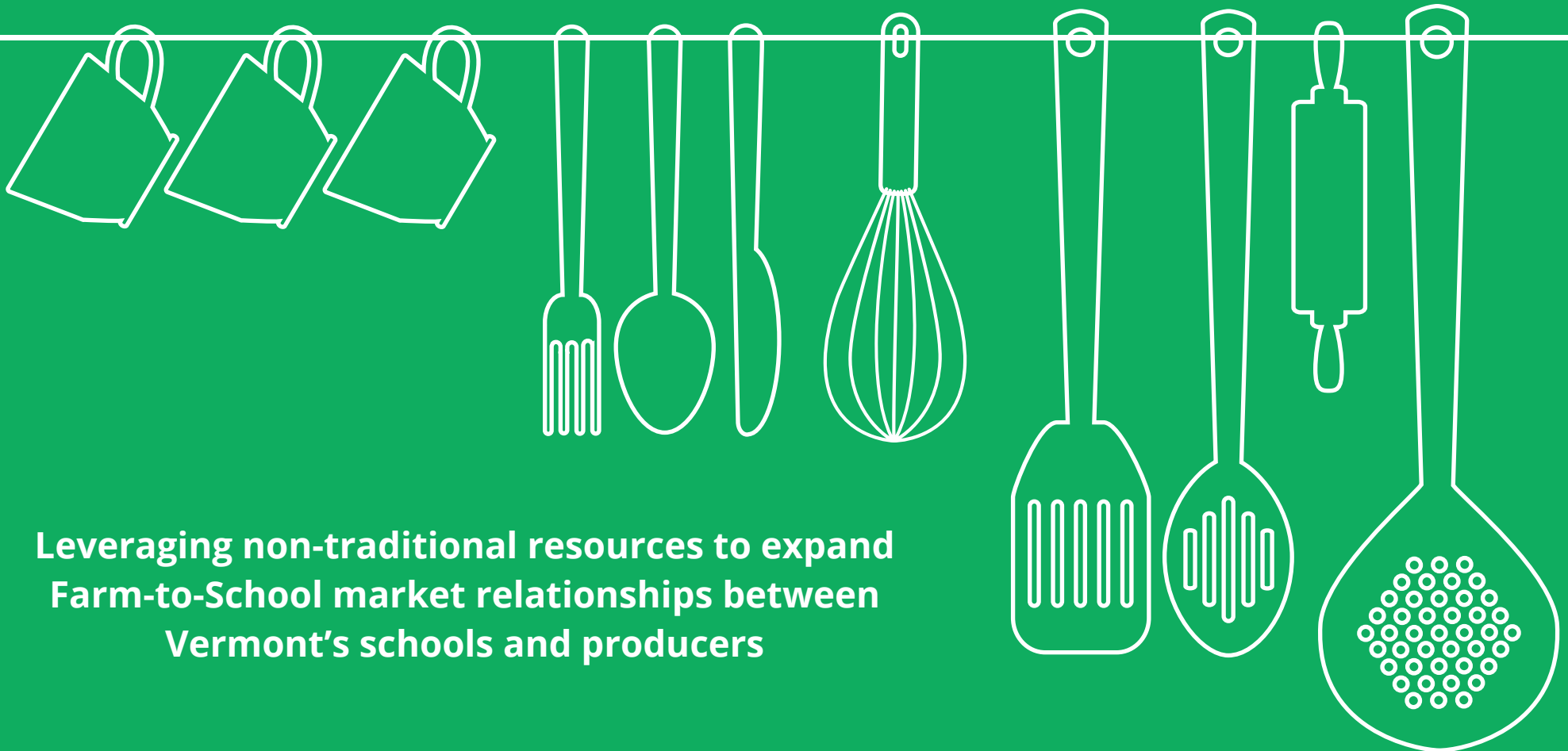# Using Food Hubs to Create Sustainable FTS Programs

Leveraging non-traditional resources to expand Farm-to-School market relationships between Vermont's schools and producers

Preface

This document is the result of a USDA Farm-to-School grant awarded to the Vermont Agency of Agriculture, Food and Markets (VAAFM) in 2013. Project partners included Addison County Relocalization Network (ACORN), Green Mountain Farm-to-School (GMFTS), Mad River Localvores (MRL), the Mad River Food Hub (MRFH), Rutland Area Farm and Food Link (RAFFL), Vermont Food Education Every Day (VT FEED), the University of Vermont's Center for Rural Studies and the University's Extension Program. The grant, "Vermont FTS Food Hub Network: Providing Collective Change", was designed to provide the opportunity for shared learning and collaboration between Vermont's food hubs that were engaged in Farm-to-School work. Additionally, the grant provided the food hubs with funds to support and expand their Farm-to-School efforts.

It is important to note that all food hubs and food system support organizations in Vermont were invited to participate in this grant; however the VAAFM only received serious interest and partnership offers from the above organizations. Project partners did not complete a competitive process to participate in this grant.

While each participating food hub was required to engage in activities that would serve the grant's objectives, each elected to accomplish those goals in different fashions. This document seeks to highlight those different methods of successful farm-to-school programming through case studies.

The Vermont Community Foundation provided additional financial support with funds secured through a Food and Farm Initiative grant. These funds allowed for the inclusion of the Vermont Housing and Conservation Board and supplemented project funding for the other partners.

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Contents of this Guide

Executive Summary

This document serves as an overview of four Vermont food hubs' efforts responding to an institutional demand for locally grown products. Farm-to-School programs have progressively expanded across the state of Vermont, thus stimulating a widespread increase in both local food supply and effective distribution. With a focus on food hubs to develop more sustainable Farm-to-School (FTS) programs, this process offered a chance for reflection on the opportunities and challenges associated with the projects. These arose from a multifaceted array of program aspects, from partnership collaboration to project growth and potential.

The four Vermont food hubs participating in this project were: **Addison County Relocalization Network; Green Mountain Farm to School; Mad River Food Hub/Mad River Localvores; and Rutland Area Farm and Food Link.** Additional statewide partners engaged in the project offered critical technical support.

The purpose of the project was:

1. To strengthen the regional support structure for farmers and food service staff to provide locally-grown food in schools;

2. To create a Community of Practice among regional food hubs focused on school food procurement; and

3. To demonstrate models of how regional food hubs support FTS programs and increase purchasing of local foods by schools.

After eighteen months of collaborative engagement, shared learning, and food hubs commitment with schools on FTS programs, the following outcomes were achieved:

- **Local food purchases increased over one year's time at schools engaged with their local food hub, by 58% (overall) and 62% (per capita).**

- **The grant-supported project provided a structure for food hubs to reach out to schools in their region, offering individualized program support approaches.**

- **Participating food hubs recognized the Community of Practice as an opportunity for learning and, with increased structure, a great tool for sharing strategies and facilitating programmatic growth.**

- **Regional food hubs play a role in creating local food demand through either producer engagement or support structure to local schools.**

- **Food hubs engagement in FTS is still viewed as experimental for schools and producers, but the relationships contribute energy and support to FTS programming at schools, making the issue top of mind and establishing their involvement at schools a social norm.**

Two key takeaways from this project can be shared with food hubs interested in engaging with FTS programs in their region or to school communities looking for FTS program support:

Each regional food hub defines and executes their FTS program support strategies differently. These differentiated approaches stem from the unique and individualized organizational structure of each food hub as well as their desire to tailor program support based on community need. However, each food hub should not be exclusively defined based on the roles emphasized in this particular case study. There is variety in the roles a food hub can play, but can typically be identified among these overarching titles:

- **Facilitator**

- **Educator**

- **Support system**

- **Producer technical assistance provider, i.e. accessibility to infrastructural resources or**

- **Outreach coordinator, i.e. ability to expand market/network.**

Not only do food hubs offer a valuable network within their community, they can also enhance a larger network through collaboration with other food hubs across the state. The establishment of a Community of Practice among the regional food hubs presented numerous themes following its implementation:

- **Value of collaboration**

- **Challenges with administrative tasks, preparation time, and coordination**

- **Awareness of individual goals of each food hub remaining unique and**

- **Pros and cons associated with flexibility.**

Introduction

Vermont has a widespread and successful history of Farm-to-School (FTS) programming, which is both an opportunity and a challenge. As the state grows its institutional demand for locally grown products, it must also consider resulting needs for supply and distribution. Increasingly, food-focused community organizations (henceforth "food hubs") have emerged to help meet this demand. Some of these organizations serve an aggregation and distribution function for local product, while others provide Farm-to-School programming, consumer education, and producer technical assistance. It is clear that not all organizations loosely referred to within Vermont as "food hubs" or "food centers" play the same roles in their communities. Similarly, within Vermont and beyond, the exact definition of what constitutes a "food hub" has evolved, and its current iteration is still under review.

The U.S. Department of Agriculture's current working definition of a food hub is "a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products." For the purpose of concision, the following food-focused community groups will henceforth be referenced as "food hubs": Addison County Relocalization Network (ACORN), Green Mountain Farm to School (GMFTS), the Mad River Localvores (MRL), the Mad River Food Hub (MRFH), and the Rutland Area Farm and Food Link (RAFFL).

To better understand the opportunity for statewide collaboration between such groups, the Vermont Agency of Agriculture, Food and Markets (VAAFM) worked in partnership with these food hubs to:

1. Strengthen the regional support structure for farmers and school food service staff to provide locally-grown food in schools

2. Create a community of practice among regional food hubs focused on school food procurement

3. Demonstrate how regional food hubs can support FTS programs and increase purchasing of local foods by schools

With these goals in mind, our grantees have successfully increased local food procurement by a total of 58% in 58 schools in a same time, year over year comparison of local purchasing by the schools. Each partner's area experienced a net increase in local purchasing, though the percent increase carried widely, from a low of 21% to a high of 111%. Moreover, the project partners learned the value of relationship building, individualized support structures, and the increased administrative effort associated with collaboration and network development.

Initially, many of the food hubs believed that Vermont needed more aggregation and distribution infrastructure to connect smaller producers with institutional and wholesale markets. However, most learned through their independent projects that their areas had sufficient infrastructure, but required better coordination of the available resources. Some food hubs were able to identify existing infrastructure within their regions that could serve the same aggregation and distribution functions they looked to create, such as RAFFL who collaborated with a local dairy farm, Thomas Dairy, to store gleaned product before distribution. This relationship allows RAFFL to increase the amount of gleaned product they can distribute without needing to construct a dedicated refrigerated storage facility of their own.

Other times, food hubs were surprised to learn that schools' current distributors already carried local product when in season, but food service directors did not know about it. To address this, the food hubs worked with school administrators and food service staff to show them how to take advantage of these offerings, and how to do it in an economically feasible manner from food hubs as well. Some schools were also unaware that they could purchase outside of their food procurement contracts; buying instead directly from producers or through community food hubs. Farmers were similarly unaware of the viability of institutional and wholesale markets—as opportunities to sell seconds and diversify their markets. Matchmaker events were

paramount to reinforcing this education and helping both buyers and producers understand the full spectrum of purchasing possibilities.

Other food hubs recognized their region's need for constant and improved relationship building with school boards, administrators and food service directors. Attending school board meetings and engaging with administrators and school food service proved to be valuable experiences to advocate for Farm to School programs and to educate the community about the benefits of a local food system. Providing these groups with this education was necessary to challenge existing practices and ideas. These opportunities allowed food hubs, like ACORN, to help reshape schools' cultures to understand and value local food, for what it provides both in and out of the classroom. Similarly, the food hubs learned that school food service staff needed additional instruction and education around purchasing local foods through their current distributors. Food hub personnel were able to directly connect school food service directors with producers through four matchmaker events. These efforts were dove-tailed with the three food safety workshops that educated producers and food service staff about food safety practices for produce production and handling from farm to cafeteria.

No one food hub would have experienced the success they did without the collective brainstorming and shared learning sessions that took place as part of the community of practice. A Community of Practice (CoP) is a group of people who share a common concern, a set of problems or interest in a topic and who come together to fulfill both individual and groups goals.1 The project partners decided to meet monthly alternating between in-person and webinar formats. In total, the partners met thirteen times to update each other on their projects and discuss selected topics. Most of the sessions focused on a particular topic, like online ordering systems, where two or three of the food hubs would present their current practices, challenges and successes. The CoP sessions provided opportunities for collective brainstorming and discussion between organizations that do not otherwise regularly interact. Through the sharing of experience, food hubs were able to identify solutions to common problems, create new collaborations between organizations, and begin to document and evaluate best practices. Overall, the CoP allowed the food hubs to

problem solve much faster and more readily address the needs in their communities, which demonstrates the value of such collaboration.

However, the benefts of collaboration are not without their costs. Coordinating and preparing for the community of practice sessions took more time than all participants realized. While the VAAFM was responsible for coordinating and facilitating the community of practice sessions and update meetings, the grantees underestimated the time it would take to prepare for such meetings. Often the grantees would make 20-30 minute presentations on various aspects of their organization. These presentations required more time than expected to prepare. Additionally, there was often "homework" to do between meetings that required food hubs to take time out of their daily operations to additionally prepare for these meetings.

The Community of Practice Sessions also required more administrative time to manage than was anticipated. This time included: scheduling meetings, preparing agendas, providing CoP feedback and follow-up, processing invoices, preparing reports, and accommodating scope of work changes. Due to the collaborative nature of this grant, grantees similarly found it difficult to differentiate billing and the processing of receipts—for shared materials or events would costs be split equally for each item? Or would the grantees take turns paying for these items? For instance, a GMFTS staff member helped the MRL/MRFH team execute a taste test, would that staff member's time be compensated by MRL/MRFH or by GMFTS as an extension of their collaborative relationship? Such questions led to a larger discussion about the operating principles and standards for organized collaboration.

