

Prepare your business

It is important to determine your level of interest and capacity to market your farm products to schools before your first meeting with the school's nutrition director or staff. Key questions to consider include:

- What products do you currently have available to sell to schools?
- What are your production costs and the minimum amount you would need to charge to cover your costs?
- Do you have the capacity and interest to expand production of your current products?
- Are you willing and able to grow new crops?



Local dairy products can be part of a farm to school program, as long as they come from licensed dairy plants.

Complete the **farm business questionnaire** and **product availability and price form** to answer some of the above questions and communicate additional information about your business, such as your food safety protocol and ordering and delivery logistics. This self-assessment tool can provide important information to school nutrition directors. Be sure to describe what makes your farm special—whether it's how your family is involved in the farm, sustainable farm management practices or particular crop varieties you grow. Although these tools focus on fruits and vegetables, keep in mind that schools are able to purchase all kinds of local foods. Do you have meats, eggs, honey, dairy or legumes that may be of interest to schools?



Tool

Farm business questionnaire



Tool

Product availability and pricing

Forward contracting

One option for working with schools is forward contracting. After you develop a good working relationship with a school nutrition director, you may want to plan together to meet future purchasing needs. In the late fall or winter, you and the school nutrition director agree to crops or food you will grow specifically for the

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Forward contracting allows the farmer and school nutrition director to agree on specific crops for the year ahead.

school during the upcoming season. This agreement includes the crop, quantity, harvest time, size, quality and price. The school nutrition director agrees to purchase the crop or food from you, as long as your product meets the agreed-to specifications. This is called a forward contract. It is a formal agreement, though not a legally binding contract. This system can provide security for both the school nutrition director and producer.

Production costs and pricing

In order to determine profitable pricing and make your farm economically sustainable, you need to know your production costs. The *Wisconsin Local Food Marketing Guide* provides an overview and strategies for **setting prices for various markets**. The enterprise budgets mentioned in this tool can be found at: www.cias.wisc.edu/category/economics/enterprise-budgets/. As you work with schools, track your production costs and delivery and business overhead to make sure your negotiated prices are adequate. If necessary, renegotiate prices with food services directors. For an additional pricing tool that is useful when marketing to schools, see the Pounds to servings calculator on page 18.



Tool

Setting prices for various markets

Most vegetable growers produce a wide variety of crops that they sell through several different marketing channels such as farmers' markets, Community Supported Agriculture, institutions or wholesale. This diversity makes it challenging for producers to obtain timely, accurate, crop- and market-specific information on their production costs. **Veggie Compass** is a whole-farm management tool that addresses the complex needs of diversified fresh market vegetable producers. A comprehensive spreadsheet facilitates the analysis of each marketing channel using cost, sales and labor data provided by the producer. You can access the Veggie Compass spreadsheet at www.veggiecompass.com.

“We need some way to help assure food safety in our schools, but we need regulations and procedures that are respectful of small farmers.”

— Marilyn Volden – Food/Nutrition Program Supervisor

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Insurance

Institutions and major distributors typically require food vendors to carry product liability insurance. Insurance costs will vary depending on your gross sales and other variables, but are not typically out of reach for producers. Talk with the school nutrition director to determine school liability insurance requirements. If you plan to have school guests (such as students or food service staff) visit your farm, you may want to make sure your policy includes premises liability as well as product liability. Coverage details vary between insurance companies. Always talk with your insurance agent when you are about to begin a new marketing venture to be sure you are protected. The *Wisconsin Local Food Marketing Guide* provides an **introduction to insurance considerations**.



Veggie Compass can help diversified fresh market vegetable producers track costs for each crop.



Introduction to insurance considerations

Food safety

In general, fresh fruits and vegetables pose a relatively low risk for food-borne illness when handled properly on the farm, in transit and in the kitchen. However, given the populations they serve, schools (and the aggregators and distributors they work with) prioritize food safety and will likely require assurance that vendors are reducing this risk. Most producers follow practices on their farms that maximize food safety. Examples include developing a food safety plan that includes manure management, water cooling greens to remove field heat, using clean boxes for delivery and providing clear trace-back of product through labeling.

State and federal regulations on the direct sale of whole, raw fresh produce do not currently exist, so most schools will want some form of food safety assurance from their vendors. Requirements for demonstrating or verifying food safety practices vary

“Performing a food safety audit on my farm did mean making some changes, but in the end it has been very worthwhile for my business. It helps me to proactively address this topic with schools and other customers for whom this is a priority.”

— Rufus Haucke, Owner and Farmer, Keewaydin Farms, Viola, WI

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among school districts. Assuring food safety may be as straightforward as providing answers to the food safety-related questions on the **farm business questionnaire tool** (page 9), hosting a farm visit for school staff, creating a written food safety plan for your farm or obtaining a third-party audit such as Good Agricultural Practices (GAP). These requirements should be determined through discussions with the school nutrition director. See the **food safety success story** for an example of how one Wisconsin community has worked together to educate schools and producers on food safety.



Food safety success story

In general, distributors serving schools (and other customers) will require producers and producer groups to comply with an annual food safety third party audit or certification process such as GAP.

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has created an **on-farm food safety website**: datcp.wi.gov/OnFarmFoodSafety/index.aspx. This site provides information on state and federal regulations for individual farms, as well as additional resources such as templates for food safety plans. Producers selling produce to schools will find the “diversified fruit and vegetable growers” link particularly useful. The **food safety and liability insurance tool** from the Community Food Security Coalition can provide further guidance on both of these issues.



Food safety and liability insurance

Initiating conversations about food safety with school nutrition directors will go a long way toward increasing their confidence in your product. Each school district and school nutrition director determines what they will require of their vendors—so ask! Some school nutrition directors are comfortable with the assurance gained from the farm business questionnaire and a face-to-face conversation with a new vendor. Others want to see a new vendor’s operation firsthand. The **Buy local, buy safely guide** and **checklist** provide information on what food service staff look for when assessing food safety.

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Buy local, buy safely guide



Buy local, buy safely checklist

Licensing and labeling requirements

It is important to know the regulations for selling locally grown products. The sale of most food products (other than whole, raw fresh fruits and vegetables) is regulated by the Wisconsin Department of Agriculture, Trade and Consumer Protection. The chart below gives a snapshot of state requirements for different food items. The **licensing, labeling and regulation requirements in Wisconsin** tool offers a detailed look at the state requirements by product and market. Schools fall under the “institution” category.



Licensing, labeling and regulation requirements in Wisconsin

State processing and licensing requirements for selling to schools

Food item sold to school	Wisconsin state requirements
Fresh produce, whole, uncut	None
Fresh produce, minimally processed (chopped, shredded)	Must come from licensed facility
Dairy	Must come from licensed dairy plant
Meat	Must be processed at USDA or Wisconsin state inspected facility
Honey	No license required (see detailed regulations for exceptions)
Maple syrup	Must be processed in licensed facility

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Harvest Medley is a Wisconsin-grown, easy to prepare product.

Processing, collaborative marketing and distributors

In some cases product type, volume or delivery needs of a school are greater than what a single grower can provide. Distributors, collaborative marketing efforts, and local food processing are critical avenues and opportunities for shifting school food purchasing to local and regional suppliers.

Many schools appreciate a direct connection with local farms and find ways to purchase and use whole

produce from farms. Some schools prefer processed fresh fruits and vegetables because of limited kitchen facilities and labor. A number of initiatives around Wisconsin are creating opportunities for producers and other entrepreneurs to process local produce into value-added products. One example is the Wisconsin Harvest Medley vegetable blends that growers, processors and distributors created to provide schools with a minimally processed, easy to use, Wisconsin-grown product. This marketing video illustrates how the **Harvest Medley initiative** worked with these supply chain partners to access the Wisconsin school food service market: www.youtube.com/watch?v=BMiDq6Y-cmM

Some Wisconsin producers are finding success in business planning that involves the development and sale of value added, local products. UW Cooperative Extension offers a number of resources related to **food business incubators** at fyi.uwex.edu/foodbin/. Extension also maintains a webpage mapping locations and contact information of **incubator and shared kitchen spaces** around the state at fyi.uwex.edu/foodbin/the-food-bin-network/.

Producers, consumers and nonprofit groups may work together to create new markets, or improve access to existing markets, in order to help small producers stay in business. This is often referred to as collaborative marketing. Examples of collaborative marketing groups include multi-stakeholder cooperatives, producer cooperatives, food hubs, aggregation partnerships, produce auctions and more. See the discussion of **collaborative marketing** in the *Wisconsin Local Food Marketing Guide* for more information, resources and case studies.

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Collaborative marketing

Food hubs play an important role in building local and regional food supply. The **USDA food hub resource guide** tool provides an in-depth guide to this aggregation strategy. A working list of food hubs and local food aggregators in Wisconsin and other states is located at www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5091437.



USDA food hub resource guide

The UW-Madison Center for Cooperatives provides resources for producer cooperatives that can help growers aggregate and market their products. The Center for Cooperatives website offers guidance for starting a cooperative: www.uwcc.wisc.edu/howtostart/.

Schools purchase most of their food through distributors. In response to increased demand for locally and regionally grown food, many of these distributors have begun to highlight both whole and processed Wisconsin-grown product, and are adding new vendors to meet the increased demand for this product. Selling product through distributors can work for producers, especially if they work together to provide significant volume and meet the liability and food safety requirements of these companies. Distributors are able to promote local products to all of their interested customers, not just to schools, thereby expanding potential market reach for producers. Read more about this option, including a case study, in the *Wisconsin Local Food Marketing Guide* section on **distributors**.



Distributors

To learn more about selling through a distributor, follow this link to a DATCP webinar called “Working with a distributor” (<http://go.wisc.edu/4sa5e3>). Aimed at producers interested in accessing local markets, the webinar includes a discussion from a local food producer, broker, and food hub and the best approaches when selecting and working with a distributor or broker.



Some school food distributors are adding new vendors to meet demand for local Wisconsin products.

Product Availability and Pricing

Farm/Business name:

Contact name:

Address:

Phone:

Fax:

Email:

Place order via (phone/fax/email):

Place an order by (date/day of week):

Item	Pack	Price	Comments
<i>Example 1: Spinach</i>	<i>10 lbs.</i>	<i>\$ 4.00 / lb.</i>	<i>leaf cut, washed</i>
<i>Example 2: Apples</i>	<i>120-135 ct.</i>	<i>\$ 28/case</i>	<i>mixed variety</i>
		\$	
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Wisconsin Farm to School – Linking the Land to the Lunchroom

SETTING PRICES FOR VARIOUS MARKETS

Setting Prices

In local food system markets, you take responsibility for obtaining pricing information, deciding on a pricing strategy, and setting the prices for your products. When you are selling directly to the consumer, you also are doing the marketing work. It takes time and effort to market a product, prepare it for sale, package it, promote it and get it into the hands of your customers. You need to charge enough to pay yourself for all that effort. You may encounter customers who complain about your price. Do not be too quick to lower your price in response to complaints. Recognize the value in your own product and charge a price that reflects that value, but realize not everyone will agree with your pricing decisions.

If you choose to market your products to an intermediate buyer - someone who is not the end consumer of the product - you need pricing information to help negotiate the terms of sale. In some cases, you might be offered a 'take it or leave it' price for a raw product. Should you take it? Knowing the wholesale prices for your product on the open market can help you decide. For information on wholesale prices, go to the resources on page 19.

What if you have a product of exceptional quality or a specialty product that costs more to produce than the typical commodity? You'll need to do your own research on prices for similar products. Be ready to explain why you deserve the price you are asking. Provide buyers with information about your production methods or special product features to help them capture a good price from the end consumer.

Sometimes you need more than a high quality food product to obtain the price you want. Well-designed packaging, a label that supports a brand identity, or third-party certification can add value to a product in your customer's eyes. However, packaging, labeling, branding or certifications all have a cost in money and time and you must earn enough extra to cover these costs.

Pricing Strategies

You must decide on a pricing strategy - or strategies - that work for you. Pricing is based on

market demand and the supply available; the greater the demand with a limited supply, the higher the price. In some cases, where large quantities are available, products may still command a high price depending on demand. Combining pricing strategies can help you find a variety of ways to market your products.

Variety in your marketing and target markets keeps you from being dependent on just one buyer and lets you market different grades of product in different ways. Your pricing may also depend on the buyer. Supplying a consistent, quality product may offset price dips occurring in other markets.

Price Based on Costs - 'Cost Plus'

'Cost plus' should be the basis of your pricing program. If you lose money on what you grow, other pricing strategies will not matter. With 'cost plus,' you use financial records to determine the cost of producing a product, packaging and marketing it, and delivering it to your customer. You then decide what profit you need to make and add that amount to the other costs to arrive at the price you will charge a customer.

Enterprise budgeting is important for this pricing strategy because it helps track your costs of production. In addition to costs of growing, be sure to include the time, labor, and other expenses you put into processing, packaging, labeling, advertising, and selling your product. Some enterprises involve holding a product in storage. You need to account for the cost of holding that inventory. Delayed payments are another hidden cost. If you sell to an intermediate buyer such as a distributor or a restaurant, you may wait at least 14 days and perhaps up to 60 days between delivery of the product and payment. For more information on calculating your cost of production, go to page 10 and refer to the resource for enterprise budgets.

Price Based on Perceived Value

This pricing approach allows you to take into account the intangible things valued by many customers - humane handling of livestock, for instance, or the knowledge that you



Developing a strong relationship with your buyers includes having your price goals established. Ongoing communication will create an atmosphere where you can ask for feedback about the quality of your products and discuss pricing in a candid manner.

practice a specific stewardship on your farm, or the special “taste of place” no other farm can match. Customers may attach more value to your products and reward you for using farming practices they like. In turn, you can charge more than the average price for similar products. Pricing information, however, can be difficult to find, since so much of a product’s value depends on the customer’s tastes and preferences.

You may need to persuade customers that your farming practices merit a higher price. Achieving a value-based premium price may require investing time in marketing activities and educating customers.

Price Based on Retail Price

Consumers pay retail prices for food at the grocery store, yet setting retail prices can be difficult. The Economic Research Service of the U. S. Department of Agriculture (USDA) reports average retail prices for crops and livestock. Prices change monthly, depending on the season and which products are in short or abundant supply. Retail grocery prices in your area can differ greatly from the national average. If your area is far from shipping terminals, for example, transportation costs will probably be reflected in higher retail food prices.

While USDA numbers can help you monitor retail prices and seasonal fluctuations, checking grocery store prices in your area will provide the most helpful information. Look at prices on products similar to yours. If you have a specialty product - such as grass-fed, Food Alliance labeled or exceptional quality - compare prices in stores that carry similar products to

Pricing Based on Costs – ‘Cost Plus’

Advantage

- Helps verify you are making a profit on your product

Challenge

- Keep detailed financial records to be sure you are correctly figuring your total costs - if you are mistaken, you risk losing profits

Pricing Based on Perceived Value

Advantage

- Achieve profits well beyond what you might expect with other pricing strategies

Challenge

- Finding the right customers who highly value what you have to offer

Pricing Based on Retail

Advantage

- Retail price rewards you for the effort you put into processing, packaging, marketing, and distributing your product

Challenge

- Customers might be accustomed to buying their groceries at stores that offer discounts, so the prices they pay for items might differ from your estimates of average retail prices

Pricing Based on Commodity or Wholesale Markets

Advantage

- Much information is available on market prices for a wide variety of commodities

Challenges

- Prices do not reflect the labor you put into packaging and marketing your product
- Market fluctuations that have nothing to do with the quality of your product can affect your profits

Pricing Based on Buyer Relationship

Advantage

- Mutual decision making on pricing builds strong relationships with your buyer

Challenge

- Buyers can change frequently and another new relationship must be built



Pricing is a balancing act and you need to know your cost of production to set a base price for your products. You must set a price high enough to reward yourself for your work. This is balanced with the needs of your customers who are looking for full value for the price they pay.

see what you might charge. Remember grocery store retail prices reflect a percentage mark-up from what the producer was paid. Some grocery stores routinely offer certain products at a loss to bring customers into the store. This is a sales strategy that most farmers can't match.

Price Based on Commodity or Wholesale Market Prices

The commodity market price rewards the effort that goes into producing a raw product and getting it to a point of sale. For products such as raw fruits and vegetables, the commodity market price pays the farmer for production as well as first steps in processing and packaging. For example, a farmer might wash vegetables, cut tops off of root vegetables, and pack them into crates prior to selling them to a distributor at the commodity price. Basing your price on the commodity market could be appropriate if you are selling a raw product right from your farm without any special branding, labeling, or marketing efforts.

Wholesale price can mean different things depending on the buyer. It may include some processing, packaging, shipping, and handling costs. Most online resources show wholesale prices on the east and west coasts and perhaps the Chicago terminal price. Shipping costs result in higher wholesale prices in areas far from terminals. Prices paid locally by distributors or other intermediate buyers can provide useful information if you plan to sell to this type of buyer or to other local markets. Determining

wholesale prices may take extra work on your part to contact distributors or grocery store buyers in your area to ask about the prices they are paying for products.

Price Based on Relationship with Buyer

One of the most important elements of selling local food products is the opportunity to build relationships with your customers and buyers. The strength of this relationship can have a great effect on pricing. For example, if you share cost of production information, your buyer may offer suggestions on how to best price your product. Sometimes a buyer will tell a farmer that their price is too low. When both you and your buyer mutually decide on a price that is fair, it supports

Pricing is always a concern for growers and, in general, farmers tell us what price they want. If the price is high, we usually try it out for awhile and if it doesn't work we try to negotiate with the grower.

Dani Lind, Viroqua Food Cooperative

and strengthens the whole local food system. Understanding the price-setting structure for different markets will help you set prices for your products that are fair, yet still provide a profit for your efforts.