Throughout this grant period, grantee roles, projects and CoP structures evolved as the group responded to new challenges and opportunities. At times this dynamic structure was valuable and allowed organic solutions to develop; however the flexibility also hindered decision-making processes, because the group looked to make each decision by consensus. As a result of the project's evaluation

process, the group offered two recommendations to others who look to establish a community of practice, or other structured collaboration relationships.

As Vermont's schools increasingly desire their own FTS programs, community groups like ACORN, GMFTS, MRL and RAFFL, are strategically posed to assist these schools' efforts. These community organizations are able to focus their efforts and provide more comprehensive FTS programming and education while the school can focus on delivering nutritious meals to its students. Some of the food hubs are able to provide farm and food education, coordinated farm field trips, school garden materials and support, food safety trainings and local food procurement advice and assistance. A school can select which services it would like and a food hub will provide them with the corresponding education. In this capacity, the food hubs provide supplementary services where needed, without requiring schools to hire new, dedicated staff. This support is beneficial in that it minimizes expenses while maximizing impact. Thus food hubs facilitate the adoption of innovative, low-cost FTS activities and practices through demonstration and education with the ultimate goal that school personnel will become responsible and trained in providing these food education opportunities.

▶ **The community of practice should identify a member to serve as the financial "backbone" organization. This organization would be responsible for managing receipts, invoicing, addressing scope of work changes, etc. Our group would even go so far as to say, this group should participate in the collaboration, but have no separate project or responsibility to the group as this role is so intensive; they would also be compensated accordingly. Having such an organization allows the other CoP members to focus more time on their projects and provides all parties with more consistent financial maintenance and reporting.**

▶ **At the onset, the group should decide how decisions will be made. Is there a lead organization that will make the final decisions? Will all decisions be made by consensus, or majority? Clarifying this process will clarify each CoP member's roles and responsibilities, which will ultimately aid communication between organizations and increase the group's overall efficiency and agility.**

This focused, smaller-scale collaboration builds on the success of the Vermont FTS Network that was launched in 2009 by key Vermont FTS stakeholders. The Vermont Food Education Every Day (VT FEED) project serves as the Network's backbone organization and works with the VAAFM and statewide and regional partners to support the advancement of new and existing farm-food-nutrition education efforts in classrooms, cafeterias, and communities around the state. The Network uses this "3 C's" model to structure its FTS programming. In addition to providing FTS programming support, the Network provides opportunities for discussion and collaboration between FTS programs. This Network also serves as a valuable asset to the state of Vermont and provides additional support to the more than 85 schools in Vermont that have received over $740,000 in state grant funding to finance FTS programs. These grants have reached schools in 13 of the state's 14 counties and reached nearly 14,500 students (out of approximately 90,000) in the state.

This document seeks to highlight the role food hubs can play in developing successful and sustainable FTS programs. The participating food hubs are showcased in a series of case studies. Each case study highlights one aspect in which the food hub staff feels they excel. We have also included the summaries of our most informative Community of Practice sessions (Contracting Basics, Efficient Ordering Systems, Production Planning, and Food Safety) to serve as a resource for FTS programs and food hubs seeking experiential information.

The Vermont Agency of Agriculture, Food and Markets is excited to present this guide as a culmination of the progress these food hubs have made in Farm-to-School efforts, both within this grant period and since their conception.

1 Etienne Wenger, Richard McDermott, & William Snyder. 2002. Cultivating Communities of Practice: A Guide to Managing Knowledge. Harvard Business School Press, Boston, MA.

Food Hub
Case Studies
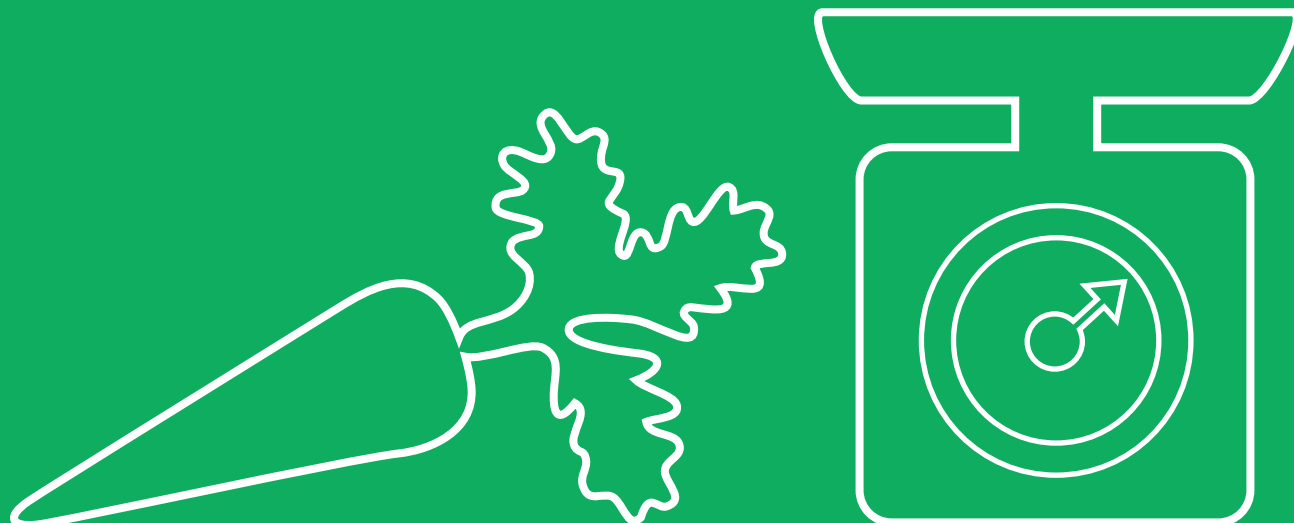
Facilitating Food Hub:
Using matchmakers to connect community producers and buyers

ACORN — Growing Community Together in Addison County

Organization: **Addison County Relocalization Network (ACORN)**

Location: **Middlebury, VT**

Legal Status: **501(c)(3)**

Date Founded: **2005**

Employees: **1 part-time**

Volunteers: **7-member volunteer board**

Website: **acornvt.org**

Phone: **(802) 382-0401**

Primary Region Served: **Addison County**

	Addison County	**Vermont**
Size (sq. miles)	808	9,623
Population	36,814*	625,953*
Median Household Income	$57,785*	$54,168*

PRIMARY ACTIVITIES Farm-to-School engagement (administrative and school board outreach, food service meetings); Market Research (wholesale feasibility and online ordering systems); Community Awareness and Education (conferences, fundraisers, and workshops)

BRIEF HISTORY: ACORN was founded in 2005 to serve as a catalyst for developing local, sustainable and collaborative solutions to address the growing environmental and economic concerns in Addison County. The organization's primary goals are to: prevent the depletion of natural resources; reduce the impacts of climate change; resolve growing economic disparities; and restore citizen's feelings of community and responsibility. ACORN's current focus on local food and agriculture began in 2009, when the organization spun off a private business, the Acorn Renewable Energy Co-op, to address Addison County's energy issues. This spin-off allowed ACORN to dedicate more time toward community development and incorporate as a non-profit. ACORN now operates with minimal resources and is guided by a dedicated volunteer board that emphasizes community- and project- based solutions to revitalize Addison County's local food system.

PROMISING PRACTICE: Using low-cost matchmaking events to bring community producers and buyers together to increase local sales between area buyers and sellers

Practice Details
Intended Outcomes:

- **Create direct relationships with area producers and buyers**

- **Connect area producers and buyers**

- **Facilitate local food sales to institutions and wholesale markets**

Rationale
ACORN's decision to hold matchmaking events began in 2011 after internal conversations surrounding a Wholesale Supply and Demand Feasibility study they conducted in Addison County. The idea arose from the feasibility study's advisory group, which identified a need

to better connect the county's farmers and buyers, at least initially, while ACORN assessed longer-term solutions to restoring the local food system in Addison County. Matchmaking events bring buyers and producers together to foster new relationships. This type of event aligns with ACORN's community focus and allows ACORN to create and support social and economic relationships within the county they serve.

Initially, ACORN collaborated with the Vermont Fresh Network (VFN), an organization of farmers and chefs that encourage the use of local food products. At the time, VFN organized an annual state-wide matchmaker event, and ACORN recognized the organization could serve as a valuable guide in the event coordinating process. Thus, VFN helped ACORN develop an event plan and timeline. They also attended the event and provided ACORN with feedback for future matchmaking events. VFN also gained insights on smaller-scale localized events to share regionally.

Planning a matchmaker

Currently ACORN holds one annual matchmaker event, generally in March before the growing season, to ensure farmers can attend and prepare for any new orders they may receive. The timing has also proved to be opportune for selling the last of storage crops to volume buyers. While this timeline most benefits fresh fruit and vegetable producers, the matchmakers are designed to include dairy, meat and egg producers as well, both raw and value-added.

To date, all of these events have been held at Middlebury College, a small liberal arts college in Middlebury, VT, which in addition to being a key area buyer, is a strong champion of the local foods movement and gladly offers space in one of its dining halls for the events.

To create the attendee list, ACORN uses the background knowledge from their feasibility study to identify those businesses that have the largest impact on the county's food system. Through the annual publication of a local food guide, ACORN also has long-term knowledge of the area's producers and buyers and now knows which businesses are most interested in engaging in these conversations.

Aiming for 24-30 attendees, with the goal of equal representation from both the demand and supply sides, ACORN works to fill most of the spots with key businesses first. They then fill the remaining spots with other interested businesses that provide a necessary diversity to the buyer and producer profiles. This diversity prevents stagnation at the events and promotes awareness of the range of producers that exist within the county. It is not uncommon to have several, similar producers present, which provides healthy competition and the drive to successfully market to each individual buyer. The matchmaker events are most effective when producers of all profiles are present: meat, dairy, produce, value-added, etc. Similarly, including food service directors from community kitchen programs, nursing homes or senior meal sites in addition to the standard retailers, restaurants, schools and larger institutional outlets helps to round out the group of buyers. Their inclusion helps engage the full community and "open their eyes" to the possibility of integrating local product into the food they serve. Producers and buyers with existing relationships are also encouraged to attend.

During matchmaker event, producer Karolyn Lalumiere meets with Middlebury College procurement team members, Charlie Sargent & Matthew Biette, to discuss local product sourcing.

Once a list of potential attendees has been determined, ACORN sends the producer or buyer a registration packet that contains information about the upcoming event, often encouraging the attendees to prepare pricing and product lists for the event. The packets also contain a questionnaire that asks business-specific information to help in making matches.

Producers and buyers receive separate questionnaires, but they feature related questions regarding product specifications, certifications, etc. Example questions include: "What certifications does your farm carry?", "Do you have a preferred delivery method?", and "What products are you looking to purchase? At what volume?" Responses to these questions provide the event coordinator with information to determine potential producer-buyer matches, understanding that not every buyer has to visit with every producer.

The event coordinator makes initial selections of who will meet whom. Alternatively, in the pre-event contact, attendees can be given the option to suggest and rank individuals with whom they would like to meet. ACORN prefers to create the matches, as they have a rather intimate knowledge of the county's food system and its needs. Though, ACORN recognizes that too much planning can prevent organic connections and may make a match solely on one common criterion—scale, market or product—just to see what conversation precipitates.

Over the years, ACORN has found value in communicating with the local press either before or after the event to increase local food visibility and keep the public current on "what's happening" in the local food movement.

Executing the event

Generally, the matchmaking events are held in a "speed-dating" fashion, where the producers are stationary and the buyers circulate between the producer tables. Having the producers stationary allows them to set up little displays for their products. (When arranging the producers at their tables, ACORN has found it is best to arrange them alphabetically to reduce confusion.) While these events don't require that much space, holding them in Middlebury College's dining hall allows the producers adequate space for their displays and space between tables to conduct business.

On the day of the event, ACORN prepares the event space and requires producers to come 15 minutes prior to registration to set up their table displays. After a registration period and introductions, ACORN dives right into the "dating" portion of the matchmaker event. "Date" sessions last 5-7 minutes, however their length should be moderated by how well the conversations are going—if they're going well, a bit more time can be given; if things are quiet or in an overall lull, consider making an announcement or wrapping the session up a bit early. The meetings will be going well, and the room will have the sounds of a fantastic gathering combining sales and purchases. It can be helpful to have a bell or ringer system to let participants know when their dates are finished and use a timer to ensure at least the minimum session time.

ACORN will typically do 4 or 5 "dates" in a row, and then offer a 15 minute break for attendees to use the restroom, grab a snack or network. The event will finish with another 4 or 5 dates. There is always

"Avoid making assumptions. Sometimes odd relationships and connections happen; you have to be open to things going a little off. A small-scale milk producer might hit it off with a big institution to supply some specialty product—you just have to say to yourself 'Okay, good for them!'"

extra time built into the schedule to accommodate networking.

Recognizing there will be "no-shows" it is important for the event coordinator to be mindful of those who don't have a date. For this reason, ACORN and VFN found it beneficial to offer a resource table with information on related programs and organizations that offer producer technical assistance, business planning, food safety workshops, and the like for attendees to peruse between matches and during the break. Making yourself and these materials available as resources helps to further strengthen community relationships. Accordingly, the success of these events is largely determined by the interactions buyers and producers have at the event itself.

The event coordinator "plays host" and reminds those that registered to attend, engages those who may not have a "date", and introduces those who don't know one another. Providing each attendee with a contact sheet, including every attendee's name and general information, can greatly facilitate this process. It can also prompt attendees to introduce themselves to one another!