Resources for Pricing

Crop Budgets for Direct Marketers

UW Extension
www.uwex.edu/ces/agmarkets/publications/documents/A3811-9.pdf
Specialty crops as profit centers and as a comparison to other crops.

Market News Service

USDA Agricultural Marketing Service
<http://www.ams.usda.gov/AMSV1.0/MarketNews>
Click on Market News Service for wholesale prices.

Organic Price Report

Rodale Institute
www.newfarm.org/opx
Organic wholesale market prices (market produce)

Today's Market Prices

www.todaymarket.com
Conventional wholesale prices from terminal markets.

with the U.S. Food and Drug Administration (FDA). Since almost all processes use an ingredient from an out-of-state source, you will invariably have to file your process with the FDA if you thermally process low-acid or acidified food products. Operating under a Hazard Analysis and Critical Control Points (HACCP) plan requires filing your process with the FDA and is not necessary for acid foods. Retailing an acidified food requires an approved process, applying for a variance, and passing better processing school.

For more information on obtaining an approved written process prior to licensing, call the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

For HACCP guidelines through FDA, go to: www.cfsan.fda.gov/~brd/haccp.html

Liability Concerns

Most farms and farm businesses, and certainly farms with direct and intermediate marketing enterprises, have complex mixtures of potential personal and business liabilities. Insurers nationwide are gaining experience with alternative farm enterprises. Because farm insurance needs are complex, you should work directly with an insurance agent to identify your particular needs and to obtain the kinds of coverage necessary.

Farmers who market products need to regularly review their insurance needs with an insurance agent and attorney. Liability questions are more challenging than those raised by simple physical property coverage. Insurance companies offer a diverse range of coverage. Individual policies are available for physical loss of property, liability, and workers' compensation, as well as coverage for other specific needs. The alternative most local food marketers select is a package policy that combines all types of coverage in one policy.

Liability and Farm Insurances

Farmers are exposed to liability for their enterprises, whether conducted on the premises or away from them, such as while selling at a farmers' market. You are also exposed as a result of injuries to you or one of your employees. If your product causes harm to the buyer, you may be held liable. Liability insurance is



Photo courtesy Department of Tourism

Besides assessing rules and regulations for your business, you must determine the risk involved in your enterprise. Whether selling on-farm or through various markets, farmers need to regularly review insurance needs for their business.

essential to pay for sums you may become legally obligated to pay.

The main areas of insurance needed typically include liability for products sold, for visitors to the farm, for farm workers, as well as coverage for the value of crops grown and property and equipment owned.

Product Liability

Liability for the food that you sell is called "product liability." This is handled differently depending on where and how much product you sell. On-farm sales may be covered through your regular property insurance package, but don't assume that is the case. Ask your insurance agent if you are covered if someone gets sick from food that you sold. If you are selling to grocery stores or food services, they may require you to carry separate product liability coverage. Some farmers' markets require each vendor to carry their own liability coverage. If you are selling product through a distributor, you probably will be required to carry product liability coverage. Following safe food handling and food processing practices are necessary

to limit your liability exposure and to guard against people becoming ill from your products. Some buyers may refuse your product if they realize you failed to follow safe food handling practices.

Premises Liability

Liability for people who visit your farm is called “premises liability.” If your farm enterprises involve having visitors to the farm, ask your insurance agent if your policy covers all liability exposures. For example, a policy may cover visitors who are guests, but not customers of a farm-based business.

When you have a farm enterprise that invites customers to the farm, such as a Pick Your Own farm, a petting zoo, or a corn maze, there are safety measures you can take to minimize risk to your customers such as:

- Make sure the areas that customers visit are free of debris.
- Get rid of wasp and hornet nests near areas visited by customers.
- Eradicate harmful weeds such as poison ivy, stinging nettles, and ragweed.
- Strictly follow re-entry times for any pesticides.
- Lock up farm chemicals, if used.
- Keep farm equipment away from customer areas.
- Post signs to warn of any dangers you are not able to remove.
- Have a well-marked and large enough parking area.



Photo courtesy Department of Tourism
Farmers are liable for the food they sell. Some farmers' markets require each vendor carry their own liability coverage.

Not only do such measures protect your customers, they give you some protection against claims of negligence should an injury occur at your farm.

Workers' Compensation and Employers' Liability Insurance Coverage

You have liability for any farm worker you hire. Most employers—including family farmers—are required to carry workers' compensation insurance for employees. Under Wisconsin law, a person engaged in farming is required to obtain a workers' compensation policy when that person employs six or more employees for 20 consecutive or nonconsecutive days during a calendar year. Employees injured on the job receive medical and wage benefits. If workers' compensation doesn't apply, the injured party can still receive compensation from the employer for monetary loss and possibly pain and suffering.

As with product and premises liability, you need to talk to an insurance agent to discuss insurance coverage needs relating to your employees. If you are exempt from carrying workers' compensation, you still need to make sure you have adequate farm worker coverage on your regular farm property insurance package. Also, farmers who are exempt may still choose to purchase workers' compensation coverage as a benefit to their employees.

As a farm employer, you have liability not only for injuries to your employees, but for injuries or losses they may cause to others. To lessen this risk, post clear guidelines and written job descriptions for your employees and discuss this liability concern with your insurance agent.

Property Insurance Coverage

Farm property includes buildings, vehicles, equipment, and inventory. A clear explanation in the policy is essential so you know what the policy provides.

Farm property insurance includes coverage for different types of farm structures, vehicles, machinery, equipment, inventory, livestock, and crops. Coverage options may vary depending on the type and cause of loss. Losses may include damage to or loss of physical items that are owned, leased, or contracted by your business.

You must know the value of the property or equipment you wish to cover and today's replacement value of these items. You'll also want to evaluate what type of losses will impair your farm operation and for how long.

Read your farm property insurance policy carefully to know the risks covered and any conditions, restrictions, or exclusions that may limit insurance coverage. Review your insurance coverage annually and make any needed adjustments.

Crop Insurance and Livestock Price Insurance

The Risk Management Agency (RMA) of the USDA underwrites crop insurance for farmers. The RMA provides insurance for a wide variety of crops, including many fruits and vegetables. For a list of crops covered, go to www.rma.usda.gov and search "Crops Covered." Then choose the list of crops covered for the most recent year.

RMA's Adjusted Gross Revenue (AGR) product provides protection against low revenue due to unavoidable natural disasters and market fluctuations that occur during the insurance year. Covered farm revenue consists of income from agricultural commodities, including incidental amounts of income from animals and animal products and aquaculture reared in a controlled environment. For more information go to: www.rma.usda.gov/policies/agr.html

AGR-Lite insurance is available through underwriting by the RMA. This whole-farm income insurance policy is based on a farm's five-year history of revenue, plus the current year's farm plan. This type of plan may be attractive to diversified enterprises since coverage is not tied to one specific crop or mix of crops.

Noninsured Crop Disaster Assistance Program (NAP)

USDA's Farm Service Agency's (FSA) program provides financial assistance to producers of noninsurable crops when low yields, loss of inventory, or prevented planting occur due to natural disasters. For more information go to www.fsa.usda.gov and search NAP or go to your local FSA office.

Supplemental Revenue Assistance Program (SURE)

This program, while not an insurance, is available to eligible producers on farms in disaster counties that have incurred crop production losses and/or crop quality losses during the crop year. For more information go to www.card.iastate.edu/iowa_ag_review/summer_08/article3.aspx

Resources for Risk Management and Insurance

www.uwex.edu/ces/agmarkets/publications/documents/A3811-7.pdf
UW Cooperative Extension
"Risk, Liability and Insurance for Direct Marketers"

www.rma.usda.gov/pubs/rme/fctsht.html
USDA Risk Management Agency (RMA)
Online publications and crop fact sheets.

www.rma.usda.gov/tools/agents/companies/RMA
RMA's online agent locator lists crop insurance and livestock price insurance agents.

WISCONSIN ADMINISTRATIVE CODE

The rules of a state agency have the effect of law and are issued by an agency to implement, interpret, or make specific legislation enforced or administered by the agency, or govern the organization or procedure of the agency. "Wisconsin Administrative Code" means such rules as they may be amended from time to time. See the chapters for Agriculture, Trade and Consumer Protection (ATCP) at: www.legis.state.wi.us/rsb/code/atcp/atcp.html



“...We need [food safety] regulations and procedures that are respectful of small farmers.

—Marilyn Volden

Assuring Food Safety

Viroqua tackles on-farm food safety

“Before considering pricing I need some assurance that a local farmer is using safe food handling practices on his or her farm,” says Marilyn Volden, Food/Nutrition Program Supervisor for Viroqua Area School District.

As a result, Volden has developed on-farm food safety protocols to ensure safe, fresh, and healthy food for students.

Surveys, farm visits and trainings

A combination of farmer food safety surveys, farm visits, and food safety trainings provide Volden with the assurance she needs to purchase fruits and vegetables from a local farmer.

While many still see food safety issues as major barriers to large-scale, statewide farm to school programming in Wisconsin, Volden doesn't see it that way. From the ground up, she has shown that buying direct from small, local family farms is safe and healthy for Wisconsin students.

“I find a better sense of safety in visiting a farm and seeing their operating procedures first hand than buying from a big distributor. I want to know where our food is coming from and how it's being produced.”

Why Farm to School in Wisconsin?

Good for kids' health

- Fresh fruits, vegetables, and other healthy foods help fight obesity.

Good for farmers

- Schools provide local farmers with new or expanded markets.

Good for the community

- Local farmers are supported and money stays in the local economy.

Good for schools

- Overall, schools report a 3-16% increase in meal participation when farm-fresh food is served, thus bringing in more funds.

—Marilyn Volden



FOOD SAFETY AND LIABILITY INSURANCE

EMERGING ISSUES FOR FARMERS AND INSTITUTIONS



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A COMMUNITY FOOD SECURITY COALITION REPORT

THIS PROJECT IS FUNDED BY USDA RISK MANAGEMENT AGENCY
COMMUNITY OUTREACH AND ASSISTANCE PARTNERSHIP



DECEMBER 2010



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ACKNOWLEDGMENTS

Many thanks to the farmers who participated in the assessments, to the USDA Risk Management Agency for funding this project, and to the following partner organizations:

- Agriculture and Land-Based Training Association (ALBA)
- Community Alliance with Family Farmers (CAFF)
- Jubilee Project (JP)
- Maine Organic Farmers and Gardeners Association (MOFGA)
- New Entry Sustainable Farming Project (NESFP)

Thanks also to Steve Warshawer of the Wallace Center National Good Food Network for commenting on a draft version of this report, to Megan Lott of CFSC for sharing updates and insights on federal food safety legislation, and to Marne Coit of Greenfield Research & Consulting LLC for survey work and information development.

ABOUT CFSC

WHAT IS CFSC?

Founded in 1994, the Community Food Security Coalition (CFSC) is a non-profit 501(c)(3) membership-based national coalition governed by a 15-member Board of Directors. The Coalition is at the hub of current efforts to re-think, re-organize, and renew the nation's food system. We are committed to creating equitable, healthful, sustainable, self-reliant and community-based food systems through policy advocacy, education, research and organizing.

WHAT IS CFSC'S MISSION?

The Community Food Security Coalition catalyzes food systems that are healthy, sustainable, just, and democratic by building community voice and capacity for change.

WHAT HAS THE COALITION BEEN DOING?

The Coalition has played a pioneering role in the farm to cafeteria arena, creating the first and only National Farm to School Network (in conjunction with the Urban and Environmental Policy Institute at Occidental College) and a National Farm to College Program. As part of this work,



PHOTO CREDIT: ALBA

the Coalition has organized five national farm to cafeteria conferences. It has also organized or participated in numerous training workshops, programs and conferences and developed many resources for farmers, agricultural professionals, food service operators and others regarding the nuts and bolts of building successful farm to cafeteria programs.

WHERE CAN I LEARN MORE?

Check out the following websites:

THE COMMUNITY FOOD SECURITY COALITION,
www.foodsecurity.org

CFSC'S NATIONAL FARM TO COLLEGE PROGRAM,
www.farmtocollege.org

THE NATIONAL FARM TO SCHOOL NETWORK,
www.farmtoschool.org, sponsored by the Urban and Environmental Policy Institute (UEPI) at Occidental College and CFSC

EXECUTIVE SUMMARY

Concerns about food safety and about liability insurance can affect institutions' willingness to purchase products from local, limited resource or small-scale farms. To address this limiting factor, CFSC began studying these issues in the fall of 2009.

With assistance from its project partners, CFSC conducted assessments with 25 farmers based in different regions around the country during January, February, and March 2010. More than half of them (60%) indicated that their customers currently have no food safety program requirements, and nearly half (48%) said that no one involved in their farm operation keeps records of their food safety practices. Most of them (72%) said that they did carry product liability insurance.

CFSC also found that the voluntary Good Agricultural Practices (GAP) guidelines issued by the FDA and USDA in 1998 are now required by some food service management companies. Others accept third party inspections or simply require GAP training (not certification). "Self-operated" institutions reported food safety requirements ranging from no requirements to GAP certification. Some companies and institutions require \$5 million of insurance coverage—far more than the \$1 million policies typically held by small producers.

Based on these findings, CFSC concludes that many small and limited resource producers seeking to increase their markets with institutional buyers will need assistance in finding adequate product liability insurance and in meeting requirements for food safety procedures. These producers may also need assistance in understanding and complying with new food safety requirements and regulations.

The recommendations in this report emphasize proactive and cooperative attention to food safety and liability insurance issues. For example, farmers should identify food safety risks and develop plans to address them. Food service operators should work with local extension educators and other agricultural professionals to make sure growers have the information and tools that they need to address food safety concerns. If needed, growers' organizations should help farmers take a group approach to food safety and product liability requirements. These actions can help to reduce food safety risks and allow small and limited resource producers to continue to grow.



A NOTE ABOUT THE FDA FOOD SAFETY MODERNIZATION ACT

This project was carried out before the United States Congress passed the FDA Food Safety Modernization Act (FSMA) at the end of 2010 during the 111th Congress. While it is too soon to know the full effects of this new law, it will certainly focus increased attention on food safety standards and practices. Analyzing the provisions and potential effects of this new law is beyond the scope of this report, but some understanding of the law as it affects small and mid-scale producers will be helpful in contextualizing this report and its recommendations.

For consumers, the growing trend towards healthy, fresh, locally sourced foods improves food safety by providing the opportunity to know their farmers and processors, to choose products based on these relationships, and to readily trace any problems should they occur. However, the industrial food system—characterized by supply chains and distribution systems that are long, complex, and difficult to trace—has long been plagued by food-borne pathogen outbreaks and widespread contamination. Recent food safety scares involving eggs, spinach, and tomatoes to name a few, have called attention to the dangers inherent to our modern industrialized food system.

As a result, food safety legislation that would expand mandatory food safety oversight—focusing mainly on expanding the Food and Drug Administration’s (FDA) role in regulating and overseeing agriculture production and processing—gained strong support in

Congress. Currently the FDA regulates 80 percent of the food Americans eat, including produce, nuts, spices, cheese, and fish. The US Department of Agriculture (USDA) regulates meat and poultry products; and the two agencies share responsibility for egg safety. The bill passed by Congress—S. 510, the FDA Food Safety Modernization Act—aims to prevent food contamination by requiring facilities to maintain food safety plans, by enabling FDA to inspect food facilities more frequently, by providing authority to FDA to order mandatory recalls in the event of contamination, and by requiring the FDA to improve the traceability of foods to help investigators link contaminated food to processors, farms, and other facilities.

The Community Food Security Coalition believes that improving the FDA’s capacity to conduct oversight in order to reduce the risk of food-borne illnesses is important. However, many of the provisions in the original bill did not take into account the diversity of agriculture or the different risks associated with various production and processing practices, and thus had the potential to be overly burdensome for small and medium-scale producers who have been instrumental in offering safer, more local alternatives to the current system.

As a result, advocates worked with Senators John Tester (D-MT) and Kay Hagan (D-NC) on an amendment to S.510 that would protect small and medium-scale producers and processing facilities that market their products directly to consumers from many hazard analysis and produce safety standard provisions in the bill. The Tester-Hagan



amendment does not create an exemption from the current law or regulations; rather, the amendment clarifies existing law and provides a size appropriate and less costly alternative to Hazard Analysis Critical Control Point (HACCP) for farmers who:

- direct market more than 50% of their products directly to consumers, stores, or restaurants;
- have gross sales (direct and non-direct combined) of less than \$500,000; and
- sell to consumers, stores, or restaurants¹ that are in-state or within 275 miles.

Farmers who meet these qualifications must provide documentation that the farm is in compliance with state regulations, and the farm/facility must also prominently display the name and address of the farm/facility on its label or, for foods without a label, on a poster, sign, or placard at the point of purchase.

Congress passed S. 510 in December 2010 with the Tester-Hagan amendment fully intact. In addition to the Tester-Hagan amendment, the bill as passed includes several other amendments that support small and medium-scale producers in specific ways, including:

- The creation of a food safety training program for farmers, small processors and wholesalers;
- FDA is instructed to provide flexibility for small processors to minimize the burden of compliance with regulations;

- FDA is given authority to exempt farms engaged in low or no risk processing from new regulatory requirements; and
- Small farmers are not required to meet extensive traceability and recordkeeping requirements if they sell food directly to consumers or to grocery stores. Passage of the FDA Food Safety Modernization Act is the first major change to the nation's food safety laws since 1938, bringing food safety into the 21st century with scale-appropriate standards.

Given the range of concerns about food safety requirements expressed by the farmers in the assessments for this project, CFSC expects that many small and mid-scale farmers will encounter challenges in implementing some provisions of the new law. The information in this report should prove helpful in identifying some of these challenges and in helping farmers, institutions, food service management companies, and others work together to address them.

¹According to Section 415 of existing Food Safety Regulations, "Restaurant" means a facility that prepares and sells food directly to consumers for immediate consumption, including entities in which food is provided to humans, such as cafeterias, lunchrooms, cafes, bistros, fast food establishments, food stands, saloons, taverns, bars, lounges, catering facilities, hospital kitchens, day care kitchens, and nursing home kitchens; and including entities in which food is provided to animals such as pet shelters, kennels, and veterinary facilities.



THE PROJECT

In its work with farm to institution programs over the past ten years, the CFSC has observed an on-going struggle around this question: How can small and limited resource farmers increase their institutional sales (and their profits) while meeting requirements for food safety practices and liability insurance? This question led to a project funded by the USDA Risk Management Agency (RMA) on "Food Safety and Liability Insurance Issues for Limited Resource Farmers Marketing to Institutions." CFSC directed this project from the fall of 2009 to the fall of 2010. The purpose was to increase limited resource producers' ability to market produce to local institutions by increasing their knowledge about the food safety and product liability insurance requirements of institutions and identifying practical solutions for these producers to address these requirements.

In this project, CFSC had the assistance of five partners:

- Agriculture and Land-Based Training Association (ALBA)
- Community Alliance with Family Farmers (CAFF)
- Jubilee Project (JP)
- Maine Organic Farmers and Gardeners Association (MOFGA)
- New Entry Sustainable Farming Project (NESFP).



PHOTO CREDIT: NESFP

Two of these organizations are based in California (ALBA and CAFF), one in Tennessee (JP), one in Maine (MOFGA), and one in Massachusetts (NESFP). (For more information about them, see the Food Safety Resources section of this report.) CFSC worked with these partners to gather information about these issues and to share that information with interested farmers, organizations, and institutions. In addition to this report, the Coalition produced a brochure (in English and Spanish) and an audio version (in Spanish) designed to help limited resource producers, agricultural professionals who work with them, and institutional food service operators understand these issues. CFSC and these partner organizations also organized a short course at their annual conference in October 2010 for those interested in learning more about this topic.

The goal of the project was to increase limited resource producers':

- knowledge about the food safety and liability insurance requirements of institutions;
- understanding of what the potential risks might be on individual farms and how to develop a food safety plan to address these risks;
- knowledge about available and potential options to address the food safety and insurance requirements of institutions;
- knowledge of available resources and programs to assist agricultural professionals and food service operators working on potential solutions to the obstacles for limited resource producers in marketing to local institutions; and
- understanding of the legislative and regulatory issues related to food safety.

To download this report, the brochure, and the audio version, visit www.foodsecurity.org. Look for Food Safety and Liability Insurance Resources on the Publications section of the website.

To view notes, slides, and handouts from the short course, visit <http://communityfoodconference.org/14/materials/#sc> and scroll down to Food Safety and Liability Insurance Issues for Marketing to Institutions under "Short Course Materials."

FOOD SAFETY STANDARDS: LEGISLATIVE ISSUES, REGULATORY DEVELOPMENTS, AND INDUSTRY INITIATIVES

Understanding food safety issues involves understanding legislative and regulatory actions as well as food industry practices? In 1997, President Bill Clinton declared safety of fresh produce a priority and created the “Food Safety Initiative.” One year later, the Food and Drug Administration (FDA) and the Department of Agriculture (USDA) issued a Good Agricultural Practices (GAP) guidance document (*Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables*). This guide serves as a common starting point for addressing food safety.³ These voluntary guidelines outline ways to minimize microbial contamination during growing, harvesting, and packing fresh fruits and vegetables. They also include instructions on farm worker health and hygiene, sanitary facilities, manure management, irrigation and wash water quality, in addition to other activities (National Sustainable Agriculture Coalition [NSAC], 2009).

Farmers can self-document their compliance with these federal GAP standards. The federal guidelines can also serve as the basis for a voluntary audit-based verification program—the Quality Through Verification Program—administered by the USDA’s Agricultural Marketing Service since 1999. Some wholesale buyers now require growers to be audited to ensure they are in compliance with GAP—turning the voluntary guidelines into de facto mandatory requirements. In addition, since 2007, all growers that sell fresh produce to federal food and nutrition programs through the USDA Fruit and Vegetable Program’s Commodity Procurement Branch are required to pass a federal GAP audit with a score of 80% or higher (NSAC, 2009).

GAP is flexible as a rubric for assessing pathogen risks on the farm, but GAP certification has been problematic for some small, mid-scale, and organic producers for whom the costs of physically adopting the GAP standards can be prohibitive. Larger growers can more easily absorb the costs and annual audit fees. A few states have created modest GAP



PHOTO CREDIT: ALBA

certification cost-share programs to address this issue, and a few other states have initiated technical assistance and outreach programs to help farmers implement them (NSAC, 2009).

Some private parties, including buyers and producer groups, have added requirements onto the federal GAP standards. These additional requirements are often referred to as supermetrics, and are generally audited by private firms. Some buyers use supermetrics to demonstrate their commitment to food safety, to exceeding the requirements of the GAP standards. These requirements often place producers at the nexus of conflicting mandates because

²The information in this section is excerpted and adapted from the Wallace Center National Good Food Network (NGFN) *Food Safety FAQ* (<http://ngfn.org/resources/food-safety/food-safety-faq#documentContent>) and the National Sustainable Agriculture Coalition’s (NSAC’s) *Food Safety on the Farm: Policy Brief and*

Recommendations, October 2009 (<http://sustainableagriculture.net/wp-content/uploads/2008/08/NSAC-Food-Safety-Policy-Brief-October-2009.pdf>).

³The FDA guide is available at: <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064574.htm>.

food safety supermetrics can conflict with conservation and habitat improvement goals that are increasingly important to farms and to the general public. In California, for example, some growers have discontinued wildlife conservation practices in response to new standards (NSAC). There is no scientific evidence that the additional requirements of buyer supermetrics increase food safety. Rather, supermetrics primarily serve a



PHOTO CREDIT: ALBA

marketing function by allowing buyers to claim that because of their stringent requirements, the food they sell is safer. As a result of these additional requirements and the many different scenarios in which supermetrics can be required by some buyers, producers are often faced with conflicting requirements and the need for multiple audits. This situation has led to “audit fatigue” among many produce growers (National Good Food Network).

These developments are responses to events within the industry. Several major outbreaks of food-borne illness in the last few years related to spinach, peanuts, and other fresh produce items have led to heightened concerns about food safety. The illness and suffering (and the media’s attention to these outbreaks and their costs) have reinforced institutions’

concerns. Institutional markets, and schools in particular, are held to a high standard in making sure that the foods they provide are safe. Institutions must supply safe food, but they also want to serve healthy food. Fresh fruits and vegetables are an essential part of the human diet, but most Americans, especially those with limited incomes, do not consume the amounts recommended by the federal government. In recent years, increasing consumer demand for fresh, high quality, locally grown produce, and the growing number and efficacy of community food endeavors that provide greater access to fresh local foods—such as Farm to School and Farm to College programs—have been hailed as part of the solution to today’s diet-related epidemics of obesity and diabetes. Any food safety standards that inhibit the growth or activities of these farms or that limit local access to fresh, affordable produce may, in fact, have negative health impacts. In addition, proposed food sterilization methods such as irradiation or high levels of chlorination may reduce the nutritional quality of fruits and vegetables by destroying phytochemicals and other healthy plant compounds, or creating new, unhealthful compounds. For these reasons, produce safety approaches should promote fresh produce production and processing management systems that prevent pathogen levels high enough to warrant sterilization methods. Overall, food safety standards must not decrease the healthfulness, variety, or availability of fresh produce in the food supply (NSAC, 2009).

Both food safety and product liability insurance requirements can create significant obstacles for small and limited resource producers trying to market their products to local institutions. Many of them cannot afford any liability insurance, or at most a \$1 million policy. Institutions’ high insurance coverage requirements (\$5 million in some cases) can impede producers’ ability to sell to food service management companies. Similarly, small producers may struggle to comply with food safety guidelines or

requirements designed for larger operations. In addition, institutions tend to assume that buying direct from the farmer is somehow more risky than buying from a broker—even though recent high profile outbreaks were connected to large-scale industrial operations. This assumption breaks down when the purchaser begins to interact with the farmers and begins to understand the farming operations. Establishing trust between producers and institutional buyers is the crucial step.

In response to the many challenges that small producers face, several organizations around the country are developing food safety protocols that are more appropriate to smaller-scale farms that grow a diversity of crops, practice sustainable agriculture methods, and have in place various conservation and habitat improvement programs. They are working with their member farmers and local restaurants, grocery stores or institutions to make sure the guidelines are doable for farmers and acceptable to their customers. These guidelines fit better with the needs and capacities of limited resource producers. Some groups that act as a distribution channel for small or limited resource producers are securing a group policy to cover product liability insurance requirements for their individual farmers. If small and limited resource producers are to gain a significant market share of the institutional food service market, many of them will need assistance in developing creative options for acquiring insurance and establishing credible food safety procedures.

APPROACHES AND CRITICAL ISSUES FOR PRODUCERS, AGRICULTURAL PROFESSIONALS, AND FOOD SERVICE OPERATORS

Food safety requirements and product liability insurance requirements have important implications for small producers. If they are unable to meet requirements, they may miss out on markets. If they are unable to meet requirements in cost effective

ways, they may not benefit from these markets. Understanding these issues requires, at minimum, some understanding of farmers' current practices, of state and federal regulations, and of institutions' and food service management companies' policies. The following section explores these various perspectives before looking at emerging models of group-based and proactive approaches to food safety and liability issues and offering several recommendations for addressing these issues.

PRODUCERS' CURRENT FOOD SAFETY PROCEDURES

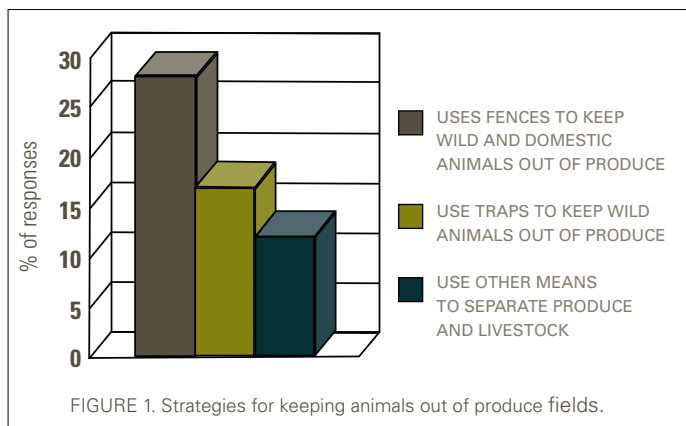
During January, February, and March of 2010, CFSC and its partner organizations conducted assessments with 25 different small or limited resource farmers (fruit and vegetable growers) around the country to learn about their current practices. The partner organizations (ALBA, CAFF, JP, MOFGA, and NESFP) each provided contact information for five producers who volunteered to participate in the assessments. The focus of the assessments was on food safety and product liability insurance issues. Twenty of the assessments were conducted by CFSC as individual phone interviews. Five were conducted by ALBA as part of a focus group.

For more details about the participants' backgrounds, their current food safety practices, and the concerns that they find hard to address, see the full summary of the assessments in the Appendix.

For the purposes of the assessments, we explained to the producers that we were defining food safety procedures as "methods for the production, handling, storage, and processing of food in ways that prevent food-borne illness."

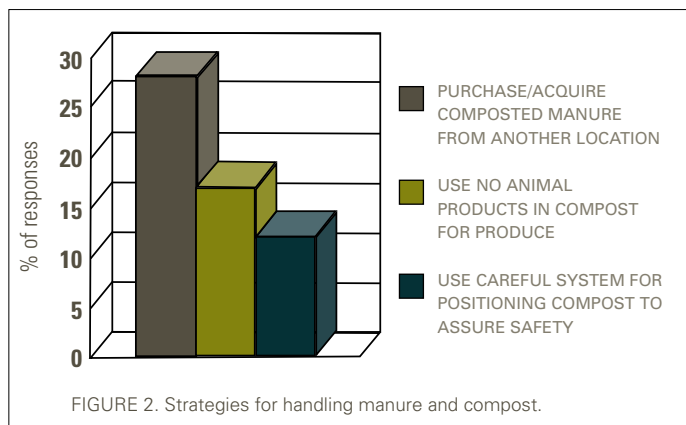
Sixty percent of the farmers indicated that their customers do not have any food safety requirements. One farmer explained that "Living in a small community, they know us, we know them, and they know they can visit us any time, they can track it down; they haven't gotten too concerned about

it right now.” However, 68 percent of the farmers indicated they have participated in a training session on food safety procedures and many cited specific procedures that they use. For example, many reported specific strategies for keeping animals out of produce fields such as using fences (28%) and traps (17%). See Figure 1.

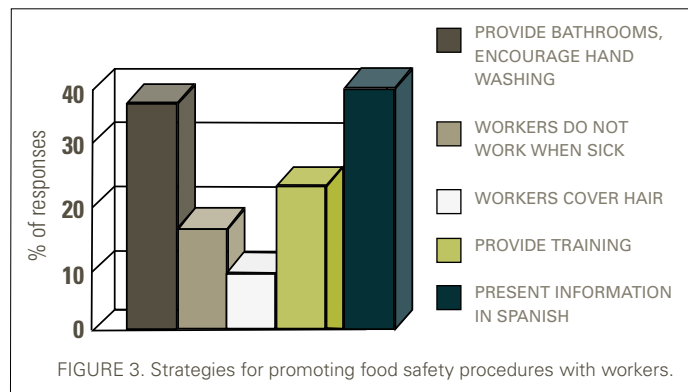


The “other means” for separating produce and livestock areas included using row covers, using tactics that scare away animals (such as tin plates), and keeping border areas clean and cleared.

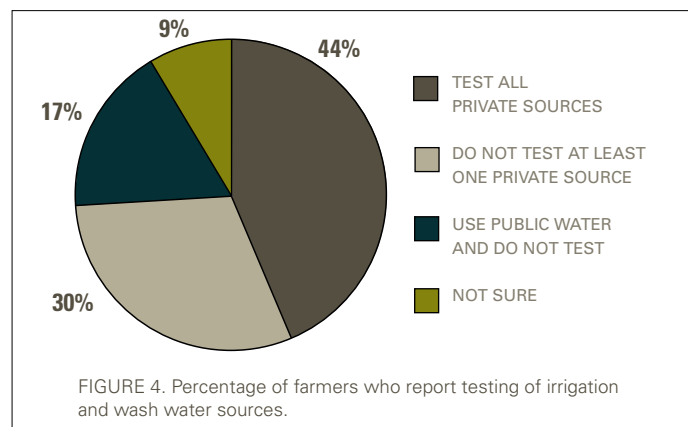
When asked how they manage manure or compost to prevent food safety concerns, some of the farmers reported that they use more than one measure. Nearly half of the responses (45%) indicated that they get their compost from another location and another quarter (27%) that they use no animal products in their compost. See Figure 2.



Nearly three quarters (72%) of the farmers have hired workers on their farms. While providing bathrooms and providing training were mentioned in the follow-up responses of these farmers (29% and 23%), the most cited strategy for promoting food safety was presenting information in Spanish (40%). See Figure 3.



Record keeping and testing of water sources were challenges for many of the farmers. Forty eight percent of the farmers indicated that no one involved in their farm operation keeps records of the food safety practices conducted on their farm. Although 44 percent of the farmers said that they use a spring or well water for wash or irrigation water (or both) and test these private sources, 30 percent said that they use spring or well water for one or both sources and do not test at least one of the private sources. Another 17 percent said that they use public water for both sources and therefore do not test the water. Nine percent were not sure if the wash water and irrigation water were tested. See Figure 4.



Of the 68 percent of farmers who participated in training about food safety procedures, the most common organizer of the trainings was a non-profit growers' organization.

Thirty seven percent of the farmers who responded said that they found certain food safety issues difficult to address. When asked about their familiarity and concern with meeting possible food safety guidelines, 58 percent communicated that they were familiar with the proposed guidelines and were concerned about being able to meet them. Some feared that the costs of proposed regulations might put them out of business: "If we have to [pay to] have [USDA] come out every year and inspect with the little bit of money we are making, we'll just quit." While these assessments reflect the input of only 25 different farmers, they are suggestive both of current practices and of concerns about how governmental action may affect future standards.

INSTITUTIONS' FOOD SAFETY REQUIREMENTS

In addition to conducting the farmer assessments, CFSC also discussed food safety and product liability insurance with federal and state agencies, food service management companies, and institutional food service directors in order to understand their perspectives.

STATE AND FEDERAL REGULATIONS

As of November 2010, there were no federal food safety requirements for farmers selling to institutions unless the grower was selling into the USDA Foods Program (formerly known as the Commodity Program). With the passage of the FDA Food Safety Modernization Act in December 2010, the FDA is expected to issue new guidelines after a regulatory review process.⁴ Under the Tester-Hagan amendment to that bill, qualifying small producers must show that they are in compliance with state regulations and label their products with the name and address of the farm/facility (or, if the product is unlabeled, provide that information on a sign at the point of sale) in order to be exempt from these new guidelines.

⁴For updates on food safety legislative issues, FDA and USDA regulatory developments, and industry food safety initiatives, go to the National Sustainable Agriculture Coalition's website (<http://sustainableagriculture.net/>) and to the Wallace Center's National Good Food Network website

At the state level, food safety requirements for growers selling direct to institutions vary. Most states do not have specific requirements. However, many state health codes do include requirements for general sanitation when selling fresh produce. Oklahoma has applied these general requirements to growers selling to schools. The Oklahoma Department of Health has stated that fresh fruits and vegetables may be sold and purchased by schools if the following criteria are met:

- 1) The produce is unprocessed
- 2) The produce is protected from contamination
- 3) The growers follow Good Manufacturing Practices (GMPs) when washing and cleaning produce.

A certificate from the Department of Health is required if the grower is selling produce that he or she did not grow or if processed products such as sliced apples, cider, or breads are involved.