At the conclusion of the event, it is important to stress and to encourage follow-up. ACORN facilitates this process by providing each attendee a suggestion list of ways to "get a second date". The list includes following-up by email or phone to keep the conversations going even if no business was transacted at the event. ACORN coordinators also remind the attendees that the matchmaker event is one step in this relationship-building process and that each attendee must engage in follow-up to maintain the relationships established at the event.

Generally 3-4 months after the event, ACORN will follow-up monitoring with the attendees to see what progress has been made, ask if the attendee need a reintroduction, etc. however ACORN finds it best to avoid getting involved in business matters. The host should be cognizant that attendees may call them for information as they follow-up with their matches, and this is an appropriate time to intervene and provide assistance.

"Reminders, reminders, reminders. Send out many before and many after to encourage attendance and follow-up."

Additional Value

Matchmaking events also provide great opportunity for feedback and dialogue between ACORN and those the organization serves. Previous matchmaking events helped ACORN identify the need for more educational opportunities for farmers to learn business skills. Having identified this need, ACORN applied and successfully received a Vermont Community Foundation grant to offer farmer workshops on marketing and money-management. Other conversations, amongst those catalyzed by the Supply and Demand Feasibility Study, prompted the investigation of a central online ordering system that Addison County farmers and buyers could use to more efficiently buy and sell their products.

Matchmaking Event Checklist

☑ Determine your goals for the event—how can this be a valuable experience for all?

☑ Conduct preliminary area research to identify key buyers and producers. Using local food guides and Chamber of Commerce membership lists can be helpful.

☑ Identify potential partners or sponsors.

☑ Identify a time and space for the event keeping in mind seasonal variables for both producers and buyers.

☑ Compose a diverse profile of potential attendees and contact them directly by phone and email.

☑ During the planning stage, send out questionnaires to both potential buyers and producers to assess operational variables, such as scale, distribution, and certifications.

☑ Confirm registration and attendance with emails and phone calls depending on your knowledge of the businesses' operations.

☑ Identify potential producer-buyer matches based on questionnaire responses, remembering to not make too many assumptions!

☑ Confirm event details and send matches to attendees prior to the event recognizing matches are subject to change.

☑ Prepare and send a press release.

☑ Execute the matchmaker event!

☑ Conduct follow-up and solicit feedback.

Support System Food Hub:
Localized aggregation and distribution to increase local food sales

Green Mountain
Farm-to-School

Organization: **Green Mountain Farm Direct (GMFD),** a project of Green Mountain Farm-to-School (GMFTS)

Location: **Newport, VT**

Legal Status: **501(c)(3)**

Date Founded: **2008**

Employees: **GMFTS: 11, including 6 AmeriCorps volunteers; GMFD: 1.5 FTE of GMFTS employees**

Volunteers: **Occasional**

Websites: **www.GreenMountainFarmtoSchool.org and www.GreenMountainFarmDirect.org**

Phone: **(802) 334-2044**

Primary Region Served: **Caledonia, Essex, Franklin, Lamoille, and Orleans Counties**

PRIMARY ACTIVITIES Farm-to-School program activities such as taste tests, school gardens, farm field trips, and nutrition education; aggregation and distribution of local food products to institutions; development of marketing and educational resources to promote the use of local food; mobile food truck providing locally-grown food and food-based education to communities; community events promoting food and agriculture.

BRIEF HISTORY: Green Mountain Farm-to-School (GMFTS) was founded in 2008 following a successful school nutrition and agricultural education pilot project the year prior. In order to reach more schools than the original five included in the pilot, the project partners formally organized themselves as a non-profit. They adopted improving child nutrition, reducing childhood obesity, improving access to healthy local food, and supporting local farms as their primary objectives. GMFTS accomplishes these goals by providing direct service programs that connect schools, communities, and farms through food and education.

Early on, GMFTS recognized the need for distribution of local farm fresh products to schools, and a service tailored to assisting institutional buyers in procuring these products. GMFTS created GMFD in order to provide the sales, marketing, purchasing, aggregation, and distribution services necessary to sell products from local farms to schools. In 2011, in response to rapid growth in sales and increasing demand for their services, GMFTS established a partnership with a local distribution company, D&S Distributors, to create their present model of Green Mountain Farm Direct (GMFD). Currently, GMFD delivers local food to over 90 retail and institutional customers within a seven county region. In FY 2013, GMFD sold over $230,000 in local food products from 45 producers.

	Caledonia County	Essex County	Franklin County	Lamoille County	Orleans County	Vermont
Size (sq. miles)	658	674	692	464	721	9,623
Population	36,658*	6,211*	48,244*	24,912*	27,129*	625,953*
Median Household Income	$48,938*	$37,214*	$55,051*	$54,064*	$41,618*	$54,168*

PROMISING PRACTICE: Providing a local aggregation and distribution service to facilitate local food sales

Practice Details

Intended Outcomes:

- Understand the opportunities and challenges associated with offering a local food aggregation and distribution service

- Provide institutions and wholesale buyers with fresh, local product

- Increase local food purchases through a streamlined ordering process

Rationale

As previously described, GMFTS's decision to offer an aggregation and distribution service for local food product was prompted by an existing market gap within their service region.

GMFD chose to collaborate with an existing distribution company, D&S Distributors, in order to continue to scale up its services, rather than invest in its own warehouse and trucking infrastructure.

Logistics

Each week, GMFD consolidates availability from farms, markets their products to institutions, coordinates order fulfillment and works with D&S Distributors to pick up product from farms and deliver to customers. GMFD accepts orders via an online ordering platform as well as by phone, makes weekly sales calls to customers and offers customer service such as advice on selecting and using local products and resolving complaints.
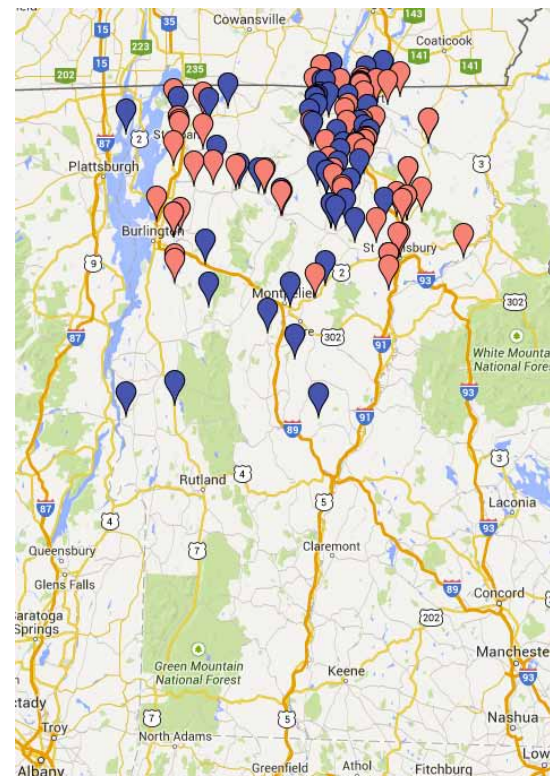
GMFD produces consolidated purchase orders and sales orders, and transmits them to D&S which uses the information to create truck routes, bills of lading, and to pick, pack, and ship orders to customers. D&S handles all payment functions, including collecting Accounts Receivable from customers, and making payments to vendors. Similar to traditional mainline distributors, D&S owns the product and assumes all liability while the product is on their trucks. Farms list products with GMFD at wholesale prices, which GMFD marks up, allowing D&S and GMFD to be compensated for their respective services.

Currently, GMFD requires all producers to follow their standards and expectations sheet. They are working towards implementing a $1 million liability insurance minimum and ask that producers have a formal, written food safety plan if they don't have a Good Agricultural Practices (GAP) certification. These expectations ensure that all parties are appropriately protected in the event of an accident or a food safety concern.

The majority of GMFD's farms (blue) and customers (red) are located in the Northeast Kingdom of Vermont; however their service area is slowly growing west and south!

Producer Benefits

GMFD lowers the barriers for entry into the institutional market by aggregating orders and delivering to multiple accounts, thereby reducing delivery costs for the producer. GMFD has established partnerships with institutional buyers, many of whom prefer to buy through one distributor rather than directly from many individual farms. Selling through GMFD allows producers to reach institutional buyers they could not reach otherwise.

GMFD also provides opportunities for farms to connect directly with buyers – in addition to matchmaker events – including, a local food show, annual dinner and other community events. GMFD consults extensively with producers on their sales base through GMFD, institutional market standards, food safety, marketing and business development, and refers producers to other service providers for specific questions that require deeper expertise.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Gross Sales	$7,217	$14,554	$114,431	$232,107	$351,00*
# of producers	15	20	41	45	45
# of customers	14	32	69	87	96*

*GMFD experienced tremendous growth in FY 2013, doubling their gross sales from the previous year. In the first two quarters of FY 2014, GMFD gross sales totaled $170,593, demonstrating GMFD is well on their way to reaching their projected sales of $351,000 for the current fiscal year. *projected*

Buyer Benefits

GMFD produces a consolidated local food Product List that helps institutional buyers purchase locally-grown foods in an efficient manner. The streamlined ordering process also facilitates a streamlined delivery process, whereby a buyer can receive products from multiple farms, but only receive and manage one delivery.

In line with their mission, GMFD offers additional benefits to customers, providing them ordering support, purchasing advice and recipe development. The combination of a high level of individual service and the unique product line offered by GMFD is difficult for other distributors to replicate. In addition to the sourcing, ordering and delivery services they receive, customers value the educational and market development programs that GMFD provides to support local farmers, local businesses and the products sold. The association with GMFTS and the mission-driven purpose of GMFD has resulted in high customer affinity and support for the organization. The idea of participating in a "social good" is a key reason that customers buy from GMFD.

Future Directions

In 2013, GMFD went through the process of developing a business plan with the Vermont Housing and Conversation Board's Farm Viability Program. This process helped GMFD identify areas of growth, liability and strength. A key outcome from the business plan was to begin receiving payment for the business and services they provide D&S. With a share of the revenue that they generate through product mark-up, GMFD is working towards financial sustainability and becoming less reliant on grant funding.

With the adoption of a new IT system, more production planning with farmers, and increased marketing efforts, GMFD seeks to improve the efficiency and quality of its operations, as well as its customer base and sales volume.
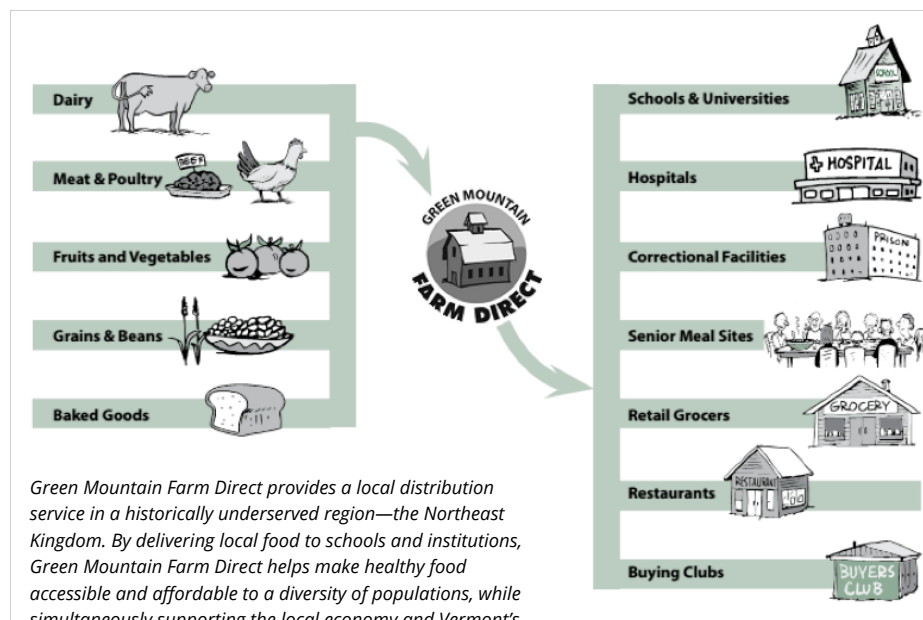
Green Mountain Farm Direct provides a local distribution service in a historically underserved region—the Northeast Kingdom. By delivering local food to schools and institutions, Green Mountain Farm Direct helps make healthy food accessible and affordable to a diversity of populations, while simultaneously supporting the local economy and Vermont's working landscape.

Product Line Development Food Hub:

Developing local food products and recipes for schools

Organizations: **Mad River Localvores (MRL) & Mad River Food Hub (MRFH)**

Location: **Mad River Valley, VT**

Legal Status: **MRL = Community Group; MRFH = Low-profit, limited liability company (L3C)**

Date Founded: **MRL = 2006; MRFH = 2011**

Employees: **MRL = 0; MRFH = 1 full-time, 2 part-time**

Volunteers: **MRL = 3-5; MRFH = 0**

Website: **MRL = madriverlocalvores.org; MRFH = madriverfoodhub.com**

Phone: **MRFH = (802) 496-3100**

Primary Region Served: **Washington County**

PRIMARY ACTIVITIES MRL = Community Engagement, Farm-to-School activities; MRFH = Food Business Incubator offering shared facilities for processing, storage and distribution

BRIEF HISTORY: This USDA grant project was collaboration between the Mad River Localvores, a community group focused on increasing local food consumption, and the Mad River Food Hub, a food processing facility that supports small-scale area producers. Both groups are located in the Mad River Valley, Washington County, Vermont.

Until 2012, the Mad River Localvores were primarily focused on local food challenges, potlucks and community farm and garden tours. When the current director, Lisa Barnes, took over in March of 2012, the group began to engage schools in the Washington West School District to educate the students, faculty and staff about the benefits of consuming local food and food education. The Mad River Localvores have succeeded in engaging school food directors and local producers to participate and provide some of the in-classroom education. As a direct result of this USDA Farm-to-School grant, the Mad River Localvores were able to work closely with seven schools and three food service directors to integrate more food education and local food product into school lunches.

Around the same time the Mad River Localvores began engaging with schools to develop Farm-to-School programs, the Mad River Food Hub opened its doors to area producers to develop, produce, store and ship raw and value-added products. The food hub's conception was a result of infrastructure needs identified by Vermont's Farm-to-Plate Strategic Plan. The Mad River Food Hub offers a licensed processing facility for producers to prepare and package value-added food products. As well,

	Washington County	**Vermont**
Size (sq. miles)	695	9,623
Population	59,462*	625,953*
Median Household Income	$57,276*	$54,168*

the facility offers dry, refrigerated and frozen storage. The Mad River Food Hub additionally runs a delivery truck two to three times a week to facilitate the delivery of local food product to retailers and other customers within a 75 mile radius of the food hub. Currently, MRFH works with over 40 producers, 18 of which process their products at the food hub.

PROMISING PRACTICE: Using a food hub with processing capacity to develop products and recipes featuring local ingredients for implementation at area schools

Practice Details:

Intended Outcomes

- Understand local food opportunities at schools
- Develop local food products for schools

Rationale

Looking to create a local food product that schools could easily incorporate into school lunches, the Mad River Localvores (MRL) and the Mad River Food Hub (MRFH) teamed up to help realize their shared goals: improving child nutrition and increasing local food consumption. The two organizations also wanted to stimulate their local economy by identifying a school food product that a new or existing business could begin to produce at the MRFH.

Product Development Process

Recognizing that eighteen value-added producers already process at the MRFH and another twenty-nine producers store or distribute their product with MRFH, the MRL-MRFH team were hopeful they could identify project partners amongst those they already worked with. Using a few criteria to narrow down the possibilities, the team selected VT Bean Crafters (VBC) as a project partner to develop and produce a local food product for schools.

VBC offers a variety of bean-based products, including bean burgers, hummus-like spreads and bean balls; all of which feature at least 90% local ingredients. In addition to doing all of their processing at the

MRFH, VBC was a logical collaborator because the company already had experience working with and selling to schools.

Early in the process, MRL, MRFH and VBC brainstormed possible products and recipes. In October of 2013, the team settled on a beef-bean burger that would feature both local meat and local beans. Schools seem to prefer offering meats as the primary protein source in school lunches; however local meat is often cost-prohibitive for school budgets. Thus the team felt combining beans with the beef would make the burger patties available at a price point amenable to the schools.

The team spent one day in the processing rooms of the MRFH to experiment with different bean varieties and beef-bean ratios. After settling on a few varieties of the burgers, the MRL, MRFH and VBC met with the food service directors of several schools in Washington County. At the meeting, the team offered various samples of the beef-bean burger to gauge product interest and solicit feedback. Based on the feedback the group received, they decided to continue developing a 75% beef/25% pinto bean burger.

In late February, the team spent another day in one of the Mad River Food Hub's processing rooms to produce a final version of the beef-bean burgers. These burgers were used for student sampling at the various schools in Washington County. The Mad River Localvores worked with school food directors at the schools to set up "taste test" events where students are introduced to new foods and are offered samples in return for their feedback on the dish. Depending on student responses, the school food service staff considers integrating the recipe or product into their school lunch program.

Taste tests were carried out at one local elementary school, as well as the local middle/high school. With over 150 samples distributed and responses recorded, it was found that among the middle and high school population, 75% of the students surveyed reported that they liked the burger, while 22% said it was "so-so" and 3% reported they did not enjoy it. Even more impressive, 79% indicated they would buy the burger in the lunch line if it was offered on future cafeteria menus, while 16% said they might and 5% reported they would not. Among the elementary school students, 82% of those who tried it reported they liked it, while 86% said they would try it again if it was offered in

Localvore beef/bean burger recipe development event at the Mad River Food Hub.
Pictured (from left to right): Jenny Morris, Jacob Finsen, Lisa Mason, Joseph Bossen
[Photo Credit: Robin Morris]

the lunch line. Both school food directors were eager to have the recipe and indicated that they would integrate the Localvore Beef-Bean Burger in future lunch menus.

Special Product Considerations

When developing the product, the Mad River team knew they had to pay attention to cost and nutrition content if they wanted to create a successful school food product.

Cost: To address the limited funds schools have to spend on lunch food, not to mention local lunch food, the team recognized they would need to create a product whose raw ingredients were relatively cheap and available in bulk quantities. Fortunately, VT Bean Crafters had already considered this challenge. VBC uses inexpensive local beans and vegetables "seconds" to create their alternative-protein products.

USDA Nutrition Requirements: Despite working with two trained holistic chefs to create their product, the Mad River team still had to also consider the USDA's school lunch and breakfast nutritional standards, which set weekly requirements the quantity of protein, grains, vegetables, fruit and dairy offered at each meal. Unfortunately these standards changed in 2012, which impacted the school food service directors' abilities to evaluate the food products. Despite being announced in January 2012, the standards are being phased in over a three year period, so the directors are still adjusting to the new standards. Once the food service directors are more familiar with

these standards they will serve as an even more valuable resource for assuring product compliance with the USDA school lunch standards.

Lessons Learned

As the Mad River Localvores and Mad River Food Hub worked with VT Bean Crafters and the school food service directors, they learned a number of lessons.

1. Kitchen capabilities exist on a spectrum. Most notably, the MRL and MRFH learned that kitchens exist on a spectrum, i.e. some have a large capacity to store and prepare food, while others have next to none. Recognizing this spectrum made MRL and MRFH evaluate the difference between developing a school food product and a school food recipe. In this case, the school food product is better suited for a kitchen that has minimal processing capacity, while a recipe that was developed using local food products is better suited for the more capable kitchens. Thus when developing a product, it is important to consider the schools you engage with—ensuring a diversity of schools and kitchens, both in size and year, to assure the development of a product (either a food product or recipe) that has the broadest market and application.

2. Make sure there will be demand for your product. When presenting the team's first product, a tomato-butternut squash sauce, to school food staff in November, few food service directors were interested in serving it in their kitchens; primarily because school kitchens have limited capacity to prep ingredients for foods they use more than once a week, like tomato sauce. Despite being offered as a prepared product, the tomato-butternut squash sauce would have been too expensive, particularly as schools prefer to save money on these types of ingredients and spend more on "center-of-the-plate" dishes, like burgers. Thus, at least initially, it may be worthwhile to focus school food product development on these larger, more "expensive" dishes to ensure they are well received by schools and food service staff.

3. Product should be developed with food service directors. The Mad River team also learned from this process, the importance of including school food directors early on in the product development process. Not only does the food service staff better understand the USDA standards, they have a better idea of what meals and foods kids prefer. The staff can also help identify market gaps and products they wished were offered. Identifying these gaps ensures the new product will have a market and be met with at least some demand.

Benefits

Product and recipe development are a great opportunity to incorporate local, healthy food products into school cafeterias. Developing a school food product benefits the local producers that create the raw products as well as the company that may choose to manufacture the product. Similarly, a food hub can create a market for area producers' products by developing a school lunch recipe that integrates the local food in a cost-effective manner. In both cases, schools and students benefit. Schools are able to offer better food and children benefit from improved nutrition in their school lunches.

On the whole, creating a simple, local product that can be prepared fresh in-house or beforehand at a food hub provides school cafeterias flexibility, while still making it easy for them to serve healthy, local food.

Localvore burger taste test at Harwood Union Middle/ High School. Pictured (left to right): Joseph Bossen, Lauren Sopher, Lisa Mason.
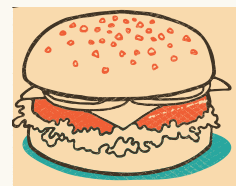
During a taste test, 75% of students from Harwood Union High School in Moretown, VT said they liked the bean-beef burger, and 78% said they would purchase the burger during lunch time.

Localvore Beef Bean Burger Recipe
(Makes roughly 20 burgers)

Ingredients
3 lbs. Local ground beef
1 lb. Local pinto beans, cooked
Seasonings, to taste

Directions
1. If using dried beans, soak overnight in plenty of water. Drain, refill water and simmer until very tender, 1-2 hours.
2. Puree beans with an immersion blender until smooth.
3. Place ground beef into lexan/tub/mixing bowl. Add pureed beans and mix thoroughly.
4. For 3 oz burgers, weigh balls of meat mixture on scale to 0.1875 lbs.
5. Place patty paper in forming press. Place 3 oz ball on patty paper, close lid, press firmly, lift. Remove and place on baking sheet or other receptacle to assist bulk packaging.
6. Cook immediately or freeze for later use.

Cooking
1. Preheat oven to 325 degrees.
2. Place patties on baking sheet with patty paper on the bottom. Season as desired.
3. Bake for 7 minutes, or to an internal temp of 165 degrees.
4. Serve immediately.

Facilitating Food Hub:
Promoting community engagement to support farm to school programs

Organization: Rutland Area Farm and Food Link (RAFFL)

Location: Rutland City, VT

Legal Status: 501(c)(3)

Date Founded: 2004

Employees: 4 full-time; 1 part-time

Volunteers: 11-member volunteer board

Website: rutlandfarmandfood.org

Phone: (802) 417-1528

Primary Region Served: Rutland County

	Rutland County	Vermont
Size (sq. miles)	945	9,623
Population	61,599*	625,953*
Median Household Income	$48,968*	$54,168*

PRIMARY ACTIVITIES Resources for New and Existing Farmers; Community engagement events; Locally Grown Guide; Farm-to-Workplace Delivery; Collaborative Producer Marketing

BRIEF HISTORY: The formation of the Rutland Area Farm and Food Link (RAFFL) originated as the result of a planning effort at the Rutland Regional Planning Commission. In the early 2000s, the Planning Commission recognized a growing concern for the preservation of the county's working landscape and farming heritage. A working group with diverse representation from farmers and agricultural support organizations was formed. This working group identified that farm acreage was decreasing due to global forces within the dairy industry. Vermont has strong land conservation supports in place, so the attention of the working group focused on identifying community-based strategies to increase economic opportunity for the emerging trend of small direct-to-consumer farms. This planning exercise quickly evolved into action and became RAFFL.

RAFFL's primary objectives are to expand the availability of and access to local food products, support the greater Rutland area's agricultural economy, and increase the community's involvement in and appreciation for local food.

A successful glean by Farm & Wilderness volunteers at Dutchess Farm.

PROMISING PRACTICE: Cultivating community support for Farm-to-School programs through "community ownership" programming

Practice Details:

Intended Outcomes

- **Generate support for FTS programs through community engagement**

- **Develop an inclusive local food-supportive community**

- **Create a strong base of community volunteers**

Rationale

In addition to creating direct buyer-producer relationships through matchmaker events, referrals and their Locally Grown Guide, RAFFL works to create horizontal relationships between residents and businesses within their community. Inviting the community to take ownership of local food projects has proved increasingly successful as community members volunteer their time and resources to expand efforts like farm to school and to follow through with their commitments to purchase local food.

Community Engagement

As described in RAFFL's history, the organization grew out of public discussions and forums which sought to identify community-based solutions for preserving Rutland County's agricultural landscape. Early on, RAFFL set the precedent that community members' voices would be heard and the local foods initiative in Rutland County would be influenced from the "bottom-up". Rutland's Regional Planning Commission worked with Green Mountain College, the Poultney-Mettowee Natural Resource Conservation District, Vermont Land Trust and UVM Extension to organize the first few events and ensure they were broadly inclusive.

These initial forums were also held in a diversity of locations: in large auditoriums and in public school cafeterias both within Rutland City and in some of the more rural towns in Rutland County. Hosting the events in different locations allowed different populations to feel comfortable to attend the events. Planning Commission members acted as facilitators and were sure to use words like "we" and "us" when communicating with the group. Using this language and publishing meeting announcements and updates in area news outlets helped residents feel a part of the new local foods initiative. These actions reinforced resident participation and assured them their ideas were being considered.

Rutland County's local food movement has evolved with the emergence of a variety of champions—from local farmers and other business leaders to Rutland City's mayor; the support of a broad-base of people has greatly encouraged area residents to participate in the new local food activities. The proponents have helped the local foods conversation stay relevant in different social circles—agriculture, economy, social interest.

Guided by the Planning Commission's experience and expertise, discussion and forum attendees slowly selected projects that seemed reasonable and feasible for the community given the availability of resources. RAFFL's early projects included the Locally Grown Guide—a pamphlet detailing local farms, farm stand and farmers' market locations—, annual farmers' gatherings and monthly discussions or workshops. RAFFL provided outreach and engagement opportunities and educational materials that informed consumers, while maintaining dialogue around local food issues by keeping an "exploratory" quality to their programming. By asking farmers and residents what they thought about a particular topic, RAFFL continued to engage community members at an individual level.

A key facet of RAFFL's programming is that it is available to all socioeconomic levels. All consumer education materials are available for free, both online and in physical form at area businesses. As well, events are on a sliding scale and are hosted at a diversity of locations to facilitate attendance by all regardless of income or transportation.