FOOD SERVICE MANAGEMENT COMPANIES

Food service management companies may also implement food safety requirements. CFSC contacted some of these companies to learn more about their requirements and discovered that they have various approaches:

BON APPETIT MANAGEMENT COMPANY (<http://www.bamco.com/>) will accept an inspection from a third party, including the local health department. They try to be flexible because they want to encourage small farmers to participate in their Farm to Fork program (a company-wide initiative to buy locally).

PARKHURST DINING SERVICES (<http://www.parkhurstdining.com/>), in general, requires farmers to have GAP certification. However, this is currently not a stringent requirement and not always enforced. Most of the local produce is going through local distributors that may have their own sets of requirements.

(<http://ngfn.org/resources/food-safety>). The Food Safety Resources section also includes a list of national organizations that work on federal legislative issues (including food safety issues) that affect farmers.

SODEXO (<http://www.sodexousa.com/>)

All suppliers are required to provide proof they have a food safety program meeting Sodexo's requirements. A third party audit is required. Sodexo provides a list of auditors. The farmer then selects one to work with, and the auditor manages the entire process. GAP certification is not required but Sodexo will accept this as proof of an adequate food safety program. Due to the cost of a third party audit, they urge farmers to work through Sodexo-approved distributors.

CHARTWELLS-THOMPSON

(<http://www.chartwellsschools.com/>) There is a blanket requirement that food suppliers be GAP certified. They do not buy directly from farmers, but from wholesalers, who must show certification.

CFSC also spoke with individual food service directors and found that "self-operated" institutions vary quite a bit in their food safety requirements, ranging from no requirements to GAP certification.

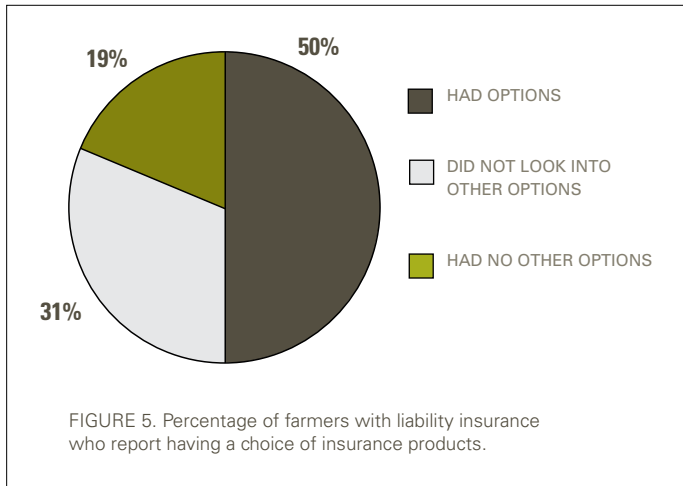
One implication of these responses is that food service management companies play a key role in establishing food safety requirements and in determining the terms under which producers have market access.

LIABILITY INSURANCE COVERAGE AND REQUIREMENTS

Like food safety requirements, product liability insurance needs and requirements can affect market access. In the farmer assessments, 72 percent of the farmers indicated that they had product liability insurance. Sixty four percent indicated that they have customers who require coverage. Customers that require product liability insurance included grocery stores, wholesale distributors, retailers, farmers markets, property owner, and certain CSA customers. Of the farmers who carried liability insurance, 50 percent indicated that they had choices of insurance products, 19 percent indicated that they had only one option, and 31 percent said that they did not explore insurance product options. See Figure 5 on the next page. Sixty seven percent of these farmers indicated that they did not have any difficulties in finding out information about liability insurance coverage or in securing this coverage.

There are no liability insurance requirements at the federal level for farmers selling to school meal programs or other institutional food service operations. In examining state requirements, Coalition staff contacted the appropriate state agencies in Washington, Massachusetts, and Oklahoma—three states with





insurance requirements for the wholesalers/ distributors they work with, with a range from no insurance required to \$2.5 million of insurance required.

The farmers participating in the assessments who carried product liability insurance sometimes had this coverage as part of a larger liability insurance policy that covered their business and personal property and/or farm worker injuries. Although they were given the questions in advance of the calls, some of them were not sure how their policies broke down in terms of how much just the product liability insurance coverage cost. Some of them were not sure how much coverage they had or how much it cost. Estimates of coverage and cost varied:

- We have \$6 million coverage for \$5,000 per year. (Some of it is product liability and some is an umbrella.)
- I think we have \$5 million coverage for \$1,000 per year.
- We have \$2 million product liability coverage, overall package costs \$1,500 per year (includes commercial property, buildings, house, equipment, machinery), \$376 per year for just liability.
- \$1 million coverage for just under \$2,000 for our whole farm policy (includes buildings and equipment)
- \$1 million in coverage, costs \$1,400/year
- \$1 million catch all policy (if someone gets hurt on farm, sick from eating food, etc.) for \$400 per year
- \$1 million coverage for \$323 per year
- We have \$500,000 coverage liability (covers property damage, bodily damage, med expenses, fire, limited farm pollution, etc), \$222 for liability part.

These responses reveal that even farmers who carry liability insurance generally carry less coverage than food service management companies require. They also reveal that the cost of coverage varies considerably.

Coalition connections in three different parts of the country. None of these states have insurance requirements. Instead, in general, liability insurance requirements tend to be at the distributor or institutional level.

CFSC also asked the food service management companies about their product liability insurance requirements:

BON APPETIT requires \$5 million of product liability insurance for most vendors. Farmers in their Farm to Fork program (a company-wide initiative to buy locally) are required to carry \$1 million in product liability insurance.

PARKHURST DINING requires \$5 million of liability insurance for most vendors, as well as for farmers selling proteins (due to the higher liability exposure), and \$2 million for farmers selling produce.

SODEXO requires \$5 million of product liability from all vendors, including fruit and vegetable growers, as produce is considered high risk. In part because of this requirement, as well as their food safety requirements, they encourage growers to work through Sodexo-approved distributors.

CHARTWELLS-THOMPSON does not buy directly from farmers, so there are no specific insurance requirements. The school districts have

GROUP-BASED APPROACHES TO FOOD SAFETY AND LIABILITY INSURANCE

Recognizing the challenges facing small and limited resource producers, some organizations have devised group-based approaches to help meet them. For example, Appalachian Sustainable Development (ASD) (<http://www.asdevelop.org/>) in Virginia developed food safety guidelines that incorporate organic certification standards. Their buyers are encouraging all produce providers to seek a certification of some sort, and they appreciate the proactive food safety efforts ASD has made. ASD has a \$2 million general product liability insurance policy with a \$2 million umbrella policy for a \$4 million aggregate product liability which covers ASD only. That means, if ASD did something wrong in handling product that caused a problem, then they would be liable. If it is proven that the problem came from a farm, then the farmer would be liable and therefore should carry his or her own product liability insurance.

Grasshoppers Distribution (<http://www.grasshoppersdistribution.com/>) in Kentucky is currently in the process of developing food safety standards for their producers. They use a GAP training program (2-3 hour course) put on by the Kentucky Department of Agriculture. They find that GAP certification (USDA) is too cumbersome and expensive for their producers. Grasshoppers has a \$6 million aggregate policy that covers the product of the farmers that use this distribution channel. Most of their member farmers would not be able to afford this policy on their own, so through Grasshoppers' coverage, many market doors are being opened for these small-scale farmers.

Red Tomato (<http://www.redtomato.org/>) based in Massachusetts is supporting their farmers in becoming GAP/GMP (Good Manufacturing Practices) certified. Red Tomato is developing a voluntary food safety program for their growers whereby all can become GAP/GMP certified (the program also has elements above and beyond GAP protocols). To encourage grower participation and create savings through joint efforts, Red Tomato is underwriting the costs of the Grower Assessments, the Food Safety Program Protocols/Manual, as well as the Training and Implementation Plan. They recently completed the Grower Assessment phase. This consisted of one-on-one visits to each farm so their consultant could evaluate each grower's food safety knowledge and farm operations. From these assessments, they will create their Food Safety Program Protocols and make recommendations tailored to each farm and each grower's needs. Some growers may be on a fast track to certification by the end of 2010. Others may take a year or two longer depending on their capacity and the needs in the marketplace. Their goal is to get all growers on board and moving forward towards GAP/GMP certification.

Red Tomato has a liability policy that covers the products sold to their customers. The policy is for \$2 million for one occurrence and \$4 million total for the policy term. In addition, they have umbrella coverage for an additional \$1 million. Some of their customers require a specific amount of coverage. Growers that work with Red Tomato must have their own policy for covering products they sell through other channels.





PHOTO CREDIT: NESFP



PHOTO CREDIT: ALBA

GLOBALGAP, a private sector body that sets voluntary standards for the certification of agricultural products around the globe, offers another model of a group-based approach. It has established itself as a reference for GAP in the global marketplace by translating consumer requirements into agricultural production in a growing list of countries. GLOBALGAP recognizes that, for structural reasons, small-scale farmers often face more difficulties in fulfilling food safety requirements than large-scale farmers and may need more time to meet these challenges. As a result, small-scale farmers are at risk of missing out on market access. GLOBALGAP has developed three approaches to facilitate market access for small-scale farmers:

⁵For more information, see the GLOBALGAP website at http://www.globalgap.org/cms/front_content.php?idcat=70.

1) a group certification process, which develops local training and verification processes for one-on-one third party verification, thus building capacity locally and still meeting external verification requirements, with reduced long term costs

2) a smallholder manual, which provides templates for producer groups establishing internal control systems

3) feedback opportunities, which allow small producers to influence what the standards are⁵
ALBA, one of the project partners, is working with NSF Davis Fresh⁶ for training, technical assistance, and food safety certification under GLOBALGAP. ALBA Organics, ALBA's licensed wholesale produce distributor, is in the process of obtaining food safety certification, along with its grower-vendors?

Producers looking for support can also check with distributors in their area to see if they may be interested in marketing their products, covering their product liability insurance coverage needs, and assisting with food safety guidelines. In order to supply the quantity and consistency of institutional food service operations, manage the high insurance coverage needs of these institutions, and address food safety requirements, farmers often work through distributors to access these large-scale markets.

PROACTIVE APPROACHES TO FOOD SAFETY AND LIABILITY INSURANCE

The farmers who participated in the CFSC assessments conducted in January, February, and March 2010 expressed concern about the potential impact of any new food safety requirements, but they also understood the bigger picture related to food safety and the need to take safety seriously. Many were concerned that the “astronomical” costs associated with some requirements might force them out of business. They commented that some ideas were “ridiculous” when extended from industrial operations down to small family operations. “Farmers are being regulated to death,” said one. At the same time, they also expressed an understanding of the seriousness of food safety. One participant put it pragmatically: “one outbreak at a farmers market and it’s going to affect everybody. We need to be proactive, because this country is reactionary. It’s important for everybody to have a food safety program.”

Though there have been several well-publicized outbreaks of food-borne illness in the last decade, those outbreaks have been linked to large-scale operations, not to farmers markets and small-scale producers.⁶ Processor/handler contaminations included repeated outbreaks due to Salmonella on Roma tomatoes from 1990 to 2004. Many outbreaks and

recalls have been associated with the large-scale fresh-cut industry, which sells fruits and vegetables that cleaned, washed, cut, packaged, and refrigerated. This list includes the September 2006 Dole Spinach outbreak and massive spinach recall, which was traced through retail bags; the November/December 2006 Taco John and Taco Bell outbreaks from food service lettuce; and the September 2007 Dole “Hearts Delight” recall of bagged lettuce. An analysis of FDA records conducted by the Community Alliance with Family Farmers found that since 1999, there were 12 outbreaks of E. coli O157:H7 traced to California leafy greens, resulting in 539 reported illnesses. Of those 12 outbreaks, 10 (80%) were on fresh-cut leafy greens and those 10 outbreaks involved 531 (98.5%) of the illnesses. The actual numbers may be closer to 100%, but the FDA is unable to definitively categorize some sources and does not appear to have been maintaining separate records for fresh-cut until 2002. The FDA released a guidance document directed at the fresh-cut industry in 2008.⁹



PHOTO CREDIT: JUBILEE

The risks associated with the large-scale fresh-cut industry are very different from the risks associated with growing and marketing whole produce in a more traditional, non-processed manner and to a local market. The FDA Food Safety Modernization Act passed in December 2010 acknowledges those differences. The Tester-Hagan amendment of this Act provides scale-appropriate options for producers whose gross sales are less than \$500,000 per year and who sell at least 50% of their products directly to consumers, stores, or restaurants locally (within 275 miles). Congress was apparently persuaded by the

⁶NSF Davis Fresh is part of NSF International. (Note: NSF is an abbreviation from National Sanitation Foundation, the company's original name. It is not to be confused with the National Science Foundation, which also uses the abbreviation NSF.) For more information on NSF Davis Fresh go to: http://www.nsf.org/business/nsf_davis_fresh/index.asp?program=DavisFre.

⁷To see a sample organizational chart for this kind of group-based GAP certification and to learn more about the process, go to <http://www.ngfn.org/resources/food-safety> and click on the Primer on GlobalGAP Group Certification (Option 2).

⁸The information in this section is based in part on Daniel Cohen's The History, Politics and Perils of the Current Food Safety Controversy: CAFF Guide to Proposed Food Safety Regulations. Community Alliance with Family Farmers, 2008. (<http://www.caff.org/CAFF.Policy.Guide.I.pdf>)

⁹Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards of Fresh-cut Fruits and Vegetables, February 2008. Available at: <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064458.htm#ch1>

argument that small producers have made regarding food safety: regulation that is ineffective at reducing food-safety risks but efficient at driving growers out of farming comes at too high a social cost.

Small producers are concerned that, as one put it, “Food safety may be being used to limit growth of small farms.” There are, however, many proactive steps that small local farms can take. Education and support regarding food safety metrics should be made available to farmers growing for the traditional whole fresh market—the market for produce that is not cut or processed. They need to respond to public concerns created by large-scale outbreaks, but with measures that are appropriate to their scale and their situation. Institutional food service management companies and individual food service operations can be important catalysts for finding creative and supportive solutions to the challenges faced by local farmers. Working together can allow the growth of small farms to continue.

RECOMMENDATIONS

To summarize, the following are some recommended strategies for agricultural professionals, food service management companies, and individual food service operations to consider in helping small or limited resource producers address food safety and product liability issue concerns:

- Learn more about the history of food-borne illnesses and outbreaks and the sources of these.
- Find out what the current state, federal, institutional and, if applicable, distributor requirements are and provide the support farmers need in addressing these.
- Get to know local farmers: find out about their operation, what the potential food safety risks are, what food safety methods are in place and what they need help with addressing. Work to provide the support they need to address these gaps.
- Research liability insurance options for farmers and provide an outline of the plans available.

- If needed, help individual farmers work together to have a group approach for addressing food safety and product liability insurance requirements.
- If possible, lower the amount of product liability insurance coverage required for a local farmer to sell to an institution in order to make it manageable for them.
- Stay up to date with pending legislation related to these issues and support legislation that is fair to small and limited resource producers.
- Given the success of state or regionally based non-profit growers’ organizations in working with this population of farmers, partner with these organizations in developing resources, programs and solutions.
- Institutional food service operations interested in purchasing product from local, small or limited resource farmers should ask farmers to develop food safety plans in which they identify potential risks and how they will address them.
- Food service operators should work with local extension educators and other agricultural professionals to make sure growers are being provided with educational materials and the tools they need to address food safety concerns on their farms.

Approaches to food safety will continue to evolve, both in response to new data and in response to new outbreaks and issues. With thoughtful planning and cooperation, farmers and food service operators should be able to address food safety and liability concerns proactively without disrupting or undoing the gains made in local food production in recent years through farm to institution programs and other efforts. They should also work to ensure that any new legislation and regulations do not ignore the needs and circumstances of small-scale producers in addressing food safety issues created by large-scale farming practices.

FOOD SAFETY RESOURCES

The following resources may be helpful for addressing food safety concerns and requirements and for networking with organizations and groups working on food safety issues. Many farmers who create food safety programs find that it is helpful to seek out the expertise of an organization with experience in this area or to work directly with a distributor who can provide guidance and advice.

OVERVIEW OF FOOD SAFETY ISSUES

FAQ on the National Good Food Network (NGFN) website:

<http://ngfn.org/resources/food-safety/food-safety-faq#documentContent>

- an overview of Good Agricultural Practices (GAP) and Hazard Analysis and Critical Control Points (HACCP)
- a list of organizations and resources promoting sustainable and organic agriculture interests in the food safety debate

FDA INFORMATION

FDA Food Safety website: <http://www.fda.gov/Food/FoodSafety/default.htm>

Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards of Fresh Fruits and Vegetables, October 1998. <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064574.htm>

- FDA established a single set of federally recognized GAPs and GHPs by issuing this guidance document in 1998. It continues to be a good starting point for learning about food safety principles.

Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards of Fresh-cut Fruits and Vegetables, February 2008. <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064458.htm#ch1>

- This document is not an update of the 1998 guidance about fresh fruits and vegetables but a separate document directed at the emerging “fresh-cut” industry.
- As the name implies, these FDA documents present guidance, not regulations. Unlike regulations, a guidance document is not mandatory. It is a set of recommendations to industry and/or regulators delineating practices which, if followed, ensure that those practices are in compliance with regulations.

Information from FDA on proposed safety standards for fresh produce at the farm and packinghouse:

<http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480aab8f1>

USDA INFORMATION

Fresh Produce Audit Verification Program: <http://www.ams.usda.gov/AMSv1.0/gapghp>

- This website describes the Agricultural Marketing Service’s (AMS’s) Fresh Produce Audit Verification Program and lists farms and companies that have gone through an audit.

STATE AND UNIVERSITY

RESOURCES AND ASSISTANCE

National GAPs collaborators by state: <http://www.gaps.cornell.edu/collaborators.html>

- a list organized by Cornell University’s Department of Food Science
- contains contact information for resource people who may be able to provide assistance regarding national GAP standards

Cornell University has resources listed on their website for GAP and GHP issues:

<http://www.gaps.cornell.edu/>

- national GAPs educational materials written in English, Spanish, Hmong, Lao, and Ilocano for farmers
- record keeping sheets for farmers
- links to other useful websites

Iowa State University - University Extension
<https://www.extension.iastate.edu/Store/ItemDetail.aspx?ProductID=6539>

- provides free downloads of food safety educational materials for farmers including information on Good Agricultural Practices, Food Handling and Cleaning, and Sanitizing.

New England Extension Food Safety Consortium
<http://www.hort.uconn.edu/ipm/foodsafety/index.htm>

- includes a series of fact sheets on Good Agricultural Practices and technical assistance services for farmers. Their goal is "to bring information to produce farmers so that they have the skills needed to reduce the risk that their fresh produce will be contaminated with microorganisms that can make people sick."

North Carolina Fresh Produce Safety Task Force
<http://www.ncsu.edu/fvsi/ncfreshproduce/taskforce.html>

The purpose of North Carolina Fresh Produce Safety Task Force is to minimize food safety risks and enhance the economic competitiveness of North Carolina's fresh produce industry. The task force is a partnership that brings together members involved in education, public policy, the fresh produce industry and research. The task force consists of five working groups: Education, Research, Industry and Policy Relationships, Regulations and Communications, and Executive Management Oversight. The website



PHOTO CREDIT: ALBA

includes resources for educators, growers, and the food processing industry.

The Oklahoma Department of Education and Department of Health worked together to develop a set of standards that growers must meet in order to sell to institutions. The Department of Health wrote a letter detailing what schools should expect from growers in terms of food safety. The requirements are for growers selling unprocessed products only. This link will take you to a copy of the letter from the Department of Health to Dee Baker, the State Department of Education's Child Nutrition Director: <http://www.okfarmtoschool.com/pdf/memorandum-6-26-06.pdf>

Penn State University's guidance on Good Agricultural Practices and on-farm food safety resources: <http://foodsafety.psu.edu/gaps/>. Includes

- a self audit to determine if your farm is ready for an inspection or if you need to make some changes
- a template for writing a food safety plan for your farm
- other helpful resources

University of California-Davis
Postharvest Technology Research and Information Center: <http://postharvest.ucdavis.edu>

- information on resources and trainings for California growers, shippers, marketers, carriers, distributors, retailers, processors, and consumers of fresh horticultural crops

UC Good Agricultural Practices website: <http://uc-gaps.ucdavis.edu/>

- a self-audit for growers and handlers: <http://ucce.ucdavis.edu/files/filelibrary/5453/4362.pdf>
- a self-audit quiz for growers and handlers: http://groups.ucanr.org/UC_GAPs/GAP_Self-Audits/

University of Massachusetts's GAPs Project team holds USDA GAPs online classes. This online program is offered in collaboration with UMass, the MA Department of Agricultural Resources, and the Cornell University National GAPs Program. To sign up, go to: <http://www.umassone.net/gaps/>. For further information contact dgn@nutrition.umass.edu or call (413) 545-0552.

University of Rhode Island, through support from the Rhode Island Division of Agriculture, developed program guidelines and a farm audit form based on Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables published by the FDA and USDA in October 1998. <http://www.uri.edu/ce/ceec/food/grow.html>

STATE/REGIONAL NON-PROFIT ORGANIZATIONS

These organizations work directly with farmers. This list is not meant to be comprehensive but to indicate the kinds of work that non-profit organizations are doing on food safety issues.

Agriculture & Land Based Training Association (ALBA): <http://www.albafarmers.org/>
ALBA provides bilingual Spanish-English training and technical assistance to beginning and established farmers in the tri-county area of Monterey, Santa Cruz and San Benito counties on the Central Coast of California. Marketing, production and post-harvest training and technical assistance cover some elements of food safety.

Community Alliance with Family Farmers (CAFF): <http://caff.org/>
CAFF is a statewide California organization that promotes sustainable agriculture. CAFF has been working with a variety of groups to develop scale-appropriate food safety outreach programs, most recently with Southeast Asian refugee farmers in the Sacramento Valley. CAFF developed a set of food safety GAPs with organic farmers and has made these available in a wide variety of contexts. These GAPs include an extensive discussion of

the risks associated with wildlife, developed in conjunction with the Wild Farm Alliance. CAFF is working on developing a series of local food distribution hubs and plans to conduct outreach on food safety with the farmers involved in these hubs.

Jubilee Project: <http://jubileeproject.holston.org>
The Jubilee Project in Sneedville, TN, works with the volunteer farmer organization CAFÉ (Clinch Appalachian Farmers Enterprise) to cooperatively market sustainably grown farm produce to restaurants, schools and individual customers in the Hawkins and Hancock county region of Eastern Tennessee. CAFÉ conducts informal food safety updates at a monthly meeting for participating farmers and also trains and inspects on the farms for safe growing and safe handling procedures. CAFÉ has written safe growing and handling policies for their farmer participants and in farm tours is careful to go over those policies. Its customers are tolerant of its small size and have worked with them in any situations requiring attention, so they have not yet had to institute formal GAP certification.

Maine Organic Farmers and Gardeners Association: <http://www.mofga.org/>
Food Safety is an integral component of the Maine Organic Farmers and Gardeners Association (MOFGA) organic marketing strategy. Over the past two years, about 60 farms have participated in MOFGA's Farm Food Safety workshops offered in four geographical regions of the state. These workshops presented a work-in-progress model of a Farm Food Safety Plan that was GAP based. To enhance market opportunities for certified organic farmers with institutions like hospitals, MOFGA and MOFGA certification services are collaborating in the development of a verification process that could be done in parallel to organic certification. Systems and protocols are being developed in collaboration with six farms and a central Maine healthcare facility. Information and resources, as available, are posted on MOFGA's online community website, <http://www.mofga.net>.



PHOTO CREDIT: JUBILEE

Michigan Food & Farming Systems (MIFFS):

<http://www.miffs.org/gapghp.asp>

MIFFS and partners presented a workshop series on Good Agricultural Practices (GAP) and Good Handling Practices (GHP) to reach out to growers trying to tackle the supply chain, focusing on the steps and strategies to safely get fresh local product to regional grocery stores and the wholesale distributors that service them. These workshops were to help farmers understand certification standards and practices that wholesale and retail buyers are requiring to ensure safe food for their customers. The presentations, handouts and resources for these workshops are available from the website.

New Entry Sustainable Farming Project:

<http://nesfp.nutrition.tufts.edu/>

Food Food Safety Training is a critical training component of the New Entry Sustainable Farming Project's seasonal field-based training curriculum. New Entry operates the World PEAS Cooperative, a multi-producer marketing cooperative that organizes a 300+ member Community Supported Agriculture (CSA) program, facilitates summer feeding program and low-income food distribution programs and coordinates sales to farmers' markets and wholesale accounts. Farmers in the program also sell direct to independent markets. New Entry hosts an annual "Post-Harvest Handling" workshop that trains new and beginning farmers about establishing food

safety practices, maintaining crop quality, and bringing quality produce to market. This hands-on training incorporates GAPs and references the Project's Plain Language Guides to Post-Harvest Handling, Selling at Farmers' Markets, and new Resource Guide to Farming in Massachusetts (which contains additional information on food safety and other related regulations). These resource guides are posted on <http://nesfp.nutrition.tufts.edu/resources/plainlanguage.html>.

Plain language guides developed by New Entry Sustainable Farming Project through Tufts University include:

- Plain Language Guide to Value-Added Food Production (some references to licensing, food certification courses, and getting insurance): http://nesfp.nutrition.tufts.edu/downloads/guides/PL_ValueAddedGuide.pdf
- Plain Language Guide to Post-Harvest Handling (not a lot about food safety in this version of the guide, but it is being revised to include more on GAPs): http://nesfp.nutrition.tufts.edu/downloads/guides/PL_HarvestGuide.pdf

COMMODITY SPECIFIC GUIDANCE

FDA Guidance Document. Includes 2009 updates for tomatoes, leafy greens, and melons: <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/default.htm>

Commodity Specific Food Safety Guidelines for various commodities, in addition to other Industry Produce Safety Initiatives, listed on United Fresh Produce Association website: http://www.united-fresh.org/newsviews/food_safety_resource_center/industry_produce_safety_initiatives

Commodity Specific Food Safety Guidelines for California and Arizona growers by Western Growers, 2008. <http://www.wga.com/default.php?id=117&pagename=FoodSafety>

Commodity Specific Information compiled by the North Carolina Fresh Produce Safety Task Force: <http://www.ncmarketready.org/ncfreshproducesafety/commodity.html>

Penn State Mushroom Food Safety Program. Commodity Specific Guidelines and Training Materials for Mushroom Growers, 2008. <http://foodsafety.psu.edu/mush/foodsafety.htm>

PUBLICATIONS

Community Alliance with Family Farmers, The History, Politics and Perils of the Current Food Safety Controversy: CAFF Guide to Proposed Food Safety Regulations, January 2008. <http://www.caff.org/CAFF.Policy.Guide.1.pdf>

This report outlines a history of food safety issues in the U.S. and approaches for protecting produce from pathogens that have been considered. This report makes a case that (mandatory) Marketing Act Orders and (voluntary) Agreements are not well suited for regulating on-farm produce safety. The report concludes with eight recommendations for an alternative approach to farm food safety.



PHOTO CREDIT: CAFF

Cornell University, Food Safety Begins on the Farm: A Grower's Guide, 2000.

This booklet provides an overview of GAP that can be implemented on farms and in packinghouses.

Also includes background information on food-borne illnesses related to produce consumption. Available in English or Spanish.

FamilyFarmed.org, Wholesale Success: A Farmer's Guide to Selling, Post Harvest Handling and Packing Produce, 2010. <http://www.familyfarmed.org/wholesale-success>

Publication contains comprehensive information on food safety issues and resources to help farmers develop their own food safety plan, as well as other information relevant to accessing wholesale markets.

Food and Agriculture of the United Nations (FAO), Improving the Safety and Quality of Fresh Fruits and Vegetables: A Training Manual for Trainers, Rome, 2004. <http://www.fao.org/docrep/007/y5488e/y5488e00.HTM>

The Food and Agriculture Organization (FAO) is the main United Nations agency specialized in all aspects related to food quality and safety, along the different stages of production, harvest, post-harvest handling, storage, transport, processing and distribution of food. This manual has been prepared as part of the activities undertaken by FAO's Food Quality and Standards Service, in an effort to strengthen the institutional capacities, both public and private, of Member Countries to develop and implement quality assurance and food safety programs for fresh fruits and vegetables that are environmentally sustainable and benefit all actors in the chain.

Food and Water Watch & IATP, Bridging the Gaps: Strategies to Improve Produce Safety, Preserve Farm Diversity and Strengthen Local Food Systems, September 2009.

<http://www.foodandwaterwatch.org/food/pubs/reports/bridging-the-gaps>

This report begins with an overview of existing on-farm food safety policies and programs. It then analyzes the ramifications of existing and proposed protocols, and offers recommendations for improving produce safety while preserving the diversity of farm sizes and production methods present in the U.S. food system.

National Sustainable Agriculture Coalition (NSAC), Food Safety on the Farm: Policy Brief and Recommendations, October 2009. <http://sustainableagriculture.net/wp-content/uploads/2008/08/NSAC-Food-Safety-Policy-Brief-October-2009.pdf>

This position paper addresses some of the legislative food safety proposals that have been introduced in the 111th Congress, as of October 2009, as well as administrative developments within the Obama Administration, the FDA, and the USDA. The paper focuses on fresh produce and microbial pathogens because they are at the center of current food safety debates.

Nature Conservancy, Safe and Sustainable: Co-Managing for Food Safety and Ecological Health in California's Central Coast Region, February 2010. <http://www.perishablepundit.com/PunditImages/producesafety.pdf>

This report was developed with support from more than 35 expert advisors representing many facets of the agricultural industry — from small- and mid-scale growers to shippers and buyers — as well as government agencies, environmental non-profits, the legal world and academia. This case study may be of interest to people who seek to conserve sensitive natural resources, reduce food-borne illness, or both. Although this case study focuses on a single category of produce (leafy greens) and a specific geographical area, the findings and underlying principles may apply across the nation. Stakeholders in the Central Coast region are currently working towards “co-management” strategies. While “co-management” can be used in different ways, here it is defined as an approach to minimize microbiological hazards associated with food production while simultaneously conserving soil, water, air, wildlife, and other natural resources.

Oklahoma Department of Agriculture, Food, and Forestry, Farm to School Program, Tips, Tools, & Guidelines for Food Distribution & Food Safety, <http://www.okfarmtoschool.com/resources/fts-distro-foodsafetymanual/index.htm>

This manual is intended to provide information, insight, and useful tools for farmers and school food service directors interested in FTS program participation. The manual includes a brief overview of the FTS program in the U.S. and Oklahoma, gives guidance for meeting food safety protocols, discusses results from surveys of Oklahoma schools and food service distributors regarding FTS participation and perceptions, and provides a summary of tips and suggestions from FTS program coordinators and participants. The manual also includes information on two new tools for use by farmers and school food service directors that are currently being used in Oklahoma: a distribution cost template and a produce calculator.

UC Cooperative Extension Specialist, Department of Vegetable Crops, UC Davis: Key Points of Control and Management of Microbial Food Safety: Information for Growers, Packers, and Handlers of Fresh-Consumed Horticultural Products, 2003. http://ucgaps.ucdavis.edu/documents/UC_ANR_GAP_Series3574.pdf

This publication provides a brief outline of the fundamental components of microbial food safety management plans for growers, specialty crop producers, harvest service operators, distribution and wholesale handlers, direct marketers and fresh cut processors. Given the diversity of environments, crop management practices and handling practices, growers can use the principles outlined to create their own food safety planning and management program. This quick reference guide focuses on these key guiding principles: prevention of contamination, reduction of survival, and prevention of cross-contamination for each step, up to consumer handling.

University of Minnesota, A Food Safety Plan (Template) for You, compiled by Michele Scherman, 2008. <http://safety.cfans.umn.edu/pdfs/FSP4U.pdf>
This guide shows how to create a food safety plan and provides template forms for record keeping and an overview of USDA GAP audit program requirements.

National Organizations Involved in Food Safety Legislation Related to Small Farms' Issues

These organizations do not work directly with farmers but work on federal legislative issues that affect farmers.

Farm-to-Consumer Legal Defense Fund :

<http://www.farmtoconsumer.org/>

Food and Water Watch:

<http://www.foodandwaterwatch.org/>

Institute for Agriculture and Trade Policy:

<http://iatp.org/>

National Organic Coalition:

<http://www.nationalorganiccoalition.org/index.html>

National Sustainable Agriculture Coalition:

<http://sustainableagriculture.net/>

Wild Farm Alliance: <http://www.wildfarmalliance.org/>

OTHER HELPFUL INFORMATION

The National Center for Appropriate Technology (NCAT) is developing an illustrated comic-style guide for growers that will describe how to implement GAP standards on individual farms. This easy-to-read guide outlines four basic approaches:

1. **CLEAN SOIL:** Minimize human pathogens in the soil.
2. **CLEAN WATER:** Monitor water quality. For example, water used for washing produce should be of drinkable quality.
3. **CLEAN HANDS:** Use good personal hygiene in the field and the packinghouse.
4. **CLEAN SURFACES:** Wash and properly sanitize work surfaces, packing bins, transportation vehicles, etc.

To learn more about NCAT's illustrated guide, visit <http://attra.ncat.org> or call 1-800-411-3222.

The FamilyFarmed.org On-Farm Food Safety Project is a national program that plans to offer farmers, food safety professionals and agricultural extension specialists technical assistance to develop risk-based food safety programs. This will be achieved through the development of an educational website and a free, easy to use on-line tool, constructed based on a comprehensive GAP control points framework, which will generate customized on-farm food safety plans based on user input. The tool will be designed for use by small- to mid-scale growers and will provide them with a full set of record keeping tools to document their food safety program and to provide training to their employees.

The program software will be based on a number of decision trees, which will assess and address food safety risks for each farm area. An easy to use web interface will be constructed and will allow the user to identify and understand food safety risk areas applicable to their operation based on their answers to a series of yes/no questions. The program will automatically generate all associated documents required to help address those risks. This on-line tool will reside on the website www.farmfoodsafetyplan.org. See www.familyfarmed.org for information about when the website will be available.

National Good Food Network (NGFN) food safety mailing list:

<http://www.ngfn.org/resources/food-safety>

National Sustainable Agriculture Coalition's blog (on food safety and other legislative issues):

<http://sustainableagriculture.net/blog/>



PHOTO CREDIT: MOFGA

Food Safety News (<http://www.foodsafetynews.com/>) presented by Marler Clark LLP, PS.

A personal injury lawyer and national expert in food-borne illness litigation, William Marler has been a major force in food safety policy in the United States and abroad. He and his partners at Marler Clark have represented thousands of individuals in claims against food companies whose contaminated products have caused serious injury and death. His advocacy for better food regulation has led to invitations to address local, national and international gatherings on food safety, including recent testimony to the U.S. House Committee on Energy and Commerce. Food Safety News includes articles on various aspects of food safety issues, including those affecting small farmers and organic farmers.