Low-cost options, like community local food potlucks, provide similar opportunities for residents to gather and consider the benefits of strengthening a local food system. While many events are exploratory and conversational, RAFFL also offers hands-on learning opportunities through their new farmer workshop series, farm tours and their free

Everyday Chef cooking lessons. Green Mountain College has also been a valuable educational partner, helping to organize events and bring in higher profile speakers.

Through these community outreach and education efforts, RAFFL successfully raised awareness around local food benefits and generated consumer demand, within residents, businesses and institutions. Not only has RAFFL successfully stimulated farmers' market attendance and increased CSA sales, schools and area business now look to feature local foods and sponsor local food events. This growth in consumer demand has led to a variety of actions around the county including an overall increase in farm businesses, an increase in farmers markets, the launch and then expansion of a winter farmers market in Rutland, and numerous Farm-to-School programs.

Meeting Demand

Interestingly, RAFFL is faced with a unique problem. Having successfully generated so much consumer demand, area businesses and institutions struggle to offer local food options because wholesale production and distribution systems are currently inadequate to meet the demand. In 2011 to better understand these systems in Rutland County, RAFFL conducted a producer and buyer survey, as well as several in-depth institution interviews, to identify a baseline institutional demand for Rutland county.

Initially, Rutland local food proponents believed businesses and institutions were having difficulty purchasing local foods because they were too costly and not available with a regular distribution company. Thus RAFFL believed that adding an aggregation and distribution function to their list of services would remedy the issue around local food availability. However, as the 2011 survey and follow-up interviews indicated, local food availability was limited due to the limited wholesale production.

At the time the survey was completed, most area growers were highly diversified and small in scale (20 acres or less). Most could not offer product volumes sufficient to satisfy larger orders. Area growers were also not interested in wholesale markets, preferring their smaller volumes and higher prices in direct to consumer markets, like farmers' markets and CSAs. These findings dissuaded RAFFL from

Arlyn Brierre and her daughter Natalie glean greens and radishes at Dutchess Farm.

creating a local food aggregation and distribution service. Rather than finding these conclusions discouraging, RAFFL recognized the value in accurately understanding a community's local food needs.

Further review of data and information collected from 2011-2013 demonstrated that RAFFL needed to spend more time addressing local food procurement challenges with Rutland-area farmers to understand their disinterest in wholesale markets and to potentially educate the farmers on the benefits of serving diversified markets.

As of 2011, 80% of RAFFL's survey respondents indicated they received over half of their income from direct to consumer sales, most of that coming from sales at farmers' markets. Few area farmers recognized the benefit of diversified markets, as they generally understand wholesale markets to be selling more product at lower prices. However farmers don't often consider the additional costs associated with direct to consumer markets, such as the gas to drive to markets, the wasted, unsold product, and the time spent driving to markets and conversing with customers. Such observations prompted RAFFL to shift their programming to support and develop resources for producers to better understand wholesale markets, which require different skills to service.

Currently, the organization is working locally on educational materials and workshops to help farmers better understand wholesale markets and the skills required to serve them. RAFFL is also actively participating in statewide efforts focused on the same topic. RAFFL will continue to make use of matchmaker events to facilitate relationships between producers and larger scale buyers. These relationships may help to "demystify" wholesale markets and make farmers more open to serving them. RAFFL looks to make these opportunities available to both new and existing area farmers.

Shared Resources

Though RAFFL will focus these new efforts on producer assistance and education, they are still looking to address infrastructure needs in the long-run. Namely, producers are interested in opportunities to build or use commercial kitchen spaces where they could create value-added or minimally processed products. Unfortunately, as with the distribution service, product volumes are still insufficient to warrant the creation of new infrastructure. However, RAFFL and area producers are interested in better understanding what infrastructure and services currently exist within the community.

As such, RAFFL continues to identify what infrastructure exists within the community that might be available for shared use. The organization is optimistic they will be able to forge "sharing relationships" similar to those they maintain with Thomas Dairy and Vermont County Store to maximize the use of existing business resources. To support RAFFL's Glean Team, Thomas Dairy, a small, family-owned dairy in Rutland, offered to store gleaned product in their cold storage facilities while the products are in transition between farm and food shelf. Similarly, RAFFL partners with the Vermont Country Store's distribution warehouse to act as the aggregation and distribution point for RAFFL's farm-to-workplace program. RAFFL hopes to make similar use of existing distribution companies and commercial kitchens to maximize resource availability while minimizing risk and cost.

Lessons Learned

Through their efforts, RAFFL has learned the necessity of flexibility. Following their initial success engaging the community and creating product demand, RAFFL thought to pursue several ideas to meet that demand only to find that the area producers weren't ready or receptive to those ideas. Fortunately, RAFFL early-on created systems for community input which helped RAFFL identify these discrepancies and prevent them from going any further without reevaluation.

Ensuring community support before pursuing large projects can seem prudish and risk-averse; but this approach has helped RAFFL be successful in the programs it does pursue. Often their successful projects were alternative solutions that required RAFFL to make stronger community connections, either with individuals or businesses. Subsequently, creating these relationships has helped RAFFL become more embedded in Rutland's economic, social and environmental circles. Such relationships have also been responsible for the innovative solutions RAFFL has created with businesses like Thomas Dairy and the Vermont Country Store.

Accordingly, Rutland County's local food movement has become less about one driving organization and more about a community's investment and commitment to support itself.

The Weatherhogg Family collecting donations at the Rutland Farmers Market.

Community of Practice Sessions

Session 1: Understanding the Contracting Process

HOW TO MAXIMIZE YOUR RELATIONSHIP WITH MAINLINE DISTRIBUTORS

The material within this section was presented by Scott Richardson of Project BREAD in Massachusetts, Linda Wheelock South Royalton School District's Food Service Director, and Holly Fowler previously with the Sodexo Group, as part of a Vermont Farm to Plate Farm-to-Institution Task Force contracting workshop held in July of 2013. This workshop was coordinated by NOFA-VT and the VAAFM.

Contracting Basics

In order to successfully develop and write contracts, it's important to understand contracting language and elements. As managing contracts can be a tedious process, it is helpful to have a dedicated employee to manage these relationships, though many Vermont schools do not have this luxury. This section is meant to provide school and food service staff with a basic understanding of the contracting process, however school contracts are often far more complicated than as explained below so you should check with school administrators to understand how your school contracts work.

The contracting process begins by identifying individuals within your organization who will be responsible for overseeing the contract. Once identified, these individuals should meet to outline the goals, services or products to be accomplished by the end of the contract period. This team should then research different companies or individuals who may satisfy these needs. Groups often benefit from reviewing the contracts at peer institutions. All public institutions are required to make their contracts public, and many individuals use these public contracts as examples.

Working off a template or an existing contract, the contract-oversight team should draft, edit and review a bid document. This document should be shared with the larger organization for final feedback, before being released to the public. Be sure to include a brief timeline of events, to include when bids must be submitted and projected project start and end dates.

At the end of the bid period, the contract-oversight team should evaluate the proposals and select the best one according to the predetermined criteria. This team should then contact and negotiate final terms of agreement with the awarded bid.

It is important to remember that contracts must be managed throughout their term; contracts are not "set-it and forget-it" agreements. The contract-oversight team should identify one individual of their team to serve as a contact person for the contractor. As well, this person should be responsible for constantly evaluating the contractor's performance as compared to the desired goals and services. Depending on the contract terms, the contract-oversight team may need to adjust payments or contract requirements during the contract period.

Finally, once the contract has come to a close, the contract-oversight team should review the performance of the contractor throughout the contract period. As well, the team should evaluate what worked well and what didn't work well during the grant period, examining the particular language and terms of agreement in the contract itself. This evaluation process can be used to inform future contracts your organization may write.

Use the following checklists to help you navigate the contracting process:

1. **When writing an RFI, RFP, or IFB/RFQ:**

☑ Set a realistic timeline—do not rush to prepare the document.

☑ Include a legal or purchasing agent as part of your contract team.

☑ Look at your past contracts and review those of peer businesses.

☑ Use all available resources to inform your process, including local experts, books, the internet, etc. Ideally one should look for templates specific to the contract desired.

☑ Use consistent language and formatting throughout the document.

☑ Choose the appropriate proposal/ bid specifications to drive responses to the desired goal.

▶ **Are your requirements reasonable and achievable by enough bidders to allow for adequate competition?**

• If the contract requirements are too specific, one may get no proposals/ bids; if the requirements are too broad, one may get too many questions or unsatisfactory proposals/ bids.

• The more "loose" the standards are the more competition there will be between contractors and vendors. More rigorous standards may limit the diversity of proposals/ bids; however they will likely more closely match the desired goals.

▶ **If you are dealing with a national/ international company, do your requirements apply to headquarters and affiliates?**

▶ **What is your best alternative if you receive inappropriate or no bids?**

☑ Select achievable and measurable goals.

▶ **What must the contractor do?**

▶ **What may the contractor do?**

▶ **What are things the contractor may NOT do?**

▶ **Use clear and objective language.**

• Avoid phrases like "as much as possible" and "to the best of the vendor's ability" etc.

▶ **Use imperative words like "must" and "required" sparingly to allow for some flexibility.**

▶ **Are these goals measurable throughout the lifetime of the contract? Can they be used to assess the performance of the contractor or vendor?**

• Percentages may not be as powerful as other metrics.

• Think specifically about what it is you want as a result of the contract, in the case of increasing local food procurement it may be more helpful to track sales and volumes rather than percentages of local product purchased. Note: this may require traceability language in your contract to ensure the vendor can verify the origin of product.

▶ **Contract specifications can include instructions as to how the contract will be filled and in what format performance measure data will be entered, be specific and define product categories if applicable.**

2. **When selecting a proposal/ bid:**

☑ Develop a process to accurately evaluate which proposal/ bid is most economically advantageous based on its relative merits and true costs?

☑ Envision how each proposal/ bid will play out, how will the proposal/ bid accomplish your goals over the lifetime of the contract?

☑ Determine how much you value dependability. Do you have any reasons to doubt the ability of the bidder to deliver on their proposal?

3. When negotiating a contact, consider:

☑ What elements are non-negotiable?

☑ Who appears to have the power in the relationship?

▶ **Look at the contracting language and determine who is able to make most of the decisions, the principal or the contractor?**

☑ What is the best alternative if you can't reach agreement?

☑ Who is negotiating the contract for the vendor?

☑ What pricing structure is most advantageous for you?

▶ **Run under a best, worst and average scenario.**

☑ What will consistent and accurate measurement cost? Are you prepared to measure the performance expectations laid out in the contract?

▶ **Make sure the contractor can provide what you seek to assess.**

☑ What are the dependencies and how to mitigate risk?

4. When managing a contract:

☑ Measure contract performance consistently and regularly.

▶ **Assign a point person or team within your organization to manage the contract.**

▶ **Identify a contact person with the contractor and communicate with them regularly.**

▶ **Apply audits using agreed upon metrics and maintain a running log of the findings.**

▶ **Promptly share audit results with all stakeholders and follow-up on issues.**

• Look to change behavior rather than punish someone.

☑ Manage the contract to minimize close-out complications.

▶ **Monitor services and their completion, products and their delivery, for accuracy and compliance.**

• Maintain evidence of compliance and non-compliance.

▶ **Maintain support documentation for shipment and payment transactions.**

☑ Make sure all relevant members of the principal and contractor or vendor parties know how they will be responsible for the success of the contract.

5. When closing-out a contract:

☑ Verify that all conditions and goals have been met as outlined in the contract.

☑ Confirm that all issues were addressed within the grant period.

☑ Meet with the contractor and determine if both parties are satisfied with the close-out.

6. When reviewing the contract process, consider:

☑ Was the project within budget?

☑ What worked well about the contracting process and the contract? What didn't?

☑ What has changed in your needs since the initial RFI/RFP/IFB/RFQ?

☑ What has changed in your strategy, business model or the business landscape that requires rethinking of your contract process of language?

SUGGESTIONS FOR SCHOOL FOOD SERVICE PROVIDERS

General Contracting Considerations:

▶ Schools should include food service providers and staff in the contracting process.

▶ More teachers and students may purchase school lunches if the food is of higher quality and tastes better. Increased school lunch sales could facilitate increased local food procurement.

▶ Buying collaboratives send distributors a powerful market signal and allows for institutions to minimize costs.

▶ Determine priorities for the distributor beforehand and supply them with a "continuous improvement plan"— something that will help them measure their performance over time.

▶ The primary difference between an approved vender versus a contracted vendor, is both will get paid, but a contract vendor will be preferentially promoted to the customer (in this case the customer is the school).

▶ Individual contracts with most producers may be too complicated and may not provide much value, in this case "hand-shake" contracts work better.

  • Let producers know early on the volumes you look to purchase within a year, but view the relationship as "fee for service."

General Food Considerations:

▶ As a food service provider, know what quantities of food products you use within a year.

▶ If possible, confirm where the products are being manufactured and produced, separately from what the distributors provide.

▶ In the contract, you can specify a certain volume of local food product to be made available. You can also specify local or sustainability grown food without using those terms directly, i.e. "produce grown on a diversified farm of no more than 20 acres", "produce grown within 50 miles", or "produce delivered from August through October within 24 hours".

▶ Distributors may do nothing to promote the local foods they offer, it is a school's responsibility to ask if such products are carried.

▶ Look at food safety and food costs and how the requirements for each many change based on the length of the contract.

When identifying local food procurement targets:

▶ What are your priorities?

  • Increasing teacher retention, improving student health and performance?

▶ Avoid using percentages as they lack transparency and are often only estimates.

  • Consider asking for product quantities or volumes.