Primus Labs:

<http://intranet.primuslabs.com/igap/default.asp>
Some distributors use this private auditor to help them work with small farmers. Their website allows you to create a personalized food safety manual for your farm, but you need to become a member and log in. The Produce Safety Project at Georgetown University seeks the establishment by the Food and Drug Administration of mandatory and enforceable safety standards for domestic and imported fresh produce. The website includes reports, articles and other resources related to food safety issues: <http://www.producesafetyproject.org/>

The Produce Safety Project website provides a chart comparing GAPs for fresh produce. In the absence of mandatory federal regulations, a number of organizations and one state have stepped into the regulatory void and adopted their own standards for the growing and harvesting of fresh produce (fruits and vegetables intended to be consumed raw) aimed at minimizing microbial contamination. <http://www.producesafety-project.org/gaps>

Testimony at USDA Agricultural Marketing Service (AMS) hearings on proposed marketing agreement for leafy green vegetables: <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateA&navID=ProposedMarketingAgreementforLeafyGreens&rightNav1=ProposedMarketingAgreementforLeafyGreens&topNav=&leftNav=CommodityAreas&page=LeafyGreensProposal&resultType=&acct=fvmktord>

United Fresh Produce Association (<http://www.unitedfresh.org/0>) is a "trade association committed to driving the growth and success of produce companies and their partners. United Fresh represents the interests of member companies throughout the global, fresh produce supply chain, including family-owned, private and publicly traded businesses as well as regional, national and international companies." United Fresh aims to provide support for its members on various issues, including on-farm food safety issues and pending food safety legislation issues and efforts.

Gap Harmonization Initiative

The technical working group (TWG) of the GAP Harmonization Initiative is a voluntary group representing many different buyers, produce commodity associations, farms, audit agencies and GAP standard owners. The TWG examined 13 different existing GAP-like standards to develop the harmonized standards. The hope is that the harmonized GAP standards will be appropriate for farmers of all scales, commodities and mixes of crops, locations (regions within North America), and production practices. A key intended outcome is to eliminate audit supermetrics, audit fatigue and redundancy, and to assure market access for farmers of all scales wishing to enter the produce supply chain, while maintaining and improving the safety of the fresh fruits and vegetables throughout that chain. The GAP Harmonization Initiative provides an opportunity to shape these standards into something that is manageable for farms of all sizes. To learn more about the GAP Harmonization Initiative and how to submit comments, go to: <http://www.ngfn.org/resources/food-safety>

Canadian Horticultural Council:

<http://www.canadagap.ca>

- The website includes a comprehensive food safety manual based on HACCP analysis of farming operations.
- The website also includes a variety of record templates. Users need to obtain membership with CHC to gain access to manuals.

LIABILITY INSURANCE RESOURCES

Arizona Cooperative Extension Service, Examining Insurance Needs Is Essential to Marketing, 1995. <http://ag.arizona.edu/arec/pubs/dmkt/Examininginsurance.pdf>

“Farmers’ markets, roadside stands, U-Pick vegetable and fruit operations, and Christmas tree farms are on the upswing. Insurance is as necessary as quality products, good help and a good location in operating a direct marketing business.”

Hamilton, Neil, The Legal Guide for Direct Farm Marketing, 1999. \$24.

<http://www.growingformarket.com/store/products/95>

Neil Hamilton is director of the Agricultural Law Center at Drake University Law School. Some of the topics covered:

- Farmers markets
- Business forms, licenses, taxation
- Contracts, food stamps, getting paid
- Advertising, organic certification and other claims
- Land use and property law, including pesticide drift
- Inspection, licensing and food safety
- Marketing meat, poultry and dairy



PHOTO CREDIT: NESFP

The Networking Association for Farm Direct Marketing and Agritourism (NAFDMA) compiled a list of insurance companies that cover farm direct marketing enterprises: <http://www.nafdma.com/Resources/Insurance>

Farmers Market Coalition

In March 2010, the Farmers Market Coalition partnered with Campbell Risk Management to make an affordable liability insurance program available to farmers market vendors at a national level:

<http://farmersmarketcoalition.org/fmc-explores-insurance-options>



PHOTO CREDIT: NESFP

APPENDIX: HIGHLIGHTS OF FARMER ASSESSMENTS

This summary details the highlights from assessments conducted by CFSC and partner organizations with 25 different small or limited resource farmers (fruit and vegetable growers) around the country. The focus of the assessments was on food safety and product liability insurance issues. Twenty of the assessments were conducted by CFSC as individual phone interviews. Five were conducted by ALBA as part of a focus group. The assessments were conducted January through March 2010.

In the text below, “Non-profit growers’ organization” refers to ALBA, CAFF, JP, MOFGA, or NESFP (the names of these organizations were removed in order to maintain confidentiality). These organizations each provided contact information for five producers who volunteered to participate in the assessments.

Background information on farmers who participated in the assessments:

The background questions conducted at the beginning of the assessments provide important contextual information about the farmers. The questions and responses are outlined below. The number next to the response indicates how many farmers indicated this response. The percentage represents the percentage of farmers who indicated this response, unless noted otherwise.

1) How many years have you been farming in the US?

- 1 – 5 years: 10, 40%
- 6 – 10 years: 2, 8%
- 11 – 15 years: 2, 8%
- More than 15 years: 11, 44%

2) Age

- 26 – 35: 4, 16%
- 36 – 45: 5, 20%
- 46 – 55: 11, 44%
- Over 55 years old: 5, 20%

3) Ethnicity

- Caucasian: 16, 64%
- Hispanic: 6, 24%
- African: 2, 8%
- Asian: 1, 4%

4) Gender

- Male: 15, 60%
- Female: 10, 40%

5) How would you describe your operation in terms of your production practices?

- Sustainable: 9, 36%
- Certified organic: 7, 28%
- Organic: 6, 24%
- Conventional: 2, 8%
- IPM: 1, 4%

6) Do you raise any animals (if so, what)?

- Yes: 11, 44%
- No: 14, 56%
- Types: beef cattle, dairy cattle, cow/ calf operation, pigs, goats, sheep, broilers, egg layers, turkeys

7) How many acres are in fruit, berry, or vegetable production?

- Less than 2 acres: 6, 24%
- 2 – 5 acres: 7, 28%
- 6 – 10: 2, 8 %
- 11 – 20: 4, 16%
- 21 – 50: 2, 8%
- 100 – 200: 2, 8%
- 380 – 478: 2, 8%

8) Where do you market your products?

Note: Most farmers had multiple responses for this question so the percentage represents the percentage of responses, not the percentage of farmers.

- Farmers’ markets: 15, 25%
- Grocery stores, natural food stores: 9, 15%
- CSA: 8, 13%
- Grower cooperative (which sells to restaurants, school, supermarkets, and individuals): 6, 10%
- Restaurants: (also see ‘other’ below) 5, 8%
- Wholesale distributors: 5, 8%
- Individuals: 3, 5%
- Other (wide variety of outlets): 10, 16%

FOOD SAFETY:

For the purposes of the assessments, we explained to the producers that we are defining food safety procedures as “methods for the production, handling, storage, and processing of food in ways that prevent food-borne illness.” Sixty percent of the farmers indicated that their customers do not have any food safety requirements. One farmer explained that “Living in a small community, they know us, we know them, and they know they can visit us any time, they can track it down, they haven’t gotten too concerned about it right now.”

However, 68% of the farmers indicated they have participated in a training on food safety procedures and many of them detailed several food safety practices they conduct on their farm. For instance, when asked what they do to keep animals out of produce areas, most indicated several measures that they take to address this. Twenty eight percent of the responses indicated using fencing to keep animals (wild and domestic) out of the fruit and vegetable fields, 12% of the responses included using other means for keeping produce and livestock areas segregated, and 17% of the responses specify using traps for keeping wild animals out of produce areas. Other responses included using row covers, using tactics that scare away animals (such as tin plates), and keeping border areas clean and cleared.

When asked how they manage manure or compost to prevent food safety concerns, some of the farmers use more than one measure for this. Forty five percent of the responses conveyed purchasing or securing composted manure from another location, 27% conveyed not using any animal products in compost that is used in produce fields, and 21% conveyed having a careful system and positioning for the compost.

Seventy two percent of the farmers have hired workers on their farms. They have various food

safety guidelines in place for their workers. Twenty-nine percent of these comments pointed to providing bathrooms and encouraging hand washing, 17% pointed to workers not working when they are sick, and 11% pointed to workers covering their hair. Twenty three percent of the responses related to employees undergoing some sort of food safety training and 40% related to information being presented in Spanish.

In terms of some of the challenging on-farm food safety practices, testing private water sources and record keeping seemed to be areas of difficulty. In terms of testing wash water and irrigation water, 44% of the farmers use a spring or well water for one or both sources and test these private sources, 30% use spring or well water for one or both sources and don’t test at least one of the private sources, and 17% use public water for both sources so do not test the water. Nine percent were not sure if the wash water and irrigation water was tested. Forty eight percent of the farmers indicated that no one involved in their farm operation keeps records of the food safety practices conducted on their farm.

When asked if there is anything else they do to protect food safety concerns on their farm, responses included:

- Try not to do anything wouldn’t want to eat yourself, common sense
- Formulated a way of keeping track of sprays: what the name of the pesticide is, what date it was applied, how long supposed to wait before picking the vegetable
- My biggest advantage here is that there is a lot of stuff here that I can keep covered so less danger of contamination, less danger of animal/ air-born/ splash contamination cause either in hoop house or covered with row cover or cages and use compost side dress

- My spouse thinks I am overly picky about it
 - Make sure towels we lay lettuce on has been bleached and didn't have any softeners
 - Use clean bags, don't recycle them
 - All of our materials are kept upstairs in a room where neither animals or food goes into so not contaminated
 - Wash our hands regularly: before go out to pick
 - This is the food we eat, so make a point of keeping things clean
 - Counters and fridge kept clean
- Change wash water regularly, try to make sure everything is harvested and washed very quickly out of the fields: don't want things to sit around too long.
- Change the water, good storage, good containers to store, good boxes, good cleaning. Pesticides just organic. Every year they (non-profit growers' organization) visit my farm, Have passed all the non-profits' visits/ certifications (regarding food safety issues)
- Harvest everything and ice it and take it to market, little bit of a fudge factor, probably not at the temperature required all of the time, we are making some big capital improvements this year, building a walk-in cooler with air conditioner.
- Wash our harvest bins: both ones we take to the fields and the ones when we are packing. This year, we are planning on washing the containers when we get back from market and let them dry; We are going to build a washing station: flooring off the ground, so that the water can drain through (wooden flooring), out of any mud or wash water; wash hands
- The thrust of our marketing is fresh market, harvested either the evening before or the day of the market, don't have a walk-in cooler or refrigeration system, very little time to cool down or handle otherwise, washing and cooling with water, just common sense hygiene. General common sense hygiene. Don't have any written policy yet but working on this since at tending non-profit growers organization workshop

- I do the following to protect food safety:
 - a. Cleanliness around field borders
 - b. Clean bathrooms adequately outfitted for workers
 - c. Wash harvesting knives with soap and water
 - d. Use bat and owl boxes
 - e. Generally keep area clean
- Right now I am building an area for my workers so they can be comfortable – a place where they can eat, rest and sit down, etc. and to keep tools.
- In terms of sources that farmers used for finding information on food safety or GAP issues, most have used more than one source but 42.5% of the responses included growers' organization in the state/ region. Another 10% of the responses cited magazines as their source for information, including Mother Earth News, and USDA articles. University Extension and state departments of agriculture each came in at 7.5%, as did finding this information from previous employers.

Of the 68% of farmers who participated in a training on food safety procedures, the most common response in terms of who organized the trainings was non-profit growers' organization in the state or region.

Thirty seven percent of the farmers found certain food safety issues difficult to address. The following comments were amongst those listed:

- Just the fact that my husband passed away, its all on my shoulders, farmers are being regulated to death: thinking about not doing it anymore because of liability involved
- Record-keeping, I should write more stuff down: More accurate harvest dates and more accurate quantities of what picked
- What concerns us as small farmers is that so many of the guidelines are set up for a large production farm with a lot of workers; at one of the trainings: we were told we can't go to grandma's house and go to the bathroom and wash our hands if not certified to do this.
- Most of us don't have washing facilities; we go into our houses to use bathroom and wash hands.
- It is the recording thing that gets me; asking us to pay for the inspector to come out: government should pay for this; doesn't seem ethical.

- I lease my land so I am not able to put in systems that I feel would be the best, Would like to have a gravel floor, stainless steel wash system with better cleaners. I use town water, everything is very low key.
- To do this the way inspectors want it to be done requires a lot of supervision time. Most small farmers don't have the ability to do this, very difficult, high cost, need someone to watch people that are using port a potties to make sure they are washing their hands,. This is not that realistic, it's very time consuming and expensive. It's also resource intensive for small and medium size farmers because they have to hire some one to focus on food safety. You need a significant amount of time to do this.
- All of them were difficult to address because they were new to the farm workers. The transition of the mindset was difficult, as they have been doing the same thing the same way for a long time. Takes a lot of review, have to be on top of it; I don't believe it is difficult to have a HACCP program on a farm.
- We have difficulties with the GAP system, we don't sell to anyone who wants GAP cause we don't think we can do it (lose points if deer walk across your fields, inspection costs astronomical).
- It is difficult to help workers understand the importance of participating in trainings. I used to require them to sign a form to prove that they had been trained. Now I only give verbal trainings since my workers are permanent.

When asked if they are familiar with some of the possible food safety guidelines that are being proposed and, if so, do they have any concerns about meeting the proposed guidelines, 58% communicated that they were familiar with the proposed guidelines and were concerned about being able to meet them.

THEIR COMMENTS INCLUDED:

- Afraid we might not be able to field pack, might have to have a packing house, a facility on farm for washing and re-packing; might have to stop growing some things like strawberries if we have

to start washing them, shelf life goes down about 50%. Washing will make them more perishable; may eliminate the small farmer, make corporate farms bigger.

- My big concern is the animals, because when I'm running this small of an acreage in terms of the barrier space between animals and produce fields. I won't have the space. I either ditch the animals or don't grow or only grow for the animals; it will be a hard choice to make. I'm just hoping that we can be proactive enough to make some sort of a scaled legislative requirement when it comes through. If they go forward with the GAP thing, it's going to be next to impossible. I hope they don't implement the GAP standard.
- There needs to be something different of what is expected of small farmers vs. large farmers who have a whole lot of workers. If we have to pay for USDA to come out and inspect our farms, it's cost prohibitive, we are not making a lot of money. The farmers are being put out of business. If we have to have them come out every year and inspect with the little bit of money we are making, we'll just quit. Can understand why needs to be placed on large farms, with workers coming in. When it is just a family operation, seems ridiculous - to go to trainings, be inspected, pay for liability insurance.
- Went to a university website: looked at what they called GAP. I think that most of these food born illnesses are due to large scale production. I used to work with migrant workers in FL: they don't have time to wash their hands, rushed through procedures, have such a high production quota, can't keep up and don't have time to follow basic sanitary procedures. Our growers cooperative met with local representative on these issues. It would be a cost to us, based on how little we make. With agri-business cutting down the price of everything, now want to take the little bit of money we make. Kinda horrendous. Seems like they don't want you to do it with all the hoops you have to jump through.
- Definitely concerned. The idea to keep all wild animals out of the field is virtually impossible, to not have hedgerows, we want to have hedgerows.

- Most difficult for a diversified farm is the sheer #s we are dealing with, so many different vegetables, enormous amount of record keeping if we need to document more and more pieces of growing and harvesting.
- How painful it is, is yet to be seen. I think overall the food safety piece we need to take in a more formal and structured way so we can demonstrate that we take it in a serious way. Food safety may be being used as a tool to limit growth of small farms. Distressed to see something like GAP, which seems so philosophically wrong

LIABILITY INSURANCE:

Seventy two percent of the farmers indicated that they had product liability insurance. Sixty four percent indicated that they have customers who require this kind of coverage. Customers that require product liability insurance included grocery stores, wholesale distributors, retailers, farmers markets, property owner, and certain CSA customers. Of the farmers who carried product liability insurance, 50% indicated that they had options, 19% indicated that they didn't have options, and 31% said that they did not look into options other than the one they signed up for. Sixty seven percent of these farmers indicated that they did not have any difficulties in finding out information about product liability insurance coverage or in securing this coverage.

ADDITIONAL COMMENTS FROM FARMERS:

1. Food outside country no regulation, need to provide more jobs in country, packaged food from Vietnam, China (at Asian stores), waste the money for our nation, support our community/ nation/ country
2. What I keep telling everybody here is one outbreak at a farmers market and it's going to affect everybody. We need to be proactive, because this country is reactionary. It's important for everybody to have a food safety program. There are efforts out there that I want to pay attention to, want to massage these efforts so [they are] friendly to small farmers; [I'm] concerned that urban food security efforts are going to get hit hard with this.

3. Excited that groups like CFSC, state departments of agriculture, and other non-profit growers organizations are interested in addressing these issues.
4. Contamination is not only in the field but also in the packing process and at stores because customers handle the products.

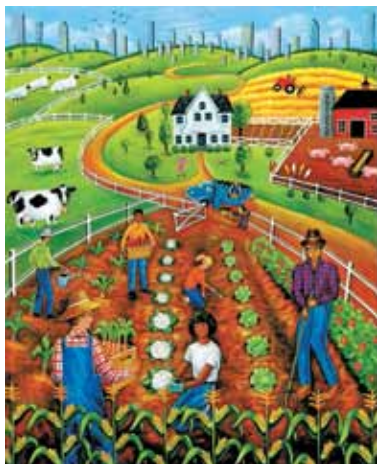


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**Community
Food
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BUY LOCAL, BUY SAFELY!

A Guide for Evaluating Food Safety Practices at Local Produce Farms

Prepared by

Division of Food Safety

Wisconsin Department of Agriculture, Trade and Consumer Protection

July 2011

Why buy local?

Many people are thinking about buying more fruits and vegetables from local growers. There are many good reasons to buy local: supporting the local farm economy, reducing costs and environmental impacts associated with food transportation, and getting fresher products.

But savvy customers won't overlook food safety when considering local purchases!