  • If asking for a sales number (dollar amount), identify the deeper analysis—what are you trying to measure? Be specific about the outcome desired, e.g. increase local whole grain purchases from $X to $Y.

ADDITIONAL RESOURCES

RFP vs Bid decision matrix: **www.summitconnects.com/Tool_Kit/ Procurement_Tips/Archive/tenderbidsvsrfp.htmh**

Small Business Administration (contract and bid templates, info on contracting): **www.sba.gov**

VT Agency of Administration link to state government contracting rules: **http://aoa.vermont.gov/bulletins**

Negotiation resource: *Getting to Yes: Negotiating Agreement Without Giving In* by Roger Fisher, William L. Ury, and Bruce Patton

KEY CONTRACTING CONCEPTS:

▶ Think about contracts as a process rather than a product

▶ There is no one-size-fits-all contract. Each is unique based on the needs of the buyer and the capabilities of the supplier.

▶ Rigorous contracts are the result of a deliberate process, reflective goal-setting and thoughtful conversation.

▶ Contracts are not "set it and forget it" legal documents—they require active management to deliver the desired results.

METHODS TO SOLICIT CONTRACT SERVICES:

Request for Information (RFI) – a process to collect written information from a contractor or vendor to inform future buying decisions.

▶ *"Looking for information"*

Request for Proposal (RFP) – a process to collect possible solutions to a problem from contractors or vendors, generally the party that proposes the solution is responsible for executing it in return for compensation from the party that released the RFP. This process tends to focus on the quality of the concepts or values to be supplied.

▶ *"Looking for a solution"*

Invitation for Bid/ Request for Quotation (IFB/ RFQ) – an invitation for contractors or vendors to submit a proposal regarding a specific project. This process tends to be focused on the price of service or product to be supplied, with the award generally going to the lowest bidder.

▶ *"Looking for a price"*

TYPICAL CONTRACT ELEMENTS:

1. Legal Broiler-plate – outlines general liability and legal considerations.

2. Scope of Service – details the basics of the contract agreement and the contract's timeline; identify who will serve as the primary contact and contract manager for each party, being sure to describe their qualifications.

3. Pricing Structure and Adjustments – explains what the contractor or vendor will be paid for and how that pricing may change [as the result of particular events or circumstances].

4. Payment Terms – describes how and when the contractor or vendor will submit invoices and be reimbursed.

5. Audit, Inspection and Record Keeping – details how and when the contractor or vendor can be contacted for a site visit or a release of financial records relating to the contract; this section may detail how the contractor or vendor must report expenses and developments to the principal.

6. Guarantees – defines the standards of care to which the contractor or vendor will be held: what they guarantee to deliver; this includes the use of performance bonds, liability insurance coverage, and liquidated damages.

7. Waivers and Amendments – defines what moderate adjustments can be made to the contract once obligated; this section may include details around price adjustments.

8. Termination and Default – outlines under what circumstances both parties can exit the contract. Note: it is good practice to have a lawyer review this section.

Session 2: Food Ordering System Suggestions

FACILITATING LOCAL FOOD PURCHASES WITH EFFICIENT ORDERING SYSTEMS

Both Green Mountain Farm Direct (a project of Green Mountain Farm-to-School) and the Addison County Relocalization Network have experimented with different ordering systems to help buyers in their region purchase more local food. Their recommendations are listed below along with those from Windham Farm and Food (WFF), a food hub in Windham County, VT, and Rutland Area Farm and Food Link (RAFFL) which were shared during an efficient ordering systems community of practice held in July 2013.

Product ordering systems are incredibly complex and require a fair amount of capital and time to set-up. As a food hub, creating an efficient ordering system for buyers can help smaller-scale, local producers more easily sell their products. Ordering systems greatly vary, thus it is important to conduct some research in your area to determine what information and services would be most useful.

When developing an ordering system, it's important to consider the system's function and target population, e.g. is the ordering system for institutions to purchase local produce, or for employees to purchase a workplace delivery CSA? Ordering needs and preference differ between groups: institutions may require weekly orders and prefer to order online, while employees participating in workplace delivery may need to only order once a month and prefer to order via email. Green Mountain Farm Direct recognizes it's important to meet customers where they are. Some customers need a call each week; others a reminder email or hardcopy order form. Similarly, producers may need regular reminders to up-load, call-in or email their product information. If food hubs have the capacity, working with customers and producers to understand their needs will ultimately increase sales.

Food hubs should also consider how they will manage the database. If producers are responsible for uploading their own product information, it is important for the product "upload" side to be as user friendly as the product purchase side; otherwise producers may be discouraged from using the system. Windham Farm and Food teaches their farmers how to use the ordering system and upload product. They also provide a simple checklist the farmer can review to ensure they've successfully uploaded product each time.

Depending on the target audience, the ordering system may require differentiated pricing options that may offer products at a lower price to schools or hospitals. In this sense, it could be beneficial for buyers to have profiles, so only the products and prices destined for certain groups will be visible to each buyer. Buyers may also prefer to search for product in different ways, such as by product or by farm. Having different "views" within the ordering system can help buyers search for the products the way they want. Larger institutions and retailers often require standard product sizes and delivery methods. Buyers

> **"**Using a promotion program, like Harvest of the Month, is helpful to prepare producers for particular months when customers may look to purchase particular products. Customized emails highlighting particular products also work well to stimulate sales.**"** **—GMFD**

"Consistently provide customers information about what they ordered (product, farm, quantity, etc.) so they can use it in their own marketing."
—Windham Farm and Food

may find it helpful if this information is readily available to expedite their purchases. However, there may be instances when particular information isn't available, in which case buyer and seller could benefit from a messaging feature, or at least contact information, that the parties can use to contact one another to answer more detailed product questions.

As buyers purchase product, it is important for food hubs to consider how money will be transacted. Some food hubs pay the producer after each purchase, while others aggregate the payments and pay the producer at the end of a given period. Similar methods can be used to invoice buyers. If using an online system, food hubs may consider adding an accounting component to their ordering system, though such a component would need to be flexible to integrate with the different accounting software producers may use. In fact, during the development phase, the Addison County Relocalization Network suggests working with accounting departments, just as much as the buyers and sellers, to create the most streamline and problem-free system. At this time, food hubs might also consider what types of reports they hope to generate. Invoices and payments can be used

as tools to measure product volumes and origins, as well as sales. Recording this information can be useful when looking to document and evaluate your work.

Lastly, food hubs need to consider who will own the product through the supply chain (from producer to consumer) and how the product will be delivered to the customer. Food hubs are increasingly playing an aggregation and distribution function with trucks of their own, while others are successfully linking with existing distributors to deliver their product.

"Think about how the online ordering platform can be used to reach new customers, especially those that aren't already purchasing local at farmers' markets or through CSAs."
—RAFFL

Session 3: Production Planning

WORKING WITH PRODUCERS TO GROW FOR YOUR SCHOOL

The following materials were shared during a Vermont Farm-to-Plate Farm-to-Institution Task Force Workshop for Technical Assistance providers on Production Planning for wholesale markets. The workshop was held via GoTo Webinar in March of 2014. Presenters included Sona Desai of the Intervale Center (Burlington, VT), Diane Imrie of Fletcher-Allen Health Care (Burlington, VT), Tony White of the Hanover Co-op (Hanover, NH), Tim Taylor of Crossroad Farm (Fairlee, VT), and Carol Tashie of Radical Roots Farm (Rutland, VT).

Food service providers can choose to procure their local foods from a distributor or directly from a producer. In the latter case, food service providers should understand that producers face unique challenges when serving institutional and wholesale markets. Farms range in size, scale and market readiness and thus it's important to "meet the farmers where they are" and work to create mutually-beneficial relationships.

When looking to purchase from a producer, consider if this will be a "one time" or "reoccurring" purchase agreement. In general, producers prefer standing orders so they can plan production accordingly. However, you may consider allowing producers to contact you when they have excess product that you can integrate into school lunches with less than a week's notice.

If you choose to establish a relationship with an area producer, plan to first meet with them in the winter, before the growing season. Not only does a farmer have more time to meet in the winter, this will also provide them the time to adequately prepare for growing your product. Many buyers and farmers find these conversations go best when sharing a meal, so look to invite the farmer for lunch at the school. This also provides the farmer an opportunity to see how their product might be featured at your school. Before your meeting, you should encourage the producer to bring a product price and availability list and if possible samples of their product. Similarly, you should be prepared for these conversations.

Bring your purchasing history to these meetings and identify potential products you would like to source from a given producer. Be sure this history includes volumes and prices that you can share with the farmer. Few producers and institutions use contracts to establish these relationships; however it is important that you discuss the finer details of this agreement with the farmer, including the farmer's food safety plan, terms of delivery and payment, and rejection expectations. See "Contracting Basics" for more information. For the first year, start with smaller volumes so both parties have an opportunity to integrate the new relationship into their business practices. As the relationship develops, you might consider increasing volumes, price permitting.

School food service staff should also consider the opportunity to purchase "seconds" or excess product from farmers—these products may be slightly blemished, but are perfect for sauces, soups and vegetable medleys. You may work with a food hub or technical assistance provider, such as RAFFL or VT FEED, to explore ideas for integrating more local product into your school meal menus.

Producers frequently value selling to schools and institutions for the added opportunity to be featured on posters in the cafeteria, in newsletters to parents, or at taste test events, so think of ways you might help promote your local producers. You might also offer to provide a letter of recommendation if the producer is applying for a grant.

Lastly, it is important to establish and maintain open lines of communication. Let the producer know how and when you'd like to be reached to confirm orders or let you know of any difficulties. If the relationship went well, you might invite the farmer back for another production planning meeting. This time you can discuss what worked well and what didn't during the first year. Now that you have built some trust, you might also consider trying new products, purchasing more product, or engaging the farmer in different promotional events.

Encourage producers to reach out to technical assistance providers, such as UVM Extension, Farm & Forest Viability, and NOFA-VT, for additional help in entering institutional markets and satisfying those market expectations. These TA providers can be valuable resources for food safety and business planning.

ADDITIONAL RESOURCES:

- **Abbie Nelson, Education Director**
  Northeast Organic Farming Association-Vermont/ VT FEED
  (802) 434-4122 x12
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- **Erin Buckwalter, Market Development and Community Food Service Coordinator**
  Northeast Organic Farming Association-Vermont
  (802) 434-4122 x27
  erin@nofavt.org

- **Ginger Nickerson, Outreach Coordinator, Good Agricultural Practices (GAP)**
  Center for Sustainable Agriculture, University of Vermont Extension
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  Virginia.nickerson@uvm.edu

- **Liz Gleason, Program Coordinator**
  Vermont Housing and Community Board, Farm & Forest Viability Program
  (802) 828-3370
  liz@vhcb.org

- **Steve Peters, Communications and Food Education**
  Rutland Area Farm and Food Link (RAFFL)
  (802) 417-1499
  steve@rutlandfarmandfood.org

Session 4: Food Safety and Schools

RECOMMENDATIONS FOR HANDLING FRESH PRODUCE IN DIFFERENT SCHOOL ENVIRONMENTS

The following materials were created and used by VT FEED/ NOFA-VT to educate schools how to properly integrate farm fresh produce into their school food service programs.

Fruits and vegetables are an important part of a healthy diet. Introducing children to them in schools will improve their present and future health. Fresh produce must be handled safely to reduce the risks of foodborne illness. There are a number of steps that foodservice employees can take to minimize the chances for fruits and vegetables they handle to become contaminated. Best practices for handling all types of produce are described below, along with practices specific to leafy greens, tomatoes, melons, and sprouts.

Contamination of produce with harmful microorganisms can occur at all stages of production, processing, transportation, storage, preparation, and service. To prevent foodborne illness, fresh produce needs to be handled with care at each step from farm to table.

In addition to implementing the below recommendations, schools should also look to adopt general good food safety and food handling techniques to prevent cross-contamination. Both practices can be implemented and encouraged by developing a training program to educate all food handlers and students about the importance of food safety and the proper techniques required to maintain those standards.

When purchasing and receiving produce:

▶ Use purchasing specifications that include food safety requirements, such as maintaining produce at the proper temperature, maintaining clean and pest-free storage areas and delivery vehicles, and complying with federal and state food safety laws and regulations.

▶ Ensure suppliers are getting produce from licensed, reputable sources.

▶ Check storage and handling practices of vendors.

▶ Establish procedures for inspecting and accepting or rejecting incoming deliveries. Procedures should include checking the condition of the fresh produce and the transportation vehicles to make sure specifications are met.

Before physically handling produce, ensure proper hand hygiene by:

▶ Washing hands thoroughly with soap and water before handling or cutting fresh produce.[1]

▶ Rewashing hands after breaks, visiting restrooms, sneezing, coughing, handling trash or money, or anytime hands become soiled or otherwise contaminated.[1]

▶ Using a barrier such as gloves, deli paper, or an appropriate utensil to touch ready-to-eat produce. *Note: This does not eliminate the need for frequent proper hand washing.*

▶ Always washing hands before putting on disposable gloves.[1]

▶ Changing disposable gloves anytime the gloves may have been contaminated or when changing tasks.

▶ Not washing or reusing disposable gloves.

▶ Changing disposable gloves if they are torn or damaged.

When washing and preparing produce:

▶ Inspect produce for obvious signs of soil or damage prior to cutting, slicing, or dicing.

▶ When in doubt about damaged produce, either cut away the affected areas or do not use the item.

▶ Wash produce before serving or cutting using either:

- Continuous running water. *Note: Do not soak produce or store in standing water.*

- Specific chemical disinfectants created for produce have not been shown to decrease risk any more than proper washing techniques. However, if used, follow the manufacturer's label instructions for recommended concentration and contact time.

▶ Do not rewash newly opened packaged produce labeled "ready-to-eat," "washed," or "triple washed." Once opened and stored, wash the produce before using it.

▶ Wash thoroughly with hot soapy water all equipment, utensils, and food contact surfaces that come into contact with cut produce. Rinse, sanitize, and air-dry before use.

When serving produce:

▶ Do not store produce in direct contact with ice or water while on display on serving lines and salad bars. *Note: Be sure to use gloves when retrieving ice and distributing it.*

▶ Mark the time when cut produce is displayed without refrigeration. Display cut produce for a maximum of 4 hours if not in a refrigeration unit or containers surrounded by ice. Discard any uneaten produce at the end of 4 hours.

Salad bars require particular attention, create safe salad bars and self-service lines by taking the following actions:[2]

Preparation and Set-up

▶ Use equipment with food shields or sneeze guards. There are several different sizes for different aged students.

▶ Consider offering pre-portioned items for students to save time. In elementary schools, pre-packaged or pre-portioned items are recommended for all self-service items.[3]

▶ Use clean and sanitized long-handled utensils in each container on the salad bar. Replace utensils at the beginning of each meal period.

▶ Label containers to identify foods and condiments so as to discourage tasting.

▶ Use dispensers for salad dressings and other condiments.

▶ Set up the salad bar just prior to serving time.

▶ Select container size so that food is used within one meal period.

▶ Provide individually wrapped eating utensils, or keep unwrapped utensils in containers with the handles up.

Temperature Control

▶ Verify that the temperature of salad bar equipment is at 41°F or below before use.[4]

▶ Check to be sure the bottom of the pan comes into contact with the ice or ice pack, when using them for temperature control.

▶ Chill foods to an internal temperature of 41°F or below before placing on the salad bar.

▶ Check and record internal temperatures of each food item with a clean, sanitized, and calibrated thermometer before placing it on the salad bar. Check at least every two hours to verify that it remains at or below 41°F.

Supervision

▶ Some schools can consider a serving line with a solid food shield in elementary schools, allowing students to select items for assisted service rather than self-service. Employees place selected items on a plate or tray, then pass it over the food shield to students.[3]

▶ Monitor self-service salad bar in middle and high schools to ensure that students **DO NOT**:

  • Touch food with bare hands.

  • Touch food with clothing or jewelry.

  • Cough, spit, or sneeze on food.

  • Use utensils in multiple containers.

  • Place foreign objects in food.

  • Place dropped food or utensils back into containers.

  • Use the same plate or tray on subsequent trips.

▶ Assist students with utensils, if needed.

▶ Avoid adding or layering freshly prepared food on top of food already on salad bars and self-service lines. Check with your state or local health department for regulations on replenishing food.

▶ Clean up spills promptly. Wiping clothes should be stored in sanitizing solution and laundered daily.

▶ Use a clean cloth or towel dipped in sanitizing solution to wipe surfaces during and between meal periods.

▶ Store sanitizing solution away from salad bar.

Clean Up

▶ Remove food immediately after the last meal period.

▶ Cover, label, date, and refrigerate food remaining at the end of service if it will be served the following day.

▶ Discard food that may have been contaminated, either unintentionally or intentionally.

▶ Use chemical sprays only after all food has been removed.

When storing produce:

▶ Maintain produce at the temperature recommended for the variety and particular stage of ripeness.

▶ Store produce at least 6 inches off the floor, including in walk-in refrigerators.

▶ Store produce in a covered container and above other items that might cause contamination, such as meat or eggs.

▶ Follow manufacturer's instructions for the product such as "keep refrigerated" or "best if used by", which indicates a date when the produce is at its peak; however after this date the product is still edible, though it may not be as fresh looking.

▶ Establish a policy for produce that is cut in-house to specify how long the refrigerated cut product may be used. Mark the product with "prepared on" or "use by" date.

▶ Wash produce just before preparation, not before storage.

When preparing produce for use in the classroom:[2]

▶ Wash hands thoroughly with soap and water prior to handling or serving fresh fruits and vegetables to students.[1]

▶ Pre-package cut produce into single-serve, closed or covered containers or individually sealed bags.

▶ Provide condiments, such as ranch or yogurt dip, in single-serve portions to minimize cross-contamination.

▶ Provide wrapped, disposable utensils to students, if needed.

▶ Deliver produce to classrooms immediately prior to service.

▶ Use a clean, sanitized, and calibrated thermometer to check food temperatures. Cut produce should be 41°F or below.[4] Record produce temperatures when delivered to the classroom.

▶ Use coolers with ice, ice packs, or mobile refrigerated carts to keep produce cold if holding it in classrooms prior to service.

▶ Return to classrooms to pick up leftover produce after service.

▶ Discard all leftover unpackaged cut produce, such as veggie sticks, sliced apples, sliced oranges, or melon.

▶ Wash all leftover unpackaged whole produce, such as apples or pears, if serving it again.

▶ Train classroom teachers and staff at the beginning of each school year about hand-washing, controlling time / temperature, and preventing cross contamination.

When handling produce in the classroom with teachers, aids, and students:

▶ Ensure all teachers and aids have thoroughly washed their hands with soap and water prior to handling or serving fresh fruits and vegetables to students.[1]

▶ Allow time for students to wash their hands with soap and water prior to eating fresh produce, if possible. Use hand sanitizers if soap and water are not available. Hand sanitizers alone kill most, but not all, harmful microorganisms.[1]

▶ Keep produce cold, or serve produce as soon as possible after it is delivered to the classroom.

▶ Do not serve any cut produce that has been held at room temperature for more than 2 hours or above 90 °F for more than one hour.[5]

▶ Distribute produce or allow students to select pre-packaged produce to minimize potential contamination.

▶ Discard all leftover fresh-cut produce, such as veggie sticks, sliced apples, sliced oranges, or melon.

NOTES

[1] For hand washing information refer to the National Food Service Management Institute's resource, *Wash Your Hands: Educating the School Community*, **www.nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=118**.

[2] These best practices are based on the 2009 FDA Food Code. Follow the food code for your local or state jurisdiction. Consult with your local health department if you have any questions, **www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/default.htm**.

[3] Recommendations based on 2010 NSF International/American National Standard Institute (ANSI) Standard 2 for Food Equipment, **www.nsf.org**.

[4] Follow your school district's food safety plan for appropriate actions when temperature standards are not met.

[5] The Partnership for Food Safety Education, **www.fightbac.org/safe-food-handling/chill**.

ADDITIONAL RESOURCES

Council for Agricultural Science and Technology, *Food Safety and Fresh Produce: An Update*, **www.cast-science.org/publications.asp**.

Food and Drug Administration, *Draft Guidance for Tomatoes, Leafy Greens, and Melons*, **www.fda.gov/Food/FoodSafety/Product-SpecificInformation/FruitsVegetablesJuices/FDAProduceSafetyActivities/ucm174086.htm**.

Food and Drug Administration, *Safe Handling of Raw Produce and Fresh-Squeezed Fruit and Vegetable Juices*, **www.cfsan.fda.gov/~dms/prodsafe.html**.

National Restaurant Association, *Guidelines on How to Keep Salad Bars Safe*, **www.restaurant.org/foodsafety/how_to_salad.cfm**.

U.S. Department of Agriculture, *Fresh Fruit and Vegetable Program Handbook*, **www.fns.usda.gov/cnd/FFVP/Resources/FFVPhandbookFINAL.pdf**.

U.S. Department of Agriculture, *Fruits & Vegetables Galore: Helping Kids Eat More*, **www.fns.usda.gov/TN/Resources/fv_galore.html**.

Session 5: Food Safety and Farms

UNDERSTANDING ON-FARM FOOD SAFETY PRACTICES

The following materials were created and used by VT FEED and UVM Extension to educate schools how to properly integrate farm fresh produce into their school food service programs. These questions were originally created by the Minnesota Department of Health's Physical Activity and Nutrition Unity in conjunction with the University of Minnesota's Department of Bioproducts and Biosystems Engineering College of Food, Agriculture, and Natural Resources Science, College of Science and Engineering.

The questions below relate to on-farm food safety practices that food service personnel can use when talking with farmers from whom they are considering purchasing fresh fruits and vegetables. *Note: these questions do no pertain to food safety in the food service kitchen facility.*

Most farmers are committed to on-farm food safety and farmers should not be offended if you ask about their food safety practices. On-farm food safety practices can help minimize the risk of contamination as the food is grown, harvested and transported to the food service kitchen facility. These questions are meant to help food service staff have an informed conservation with a farmer about his or her food safety practices, educating the food service staff along the way.

Start with a tour of the farm to note areas of concern. If questions are presented in a conversational manner, and you tell the farmer about your school circumstances, most farmers will be happy to talk about their practices. In addition to asking the below questions, food service staff should observe the farmer and his/her delivery vehicle. Particularly for the truck, are there any signs of animals, animal products, compost or other non-food material? Is there trash and debris unrelated to the vegetables?

Food service staff should be comfortable with the farmer's responses, if not they should explore if the farmer is willing to make some changes; otherwise food service staff should consider not purchasing from the farmer at that time.

FARMER FOOD SAFETY INTERVIEW QUESTIONS:

▶ Get started talking with farmers about food safety by opening with, "Can you tell me a little about your food safety practices?"

▶ As you listen to their response, listen for these words or conceptions:

- "I have a written food safety plan."

- "I test my well water annually."

- "We train all of our staff on our food safety protocols including hygiene, illness and injury reporting."

- "We don't use raw manure; or, we apply raw manure in the fall; or we buy composted manure."

- "I am certified organic or am certified by the Food Alliance*."

   * While the Organic and Food Alliance standards are not food safety standards, certified growers often have many key food safety practices already in place on their farm to meet organic and Food Alliance certification standards.

▶ "I've passed a GAP (Good Agricultural Practices) audit, or intend to schedule an on-farm food safety audit."

- GAP is similar to a HACCP plan for farmers, but very few farmers in Vermont are GAP audited, so do not expect the farm to have an audit certificate.

▶ "I haven't gone through a GAP audit but I've adopted the on-farm food safety practices that are relevant for my farm."

▶ "I've attended on-farm produce safety trainings or webinars."

ADDITIONAL QUESTIONS TO ASK FARMERS ABOUT THEIR FOOD SAFETY PRACTICES INCLUDE:

FOR FARM AND PRODUCTION PRACTICES

▶ "Do you have a written food safety plan or standard operating procedures related to food safety? If not, how do you document and ensure food safety on your farm?"

- If they say 'no' to this question or do not seem to have a food safety plan, food service workers should consider a farm visit before purchasing from this farmer.

- You might also let the farmer know that they can get more information about on-farm produce safety practices from UVM Extension's GAPs Coordinator.

▶ "Is the produce rinsed or washed before delivery?"

- If they rinse or wash their produce, it needs to be done with potable water.

- If purchasing cut greens (not head lettuce), you need to know if they have been triple washed to meet food safety standards.

▶ "How often do you have the well water tested for E. coli and how do you treat and manage your wash water?" (This is especially important if you are purchasing leafy greens or salad mixes.)

▶ "What do you do to keep livestock and other animals (including dogs) out of vegetable fields?"

▶ "How is the produce kept cool and covered before and during delivery?"

FOR WORKER HEALTH AND HYGIENE

▶ "Do you have health and hygiene training for employees? What does it cover?"

- Listen for training on hand washing procedures, illness and injury reporting.

▶ "Are restrooms with hand washing facilities, including single-use towels, soap and clean running water available to all workers?"

- Hand washing cannot be substituted with sanitizing gels.

▶ "Are workers excluded from handling food products if they are ill or have a fever or diarrhea?"

REGARDING PACKAGING AND TOOL CLEANLINESS

▶ "How will product be packaged? Will the boxes be disposable or reusable? Are the boxes specific to this product?"

- Boxes should appear clean and intact, like new, when the produce arrives. Boxes that have held meat or poultry should NOT be used to transport produce.

▶ "How often do you clean your harvest tools and containers?"

- Tools should generally be cleaned at the end of the day, and containers should be cleaned before each use.

▶ "Where do you pack your produce?"

- The farmer may field pack or have a packinghouse. Produce should be kept off the ground once it is harvested. Packinghouse surfaces should be cleaned and sanitized regularly.