Just because a grower is small-scale and local doesn't guarantee that they have taken the right steps to ensure that their produce is safe to eat. All growers should consider food safety hazards and take appropriate preventive measures. After all, every grower wants to be sure their customers won't contract a food-borne illness from produce.

What food safety hazards can occur in produce? The major hazards associated with produce are disease-causing bacteria such as *Escherichia coli* O157:H7 and *Salmonella*, viruses such as hepatitis A and norovirus, and parasitic protozoa such as *Cryptosporidium*. Many of these hazards have been in the news over the past few years for causing large-scale illness outbreaks.

How do food safety hazards get into produce? Microbes can be carried by livestock, wildlife, or humans, and transferred to produce by contaminated irrigation or spray water, improper manure use, runoff from neighboring farms, wildlife passing through the farm, or poor hygienic practices by farm workers. Many food safety hazards, like *E. coli* O157:H7 and *Salmonella*, are carried in the intestinal tract of animals. Others, including *Listeria monocytogenes*, can be naturally found in soil and water, or the packing shed environment – often surviving for months.

What about pesticides and chemicals? Consumers might also be worried about the potential hazards of pesticide residues or other chemical contaminants. These hazards haven't been in the news as much as microbes, but they are still important. Many customers base their purchasing decisions on how growers use agricultural chemicals, and will ask produce farmers about their use of agricultural chemicals. In this guide, though, we'll focus on the hazardous microbes.

What do food safety regulations say about produce? Wisconsin food safety regulations say little about produce sold directly to consumers. In addition, the regulations for restaurants and retail food establishments only say that produce should be obtained from an approved source. This guidance was written to help growers and their customers understand the best practices recommended for producing safe fruits and vegetables. In the future, some larger growers will be required to meet produce safety standards set by the U.S. Food and Drug Administration (FDA). These standards are not likely to be in place before 2013.

What's the most straightforward way for a grower to become an "approved source"? Up-to-date United States Department of Agriculture (USDA) certification for implementing Good Agricultural Practices (GAPs) is a straightforward indication that a grower has taken appropriate food safety measures. For more information about the USDA GAPs program, technically known as the Fresh Produce Audit Verification Program, go to the following website:

<http://www.ams.usda.gov/AMSV1.0/gapghp>.

There are a variety of other organizations that audit produce-growing operations for good agricultural and handling practices; many of them are listed at the Cornell University National GAPs Program website (<http://www.gaps.cornell.edu/weblinks.html>).

What if a grower is a certified organic grower? A certified organic grower meets the standards of the National Organic Program (NOP). Some aspects of the NOP standards, such as those for use of manure as fertilizer, relate directly to food safety hazards. However, the NOP does not address most of the major steps that must be taken to prevent contamination of produce with disease-causing microbes. So, organic certification isn't a reliable indicator of how well the grower controls food safety hazards.

How can a grower adequately ensure food safety without being GAPs-certified? First, the grower should have a written food safety plan, which they can show to customers, and documentation that shows the plan is being followed. The food safety plan should address each of the questions listed in this guide. For each of the questions asked, a "Yes" answer indicates that an important step is being taken toward ensuring crop safety. At the back of this guidance is a score sheet you can use to make a more detailed evaluation of a food safety plan.

For the questions in this guide, there is a general principle to follow for minimizing food safety hazards, and suggested steps to take in following the general principle. You may notice that the suggested steps sometimes seem vague. This is because the factors affecting contamination of produce are often very complex, and make it hard to provide hard-and-fast answers on how to ensure that produce is safe to eat. For example, a well-accepted principle is "prevent exposure of

produce crops to livestock waste”. But is it acceptable if there is a dairy farm on the adjoining section of land? What if the dairy farm is downhill from the produce? What if the dairy farm is uphill from the produce but there is a vegetation buffer zone between the dairy farm and the produce? What if the dairy farm is ¼ mile from the produce farm? How about ½ mile? There are no clear answers to these questions, because each situation is unique and complex. What you can set as a standard is that for each question in this guide, at least one preventive step is taken towards a “Yes” answer.

WATER

Anytime water contacts produce there is the potential for contamination. If the water contains disease-causing microbes, these microbes can be transferred to the produce. Here are some key water-related questions to answer in evaluating a farm’s food safety system.

- **Is the best-quality available water used for post-harvest operations such as rinsing harvested crops?**

Guiding principles: The closer it is to harvest time, the more important it is to use high-quality water. The best-quality water should be used when working with the harvested product.

Steps to take: The water supply for post-harvest operations should be potable (suitable for drinking and from an approved source); growers may also choose to add a food-grade sanitizing agent, such as sodium hypochlorite, chlorine dioxide, or peracetic acid, to post-harvest water.

These sanitizing agents can be purchased from a sanitation chemical supply company.

- **Is the water source protected from possible contamination via run-off, flooding, and animal livestock operations?**

Guiding principle: Once water becomes contaminated, it is very hard to clean up. Preventing contamination is the best strategy.

Steps to take: Wells should be properly constructed and sealed to minimize the chance of contamination. Both surface water and ground water may be influenced by point and non-point source contamination, especially during storms. Growers can protect crops from flooding or run-off by building run-off structures, waterways, diversion berms and buffer areas. Ideally wells should be upslope from animal livestock operations. Fences and gates may be useful in keeping animals away from surface water sources.

- **Is there minimal contact between irrigation water and produce?**

Guiding principle: Direct contact between irrigation water and produce should be avoided, or at least minimized.

Steps to take: Growers can use drip or furrow irrigation which is less likely to contaminate produce than overhead spray irrigation. Experts recommend growers develop a schedule of testing the irrigation water for *Escherichia coli*, a bacterium indicative of fecal contamination. Some experts recommend testing for fecal coliform bacteria or total coliform bacteria. These bacterial groups can also indicate fecal contamination. The higher the level of *E. coli*, fecal coliform, or total coliform bacteria, the greater the distance you should try to have between irrigation water and crops.

- **Is spray-water suitable to contact produce?**

Guiding principle: The water used for delivering chemicals and/or amendments to plants should be of the same quality as water used for post-harvest operations, i.e. potable (safe to drink and from an approved source).

Steps to take: Growers should review and document their water sources and usage to be sure that their best-quality water is designated for spraying and workers know and follow the correct procedure for making spray solutions. It is also important to adequately clean spray reservoirs between uses.

- **Is there any re-use of water in post-harvest operations? If so, is the re-use done counter to the process flow? Are sanitizing agents added to the water?**

Guiding principle: Every time water is re-used, the levels of microbes and organic matter in it will likely increase. If water is re-used, each successive use should be farther away from the finished product. Sanitizing agents can reduce the transfer of microbes from water to produce.

Steps to take: Growers should examine their sources of post-harvest water and determine if re-use occurs. If it does, procedures should be developed, and followed, for ensuring that the “direction” of water usage is opposite to the product flow. For example, water that is used to rinse or cool harvested crops could be re-used to irrigate crops. To prevent the potential transfer of bacteria from step to step, growers may want to add a food-grade sanitizing agent, such as sodium hypochlorite, chlorine dioxide, or peracetic acid, to post-harvest water. These sanitizing agents can be purchased from a sanitation chemical supply company.

SOIL AMENDMENTS

Growers may add various substances to the soil to provide nutrients and organic matter that support healthy produce crops. These soil amendments can be important for creating a healthy soil ecosystem that improves crop yield and improves soil aeration and drainage. However, soil amendments can also be an important source of harmful microbes. Animal manures are the most problematic soil amendments because they can contain a variety of disease-causing bacteria such as *E. coli* O157:H7 and *Salmonella*.

- **If manure is added to the soil, has the manure been properly composted to ensure that fecal bacteria have been destroyed during the composting process?**

Guiding principle: Manure should be properly composted before application, or, if not composted within recommended limits, applied well in advance of harvest time.

Steps to take: The National Organic Program (NOP) specifies time/temperature/turning requirements for composting of manure. The NOP requires that the manure have an initial carbon : nitrogen ratio between 25:1 and 40:1 and states that temperatures between 131° F and 170° F must be sustained for at least three days using an in-vessel or static aerated pile system. In a windrow composting system, temperatures must be sustained between 131° F and 170° F for at least 15 days; during the 15 days the materials must be turned a minimum of five times. If manure-composting does not achieve these time/temperature/turning requirements, the composted manure should be applied at least 120 days before harvest if the edible portion of the crop is likely to have direct or indirect contact with soil (e.g. a root crop, green beans that might

be splashed while growing). If the edible portion of the crop is not exposed to soil, there must be at least a 90-day application-to-harvest interval.

- **Are in-process and finished-product composted manure stored properly?**

Guiding principle: Manure that is in the process of being composted can be a source of contaminants. If composted manure is not stored properly, it can become re-contaminated before it is used.

Steps to take: Manure composting should be done where runoff will not contaminate produce fields. For example, the composting area should not be up-slope from the fields. Once composting is complete, care should be taken to prevent cross-contamination with manure that is not yet composted. Growers should avoid storing finished compost down-slope from the in-process composting operation.

- **If non-composted manure is used as a soil amendment, is it applied at the correct time?**

Guiding principle: If application of non-composted manure is done too close to harvest-time, disease-causing microbes in the manure are more likely to be transferred to the produce.

Steps to take: There are no requirements regarding when properly composted manure can be applied to soil. But if non-composted manure is used, the NOP standards require that it be applied at least 120 days before harvest (exposed edible portion) or at least 90 days before harvest (non-exposed edible portion).

PHYSICAL LOCATION OF FIELDS

- **Do the fields have topographical features that might prevent run-off contamination of produce?**

Guiding principle: Steep slopes can lead to contamination via runoff from adjacent fields or surface-water sources. Contamination is much less likely if the fields are up-slope from adjacent fields or surface-water sources.

Steps to take: If the ground slopes toward the crops, growers should create physical barriers such as trenches to prevent contamination. Buffer vegetation zones may also be useful as barriers. If crops are up-slope from potential contamination, physical barriers are far less necessary.

- **Do the fields have an appropriate land history?**

Guiding principle: Previous uses of fields can leave a reservoir of disease-causing microbes.

Steps to take: Growers should determine the previous history of their fields and avoid growing produce crops too soon after the fields have been used in animal agriculture. For example, land that has been used for raising cattle within the past three years may not be appropriate for growing vegetables.

- **Do adjacent fields present an insignificant risk of contamination?**

Guiding principle: Adjacent fields can be a source of disease-causing microbes.

Steps to take: Ideally, produce fields should not be near animal feedlots or other potential sources of animal waste contamination. Growers should also consider the spread of waste via run-off and wind. A grower may prevent runoff contamination by using physical barriers such as ditches or diversion berms. Buffer zones containing trees or bushes may reduce contamination carried by wind.

- **Is animal movement controlled to minimize the risk of contamination?**

Guiding principle: Wild and domestic animals can carry disease-causing microbes in their intestines. If these animals get into a produce field, their feces can contaminate produce.

Steps to take: Fences and buffer zones may reduce animal traffic through produce-growing fields. A more challenging situation occurs on farms that use livestock to pull plows or other farm implements. Short of “diapering” of horses (as is sometimes done with horse-drawn carriages in cities), there are few practical preventive steps available. At the very least, the animals should be used in the fields at least 90 or 120 days before harvest (the same standard as for applying non-composted manure).

- **Does the area have a small population of birds?**

Guiding principle: Birds are common carriers of *Salmonella* and can shed these bacteria over a large area.

Steps to take: There are no effective practical methods available to prevent bird traffic through farms. Eliminating bird habitat near the farm is often not desirable from an ecological viewpoint. To some extent, though, bird populations are related to insect populations, so an effective Integrated Pest Management system may be the best preventive step available.

PERSONNEL

- **Are employees properly trained in personal hygiene and how to prevent contamination of produce?**

Guiding principle: If employees don’t have good hygiene practices, they are more likely to spread disease-causing microbes to produce during harvest, washing, and packing operations.

Steps to take: Regardless of the number of employees, growers should have a set of hygiene policies for employees to follow, and a documented system for teaching employees about these practices. It is a good idea to have introductory training for new employees and refresher training for experienced employees. Training should be clear, at a level that employees can understand, in the appropriate language, and should ideally involve demonstrations of desired practices. Records of training sessions (dates, attendees, topics) should be kept.

- **Are employees with illnesses or open wounds prohibited from handling produce?**

Guiding principle: Ill employees can contaminate produce with disease-causing microbes.

Steps to take: Plainly speaking, the grower should take steps to be sure that employees with vomiting, diarrhea, or other symptoms of gastrointestinal illness do not handle produce.

Employees with these symptoms should be sent home or assigned tasks that do not involve contact with produce or any surface that contacts produce. If an employee has a skin wound, they can handle produce if the wound is completely covered with a waterproof covering. If not, they should also be sent home or re-assigned. Employees with symptoms of respiratory illness (e.g. coughing, runny nose, sneezing) should be sent home or assigned tasks that do not involve contact with produce or any surface that contacts produce. The grower should have written policies for dealing with employee illnesses and be sure that employees understand the policies.

- **Are adequate restroom facilities available to employees?**

Guiding principle: If employees relieve themselves near the growing area, disease-causing microbes can be transferred to the produce. If employees don't have the opportunity to wash their hands after using the restroom, they may spread disease-causing microbes to produce.

Steps to take: The grower should prevent this type of contamination by providing adequate restroom facilities that are convenient for employees to use. The restroom facilities may have to be portable on large farms. The facilities should always include adequate facilities for washing and drying hands. The facilities must be maintained so that they do not become a cause of produce contamination.

- **Do field workers have a separate area for breaks and meals?**

Guiding principle: Food and beverages can be spilled and spills will attract pests. Pests can transfer disease-causing microbes to produce.

Steps to take: To prevent transmission by pests attracted to spills, the grower should require that food and beverages are only consumed in a break area that is separate from the produce fields and packing areas.

FIELD SANITATION

- **Are appropriate harvest containers used?**

Guiding principle: Harvest containers can transfer disease-causing microbes to produce. This transfer is more likely if the containers are made out of porous materials like wood, burlap, or re-used corrugated fiberboard.

Steps to take: Smooth, cleanable non-absorbent container surfaces are less likely to harbor microbes and contaminate produce. Ideally, growers should use containers that are cleanable and constructed out of a food-grade plastic material.

- **Are harvest containers inspected, discarded if necessary, cleaned and sanitized regularly?**

Guiding principle: Even if harvest containers are made out of appropriate materials, they can still become a source of disease-causing microbes if they are not kept in good condition, cleaned and sanitized.

Steps to take: Ideally, growers should have a documented program for inspecting containers, discarding damaged containers, and cleaning and sanitizing the containers that are in good condition. The process of inspect-clean-sanitize should be done, and documented, regularly, with the frequency increasing when conditions such as rainy weather lead to greater amounts of soil on the containers. Remember that if containers are nested, the outside of each container should be inspected, cleaned, and sanitized, too. Drying the containers in the sunlight, before they are used, nested, or stored is recommended because the ultraviolet light in sunshine can kill microbes.

- **Is farm equipment cleaned and sanitized routinely?**

Guiding principle: Farm equipment is often overlooked as a source of produce contamination.

Microbes that contaminate equipment during an earlier task can be transferred to the produce or its surrounding environment during a later task.

Steps to take: Growers should carefully clean and sanitize equipment before it is used with fresh produce, especially if the equipment has been used with debris or manure. Growers should have a schedule for equipment cleaning and sanitizing and document that it is followed.

PACKING SHED SANITATION

- **Is the building designed to prevent cross-contamination?**

Guiding principle: Cross-contamination with disease-causing microbes can occur when washed produce touches unwashed produce or equipment that also handles unwashed produce.

Steps to take: The grower should design and operate the packing shed so that the product flow is linear – unwashed produce enters the shed at one end, and washed packaged produce leaves the shed (or goes into the cooler) at the other end. The shed should be operated so that unwashed and washed produce are kept separate, never coming into contact with the same surfaces or each other. Access to the packing shed should be limited to reduce opportunities for contamination. The grower should construct the shed so that birds, rodents, and insects are kept out. If there is a maintenance area in the shed, it should be physically separated from the washing / packing area. Growers might document the layout of their packing shed by preparing a floor plan sketch or by taking digital photographs.

- **Are containers inspected, discarded if necessary, cleaned and sanitized regularly?**

Guiding principle: In the packing shed, bins and other containers may hold produce for relatively long periods of time. Alternatively, some containers get re-used many times throughout the day, making it important to minimize contamination by frequently cleaning and sanitizing them.

Steps to take: Some growers use two different colors of bins – one for unwashed produce, and one for finished produce. Ideally, growers will have a written procedure for container inspection, cleaning, and use.

- **Are personnel trained in minimizing microbial contamination?**

Guiding principle: Just like in the field, packing shed employees can contaminate produce with disease-causing microbes.

Steps to take: Growers should make sure that packing shed employees understand and follow good hygiene practices. Hand-washing stations should be convenient and accessible, and the employees should be trained when and how to properly wash their hands. Toilet facilities should be physically separate from the packing and storage areas, but within a convenient distance, and equipped with appropriate hand-washing facilities.

- **Is equipment cleanable, cleaned and sanitized as appropriate?**

Guiding principle: If equipment traps debris or isn't cleaned and sanitized properly, it can be a source of contaminants.

Steps to take: Growers should only use equipment that is designed so that it can be easily cleaned. Growers should maintain the equipment condition, and repair or replace damaged, pitted, corroded, or cracked equipment, because these defects can harbor debris and the microbes in it. Growers should design packing lines to avoid "dead ends" where produce (and microbes) can accumulate. Equipment should be positioned so that there is enough space around it to allow for adequate inspection and cleaning. The grower should have a schedule for inspection, cleaning, and sanitizing, and documentation to show that the schedule was followed.

- **Are packaging materials stored in a sanitary manner?**

Guiding principle: Contaminated packaging materials can transfer disease-causing microbes to produce.