ADDITIONAL RESOURCES

- **UVM Extension, Food Safety for Producers and Processors webpage:**
  www.uvm.edu/extension/food/?Page=food_safety.html

- **Abbie Nelson, Education Director**
  Northeast Organic Farming Association-Vermont/ VT FEED
  (802) 434-4122 x12
  abbie@nofavt.org

- **Ginger Nickerson, Outreach Coordinator,**
  Good Agricultural Practices (GAP)
  Center for Sustainable Agriculture, University of Vermont Extension
  (802) 656-5490
  Virginia.nickerson@uvm.edu

Implications
for Practice
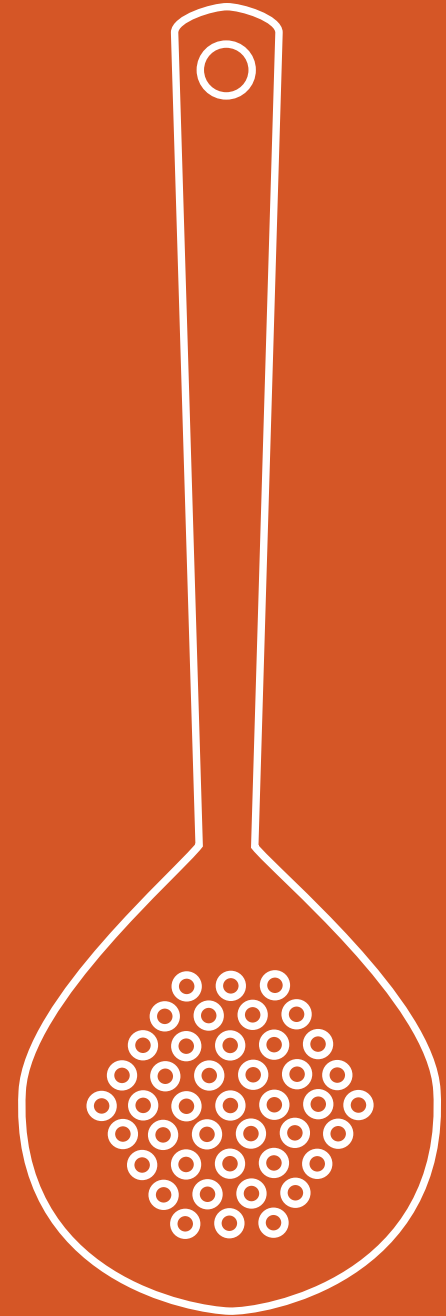
As we brought our community of practice to a close, the group reflected on lessons learned and what advice to share with others looking to do similar work. Our thoughts and discussion lingered on appreciating the value of relationship building and the time associated with collaboration.

Key reflections were identified by the group as opportunities to continue to move the collective farm to school work through the engagement with food hubs:

▶ 'Collective brainstorming' achieved through the CoP remains an effective shared-learning tool;

▶ Network collaboration is time-consuming, requiring lengthy prep time, "homework" between meetings, and more administrative time than expected;

▶ Collaboration requires openness to a dynamic group process;

▶ Comprehensive of community needs helps uniquely address local food procurement challenges;

▶ Variety of successful strategies exist for food hubs to connect producers with buyers, based on community-supported approaches; and

▶ Food hubs play a critical role in community outreach and engagement efforts.

Reaching out to new partners, schools, farmers, distributors and other supply chain partners can be challenging and time consuming. However, once those relationships are made it is much easier to collect information, receive feedback, leverage resources and execute community projects. Our grantees found community members and businesses particularly responsive to helping efforts that would improve childhood nutrition, for example. A principal farm to school goal remains engaging students in an appreciation of agricultural literacy and the importance of understanding how our food is grown. Achieving this level of relationship development is easier after understanding and leveraging shared community values.

The funding afforded to us by this USDA Farm-to-School grant allowed Vermont's farm-to-school leaders to share and evaluate their different methods of understanding and leveraging. Such an opportunity has improved operations at all participating food hubs and increased the group's general understanding of Vermont's local food system and farm-to-school network. Along with this learning, the grant partners now have a stronger concept of how to coordinate collaboration efforts and provide structure to their association to maximize their participation and increase their impact.

Overall, the Agency is grateful for having had this opportunity to engage more intimately with its partners in state-wide work. All grant participants are excited to continue their work with their new relationships and enhanced knowledge. Similarly, we look to organize regular informal forums and meetings to continue to facilitate shared learning and collaboration opportunities.

Appendix A:
Hazard Analysis and Critical Control Points

Understanding a More Comprehensive Food Safety Plan

These materials were prepared by the University of Vermont's Extension program. While these materials were not prepared using this USDA grant funding, the materials were used in food safety workshops provided to the grantees by the University's Extension program. This information was prepared by Dr. Londa Nwadike, former UVM Extension Food Safety Specialist, October 2012, revised August 2013.

A Hazard Analysis and Critical Control Points (HACCP) plan is a regulatory requirement for processing of some food products (meat and poultry, juice, seafood, some vacuum packaged foods). However, more food buyers are now requiring other food producers to have a HACCP plan in place. This information may be valuable for both food service staff and producers to better understand food safety from the farm to the table.

Developing and implementing a HACCP plan can help food processors produce food with a risk-based, systematic, preventative approach to food safety. Once implemented, the FDA Food Safety Modernization Act (FSMA)[1] will also require that processors of products other than those listed above have a preventative control plan in place, similar to HACCP plans. Therefore, it is beneficial for all food processors to move towards having HACCP plans.

The intention of HACCP is to prevent biological (e.g. bacterial pathogens), chemical (e.g., cleaner residues, allergens), and physical (e.g., glass and metal fragments) hazards from impacting a food product's quality.

Before Implementing a HACCP plan, processors must have certain pre-requisite programs in place. *Note: the importance of these programs will be even more prominent under FSMA and will require more documentation (monitoring, corrective actions, etc.).*

PRE-REQUISITE PROGRAMS FOR HACCP:[2]

Good Manufacturing Practices for:

▶ Buildings and facilities

▶ Equipment and utensils

▶ Personnel

▶ Raw material/ supplier control

▶ Process control

- Cleaning and sanitation
- Allergen control programs
- Pest control programs
- Chemical control programs
- Glass control programs
- Foreign materials control
- Traceability and recall systems
- Food defense program
- Pathogen testing

Initial Steps to developing a HACCP plan:

▶ Describe your product[3]

▶ Develop a detailed process flow diagram for your product

Note: for processed food products, a separate HACCP plan is needed for each product, or for a group of products (e.g. different dry spice blends in a sausage) that would have the same hazards. In retail and foodservice HACCP plans, each plan will cover a different food preparation process.[4]

Use the following checklist to ensure you develop a robust HACCP plan:

☑ Complete a hazard analysis for every step in product flow diagram.

▶ Identify and evaluate biological, physical and chemical food *safety* hazards at each step of the process.

▶ Identify which hazards are likely to cause illness if not controlled.

▶ Include documentation that supports all decisions made in the hazard analysis, including:[5]

• The process to determine if something is or is not a hazard (a decision-making document).

☑ If the decision is made that the hazard **is** likely to occur, there needs to be an intervention *somewhere* in the process.

☑ If the decision is made that the hazard **is not** likely to occur, there needs to be scientific documentation or a pre-requisite program that supports the decision.

• The effectiveness of a particular intervention or control measure.

☑ Identify Critical Control Points (CCPs) required to control identified hazards.

▶ The last point in your process where control can be applied to prevent, eliminate, or reduce hazard to acceptable levels before product leaves your control, i.e. chilling, cooking, and other product formation controls.

☑ Determine Critical Limits (CL) that must be met at each identified CCP.

▶ Boundaries of safety to control identified hazard to ensure product is safe to eat, i.e. cooking food product to at least 170°F or obtaining a product pH of less than 4.6.

☑ Develop procedures to monitor CCPs.

▶ Planned sequence of observations/measurements to ensure the CCPs are under control.

▶ Need to think through and document who, what, where, when (how often), and how measurement will be taken, i.e. taking and recording product temperatures.

☑ Establish corrective actions.

▶ Create a procedure to be followed when monitoring indicates a deviation from the Critical Limit at a CCP.

▶ Describe how to bring process back under control.

▶ Document what to do with non-compliant product.

☑ Perform verification procedures.

▶ These are the activities performed to verify that:

• The HACCP plan is adequate to control hazards.

• The system is operating as intended.

▶ Procedures include:

• Review of records (pre-shipment for meat and poultry; within 1 week for FDA products).

• Direct observation (by a second person) of monitoring activities.

• Calibration of equipment (thermometers, etc.).

• Annual reassessment of equipment operation and the HACCP plan.

☑ Establish effective record keeping systems.

▶ Document that the HACCP system is operating according to the written plan.

- From an inspector's perspective, if something isn't recorded, it didn't happen.

▶ Good records allow producers to trace product if problems do arise.

▶ Records to maintain include the following:

- Summary of hazard analysis (including documentation of justification for all decisions made).

- Details of your entire HACCP plan (CCPs, CLs, monitoring procedures, corrective actions, verification procedures).

- Daily monitoring records (including equipment calibration, corrective action log, CCP records).

- Pre-requisite program information and records, including Sanitation Standard Operating Procedures (SSOPs), an allergen control plan, etc. This is particularly important for those programs that are used to support the decisions in the Hazard Analysis.

NOTES

[1] FSMA: **www.fda.gov/food/guidanceregulation/fsma/default.htm**

[2] More information on these pre-requisite programs is available in a UVM Extension Food Safety Fact Sheet on "Good Manufacturing Practices for Food Safety", which is available along with other Food Safety information at: **www.uvm.edu/extension/food/?Page=food_safety.html&#publications**

[3] Example of a generic HACCP plan (including product description and product flow diagram) for various meat products: **www.meathaccp.wisc.edu/index.html**

[4] Others are available online with a simple search "[product] HACCP plan template".

[5] Information for food service providers is available at: **http://fsrio.nal.usda.gov/haccp/food-service-haccp**

[6] For meat and poultry products, USDA/FSIS released Directive 5,000.6 "Performance of the Hazard Analysis Verification (HAV) Task" in August 2012 which reinforces the need for this documentation.

ADDITIONAL RESOURCES

USDA (meat and poultry) website on HACCP: **www.fsis.usda.gov/wps/portal/fsis/topics/regulatory-compliance/haccp/haccp**

FDA (seafood, juice, retail and food service, others) website on HACCP: **www.fda.gov/food/guidanceregulation/haccp/default.htm**

Appendix B: Checklist for Selling or Purchasing Local Produce

Checklist for Selling or Purchasing Local Produce

Producer/Farm:_____ Phone:_____ E-mail:_____

Address:_____

Have Liability Insurance? Y / N   Amount:_____

Products to be Purchased:_____

Substitutes available if order cannot be filled:_____

PRACTICE	YES	NO	N/A OR COMMENTS
Does the farm have a written food-safety plan?			
Cultivation and Field Practices : Land History, Soil Fertility, Irrigation, Field Contamination			
Are there any current or previous sources of potential contamination (dumps, recent flooding or run-off from manure or compost sites, etc...) on the land?			
What types of manure are used? ☐ Raw ☐ Aged ☐ Composted ☐ No Manure			
Is raw manure incorporated at least 2 weeks prior to planting and/or 120 days prior to harvest?			
If irrigation is used, what is its source? ☐ Well ☐ Stream/River/Pond ☐ Spring ☐ Municipal			
Is irrigation water tested for E.coli?			
Are any actions taken to restrict farm animals and wildlife from growing areas?			
Are there policies in place to not harvest produce contaminated by feces or chemicals?			
Harvesting Produce: Cooling & Cold Chain, Cleaning Produce, Harvest Containers			
Is field heat removed by cooling in water or placing in cooler?			
Is dirt, mud, or debris removed from product before packing?			

PRACTICE	YES	NO	N/A OR COMMENTS
Harvesting Produce: Cooling & Cold Chain, Cleaning Produce, Harvest Containers			
Are harvest bins and totes, bulk hauling vehicles and hand harvesting tools cleaned before use with potable water and kept covered and clean between use?			
Can harvest containers and containers for non-food uses (trash, culls, compost, carrying tools) be clearly distinguished so that only harvest containers are used for food contact?			
Are bulk hauling vehicles and hand harvesting tools that come into contact with food kept as clean as practical and sanitized between contact with manure/compost/animal products and produce?			
Washing Produce : Wash Water, Cleaning Routines for Contact Surfaces, Packing Containers			
If produce is washed before packing, is wash water tested for E.coli annually?			
Are leafy greens and washable herbs double or triple rinsed? Or if single rinsed, is a sanitizer added?			
If produce is washed, is a disinfectant added to the wash water?			
Are food contact surfaces in the wash and pack shed made out of washable materials (plastic or stainless steel) and cleaned on a regular basis or as needed?			
Are packing containers kept covered and protected from contamination?			
Storing Produce: Storage Conditions and Cleaning			
Are the storage facilities (cooler, root cellars, produce storage rooms) clean and cleaned and main- tained on a regular basis?			
Are non-food-grade substances such as fertilizers, chemicals, lubricants etc. Kept in a manner as to not contaminate food?			
Is there a policy in place for produce that falls on the floor during packing?			
Is there a pest control program in place for storage facilities			

PRACTICE	YES	NO	N/A OR COMMENTS
Tracking Produce			
Are shipping containers clearly labeled with farm name and address, date packed, and type of produce for traceback to farm?			
Does farm have a system in place for recalling produce if necessary? (e.g. can farm use invoices to trace sold produce one step back to field and one step forward to buyer(s)?			
Worker / Visitor Health & Hygiene : Potable water, Toilet and Handwashing Facilities, Employee Training in Hygiene, Health and First Aid, Visitor Information			
Is water used for employee drinking and handwashing tested for potability on an annual basis?			
Do workers have access to toilets and a place to wash their hands supplied with potable water, soap and single use paper towels?			
Is there a training program for employees on food safety practices (e.g. personal health and hygiene, field practices, standards operating procedures for cleaning)			
Are workers trained not to handle food if they are ill with fevers or could have diarrhea or other serious illness?			
Are workers trained to wash hands after using restroom, smoking, eating and before handling food?			
Are there first aid kits available and accessible for workers and are they instructed to cover open wounds?			
If the farm has on-farm visitors (U-Pick, CSA, farmstand, etc.) are handwashing facilities availa- ble and signs posted about their availability?			

Additional Comments:

This template is an educational resource developed for use in the University of Vermont Extension's Practical Produce Safety Workshop. It is not intended to be used as a component of Good Agricultural Practices (GAPs) training or audit documentation. Topics are intended as a guide to ad- dress on-farm produce safety. Growers remain fully responsible for their own management decisions, for the quality and safety of the food they sell, and for compliance with all applicable laws and regulations.

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