Steps to take: Growers should store packaging materials in a dry, separate area where they will not become contaminated.

- **Are coolers adequately maintained?**

Guiding principle: Microbes grow more slowly when the temperature is cold. Maintaining cooler temperatures at 45°F or lower will minimize microbial growth and, for most produce, extend its shelf life.

Steps to take: Growers should have a regular schedule for monitoring, and recording, cooler temperature. Growers should remember to regularly empty, clean and sanitize the cooler so that it doesn't become a source of contaminants. Cooler floors should be kept clean and dry. Cooling unit coils and fan housings should be regularly cleaned.

- **Are trucks maintained in a sanitary condition?**

Guiding principle: Contaminants on the inside of the truck can lead to unsafe produce if they are transferred to the produce.

Steps to take: Growers should avoid using trucks that back-haul animals, raw meat, fish, or poultry, or non-food-grade materials. There should be a regular schedule for cleaning and sanitizing the truck interior, with records kept to show that the schedule was followed.

Refrigerator conditions should be maintained in the truck cooler during transportation.

SUMMARY

Using this guide will help you evaluate food safety practices in produce operations, but it is just a start. You may want to periodically re-evaluate practices, especially if unusual growing conditions occur (e.g. flooding), a new food safety concern is discovered, or new preventive measures are developed.

Buy Local, Buy Safely!
A Guide for Evaluating Food Safety Practices at Local Produce Farms
Checklist

Instructions

The following six topic tables describe Guiding Principles and supporting Best Practices that growers may use to improve the safety of their produce. For each Guiding Principle, check the box next to each food safety Best Practice used by the grower. Record the number of checkmarks in Column A to the right of the table and multiply the number of checkmarks by the number of points listed in Column B. Record the total as a subtotal in Column C. (Round scores that end in .99 up to the nearest whole number.) The highest possible score for each Guiding Principle is 4. Add the subtotals to determine the total score for each topic table and record those total scores below. Add the scores below to calculate the overall score.

I. WATER	_____
II. SOIL AMENDMENTS	_____
III. FIELD LOCATION	_____
IV. PERSONNEL	_____
V. FIELD SANITATION	_____
VI. PACKING SHED SANITATION	_____
OVERALL SCORE (ADD ALL ABOVE)	_____

Results

The highest score possible is 100. A score between 95 and 100 indicates that all but a few Best Practices have been adopted. To identify specific Best Practices that could be adopted, review the subtotal scores in each table. Guiding Principles in which the score is zero indicate a need for improvement.

I. WATER

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
<p>A. Best-quality water is used when working with harvested product.</p> <p><input type="checkbox"/> 1. Potable water is used for post-harvest operations.</p> <p><input type="checkbox"/> 2. Food-grade sanitizing agent is added to potable water used for post-harvest operations.</p>		2	
<p>B. Water sources should be protected from contamination via run-off, flooding, animal agriculture operations.</p> <p><input type="checkbox"/> 3. Municipal water supply used.</p> <p><input type="checkbox"/> 4. Backflow prevention devices used.</p> <p><input type="checkbox"/> 5. Private well is used and it is:</p> <ul style="list-style-type: none"> • properly constructed and sealed • upslope from animal agriculture operations • protected from run-off and separated from animals by fencing. 		1.33	
<p>C. Direct contact between irrigation water and produce should be minimized.</p> <p><input type="checkbox"/> 6. Drip or furrow (not spray) irrigation is used.</p> <p><input type="checkbox"/> 7. Irrigation water is regularly tested for fecal indicator bacteria; practices are adjusted, based on test results.</p> <p>If irrigation is not done, check this box <input type="checkbox"/> and count as 2 checks in column to the right.</p>		2	
<p>D. Best-quality water should be used for spraying.</p> <p><input type="checkbox"/> 8. Potable water is used for spraying OR food-grade sanitizing agent is added to non-potable water used for spraying.</p> <p><input type="checkbox"/> 9. Spray reservoirs are cleaned between uses.</p>		2	
<p>E. If water is re-used, the re-use should be done counter to process flow and/or sanitizing agents should be added to the water.</p> <p><input type="checkbox"/> 10. Re-use is done counter to process flow.</p> <p><input type="checkbox"/> 11. Sanitizing agent is added to water.</p> <p>If water is not re-used, check this box <input type="checkbox"/> and count as 2 checks in column to the right.</p>		2	
WATER TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 20)			

II. SOIL AMENDMENTS

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
<p>F. If manure is used as fertilizer, it should be properly composted or applied far enough in advance of harvest. (Check ONE box for the practice that best describes what is done.)</p> <p><input type="checkbox"/> 12. Manure is composted in accordance with National Organic Program (NOP) standards: C : N ratio between 25 : 1 and 40 : 1; in-vessel or static aerated pile is between 131 and 170°F for at least 3 days; windrow composting is between 131 and 170°F for at least 15 days and compost is turned at least 5 times.</p> <p><input type="checkbox"/> 13. Manure is not used as fertilizer.</p> <p><input type="checkbox"/> 14. Manure is composted but not in accordance with NOP standards. Manure is applied at least 90 days (non-exposed crops) or 120 days (exposed crops) before harvest.</p> <p><input type="checkbox"/> 15. Manure is NOT composted, but is applied at least 90 days (non-exposed crops) or 120 days (exposed crops) before harvest.</p>		4	
<p>G. In-process and finished composted manure should be stored to prevent cross-contamination.</p> <p><input type="checkbox"/> 16. Composting area is down-slope from produce fields.</p> <p><input type="checkbox"/> 17. Composting area is down-slope from water source.</p> <p><input type="checkbox"/> 18. Finished composted manure is stored separately and up-slope from in-process composting manure.</p>		1.33	
SOIL AMENDMENT TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 8)			

III. FIELD LOCATION

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
H. Field topography should prevent run-off contamination of produce. <input type="checkbox"/> 19. The field is up-slope from adjacent fields or water sources. <input type="checkbox"/> 20. Run-off barriers protect the fields.		2	
I. Previous field uses should not leave a potential reservoir of disease-causing microbes. <input type="checkbox"/> 21. The field has not been used for animal agriculture within the past 3 years.		4	
J. Adjacent fields should not be a reservoir of disease-causing microbes <input type="checkbox"/> 22. The adjacent fields have not been used for animal agriculture within the past 3 years.		4	
K. Animal movement onto the produce fields should be minimized. <input type="checkbox"/> 23. The produce fields are surrounded by fences and/or buffer zones that minimize animal traffic. <input type="checkbox"/> 24. Animal-drawn farm implements are not used OR animal-drawn farm implements are used but only at least 90 days (non-exposed crops) or 120 days (exposed crops) before harvest.		2	
I. Bird populations in and near the fields should not be excessive. <input type="checkbox"/> 25. Integrated Pest Management is practiced to minimize the number of insects on which birds can feed. <input type="checkbox"/> 26. Steps are taken to prevent nesting and roosting near fields and buildings.		2	
FIELD LOCATION TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 20)			

IV. PERSONNEL

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
<p>M. Employees should be properly trained in personal hygiene and prevention of produce contamination.</p> <p><input type="checkbox"/> 27. Employees read hygiene practices and sign a statement indicating that they have read and intend to follow these practices.</p> <p><input type="checkbox"/> 28. Introductory training in hygiene practices is provided and documented for all new employees.</p> <p><input type="checkbox"/> 29. Refresher training in hygiene practices is provided and documented for all continuing employees.</p>		1.33	
<p>N. Employees with illnesses or open wounds should be prohibited from handling produce.</p> <p><input type="checkbox"/> 30. Written policies explain that the grower will send ill employees home or assign them tasks in which they won't contact produce, and require employees to cover wounds completely with a waterproof covering or be assigned to tasks in which they won't contact produce.</p>		4	
<p>O. Employees should have adequate restroom facilities.</p> <p><input type="checkbox"/> 31. Restroom facilities are provided in close proximity to work areas.</p> <p><input type="checkbox"/> 32. Restroom facilities include hand-washing stations with sufficient water, soap, and single-use paper towels.</p>		2	
<p>P. Employees should have a separate area for breaks and meals.</p> <p><input type="checkbox"/> 33. Break area for food and beverage consumption is separate from produce fields and packing areas.</p>		4	
PERSONNEL TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 16)			

V. FIELD SANITATION

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
<p>Q. Harvest containers should be constructed and handled to minimize transfer of disease-causing microbes to produce.</p> <p><input type="checkbox"/> 34. Harvest containers are made of smooth, cleanable non-absorbent material.</p> <p><input type="checkbox"/> 35. Harvest containers are regularly inspected for damage and discarded if damaged. Inspection results, including discarding damaged containers, are appropriately documented.</p> <p><input type="checkbox"/> 36. Harvest containers are regularly cleaned and sanitized, with appropriate documentation of cleaning and sanitizing.</p>		1.33	
<p>R. Farm equipment should be cleaned and sanitized before it is used with fresh produce.</p> <p><input type="checkbox"/> 37. Farm equipment that is to be used with fresh produce is regularly cleaned and sanitized, with appropriate documentation of cleaning and sanitizing.</p>		4	
FIELD SANITATION TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 8)			

VI. PACKING SHED SANITATION

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
<p>S. The packing shed should be designed to prevent contamination of produce.</p> <p><input type="checkbox"/> 38. Product flow in the packing shed is linear.</p> <p><input type="checkbox"/> 39. Unwashed and washed produce items are not touched by the same equipment, surfaces, or personnel.</p> <p><input type="checkbox"/> 40. Access to the packing shed is restricted to authorized employees.</p> <p><input type="checkbox"/> 41. The packing shed is constructed to keep pests out.</p> <p><input type="checkbox"/> 42. The maintenance area is separate from the washing / packing area.</p>		.8	
<p>T. Bins and containers in the packaging shed should be maintained, cleaned and sanitized to prevent transfer of disease-causing microbes from the container to the produce.</p> <p><input type="checkbox"/> 43. Different color bins are used for unwashed and finished produce.</p> <p><input type="checkbox"/> 44. Bins and containers are regularly inspected and discarded or repaired as necessary, and regularly cleaned and sanitized, with appropriate documentation of cleaning and sanitizing.</p>		2	
<p>U. Packing shed personnel should be trained in minimizing microbial contamination of produce.</p> <p><input type="checkbox"/> 45. Employees read hygiene practices and sign a statement indicating that they have read and intend to follow these practices.</p> <p><input type="checkbox"/> 46. Introductory training in hygiene practices is provided and documented for all new employees.</p> <p><input type="checkbox"/> 47. Refresher training in hygiene practices is provided and documented for all continuing employees.</p> <p><input type="checkbox"/> 48. Written policies explain that grower will send ill employees home or assign them tasks in which they won't contact produce, and require employees to cover wounds completely with a waterproof covering or be assigned to tasks in which they won't contact produce.</p>		1	
<p>V. Packing shed equipment should be cleanable, cleaned and sanitized, as appropriate.</p> <p><input type="checkbox"/> 49. The packing line is designed to avoid "dead ends" and is positioned to allow adequate inspection and cleaning.</p> <p><input type="checkbox"/> 50. Equipment is food-grade and maintained so that damaged, pitted, corroded, or cracked equipment is repaired or replaced.</p> <p><input type="checkbox"/> 51. Equipment is regularly cleaned and sanitized, with appropriate documentation of cleaning and sanitizing.</p>		1.33	

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
W. Packaging materials should be stored so that they do not become a source of contamination. <input type="checkbox"/> 52. Packaging materials are stored in a separate, dry area where they will not become contaminated.		4	
X. Coolers should be kept clean and dry and operated at a cold enough temperature to minimize microbial growth without harming produce quality. <input type="checkbox"/> 53. Coolers are maintained at 45°F or colder. <input type="checkbox"/> 54. Cooler temperature is regularly monitored and recorded. <input type="checkbox"/> 55. Coolers are regularly emptied, cleaned (including cooling unit coils and fan housings), and sanitized, with appropriate documentation of cleaning and sanitizing activities. <input type="checkbox"/> 56. Cooler floors are kept dry.		1	
Y. Trucks should be maintained so they don't contaminate produce that is transported in them. <input type="checkbox"/> 57. Trucks are not used to back-haul animals, raw meat, fish, or poultry; or non-food-grade items. <input type="checkbox"/> 58. The interior of each truck is regularly cleaned and sanitized, with appropriate documentation of cleaning and sanitizing.		2	
PACKING SHED SANITATION TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 28)			

LICENSING, LABELING, AND REGULATION REQUIREMENTS

State requirements that affect local food marketers may include inspection of processing facilities, review of labels on packaged food products, inspection of scales, and collection of food samples to be analyzed for contaminants or composition requirements. Department of Agriculture, Trade and Consumer Protection (DATCP) inspectors typically visit local food marketing operations if warranted by consumer complaints.

for commercial purposes, and the room must be properly ventilated. A three-compartment sink or NSF-approved dishwasher will be needed for washing your equipment and utensils. A separate hand sink is also required. Some starting operators rent time in an area restaurant, school, or church kitchen to satisfy the separate commercial kitchen requirement without having to invest in a new, separate kitchen of their own.

Overview of Food Marketing Regulations	
DATCP's Division of Food Safety has regulatory authority over food sold in Wisconsin. Generally, the more food products are processed, the more they are regulated.	
Less Regulation	More Regulation
Raw, unprocessed foods	Processed foods
Single-ingredient foods	Multiple ingredients foods
Shelf-stable foods	Sold at a location off the farm
Sold to the end consumer	Sold to a retailer for sale to consumer
Small sales volume	Large sales volume

- Equipment such as stoves, sinks, and mixers must be of approved design, be easily cleaned, and in good repair. If the equipment bears the NSF certification, you can feel certain that it will meet these design requirements.
- Other utensils like pans, bowls, and spoons must be smooth, non-porous, and easily cleaned. Almost all utensils currently manufactured meet this requirement.

For more information about NSF go to www.nsf.org/regulatory/

For exact legal requirements for commercially processing food in Wisconsin go to www.legis.state.wi.us/rsb/code/atcp/atcp070.pdf

Processed Food Labeling

Accurate information on processed food labels helps consumers make informed choices about food. Labels provide weight and content information to help consumers choose the best value for their money. The ingredient list identifies products consumers may need to avoid due to potential allergic reactions or other health concerns. Your packaged products must be properly labeled with:

- the name of the product
- a listing of the ingredients in decreasing order of predominance by weight
- a net weight or volume statement
- the name and address of the manufacturer, packer, or distributor
- nutrition information, unless exempt

Contact state or local food inspectors for specific questions regarding labeling. DATCP does not require label approval prior to a food product's manufacture or distribution. DATCP's Division of Food Safety does not "approve" labels but its staff will answer questions and provide assistance.

Processed Food Business Licensing

Starting a processed food business will require state and, possibly, federal licensing depending on the products involved. If you plan to primarily sell your products directly to consumers, you will need a retail food establishment license. Internet sales are considered retail sales. If you plan to sell primarily through wholesale distribution, you will need a food processing plant license. Key requirements to obtain either license include:

- The facility must be an approved (commercial grade) kitchen. Using your personal home kitchen is not allowed. If you plan to start the business in your home you will need to construct a separate kitchen room dedicated to this food business. The dedicated kitchen will need to have washable floors, walls, and ceilings. The lighting will need to be adequate

The responsibility to comply with current food labeling requirements rests solely on the manufacturer or distributor of the food products. For specific information about processed food labeling go to <http://datcp.state.wi.us/core/food/food.jsp> or contact the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

Resources for Food Labeling

General Labeling

www.datcp.state.wi.us/fs/business/food/labeling/pdf/food_label_questions.pdf

An 8-page publication covering the most basic information on food labeling called "Frequent Food Label Questions."

General Labeling and Nutrition Labeling

www.cfsan.fda.gov/~dms/2lg-toc.html

U. S. Food and Drug Administration (FDA) publication called "A Food Labeling Guide."

94 pages that includes information on basic food labeling as well as information on nutrition facts, trans fat, and allergen labeling.

DATCP Division of Food Safety Labeling Information
www.datcp.state.wi.us/fs/business/food/labeling/index.jsp
DATCP's Division of Food Safety website provides general information. However, go to the FDA website for the most up-to-date and comprehensive information available.

Food Label Sources

http://datcp.state.wi.us/fs/business/food/labeling/pdf/food_label_sources.pdf

A list of Wisconsin sources for design and printing of food labels.

Meat Business Licensing and Labeling

New processors must meet several standards to obtain a license for a meat business. State of Wisconsin meat plants must meet the same standards as USDA-inspected meat plants and must implement a food safety system called Hazard Analysis Critical Control Point (HACCP). A licensed meat establishment is required to implement HACCP plans and have a Sanitation Standard Operating Procedure (SSOP) in place. The HACCP is a risk-based approach to manufacturing food products that identifies the critical step(s) in the manufacturing process and performs a monitored, quantifiable function in those places where there is a danger of causing or promoting microbiological, physical, or chemical contamination. The SSOP is a written plan that outlines the monitored procedures followed to maintain overall plant sanitation, including daily cleaning, regularly scheduled maintenance, food handling practices, and employee hygiene.

Labeling meat products differs from other processed foods due to the greater risks and requirements that meat processing involves. The State of Wisconsin meat inspection program and meat establishments work together to ensure that meat products produced and sold comply with required standards for safety, identity, and wholesomeness set by the state and federal governments.

For references to specific aspects of meat labeling, see Chapter 55 of the Wisconsin Administrative Code: www.legis.state.wi.us/rsb/code/atcp/atcp055.pdf It explains labeling requirements, including weight, inspection, safe handling instructions, and other pertinent information.

See the first resource below for a summary of the Bureau of Meat Safety & Inspection's labeling guidelines.

Resources for Meat Business

Licensing and Labeling

Wisconsin's State Meat Inspection Program

http://datcp.state.wi.us/fs/consumerinfo/food/publications/pdf/state_meat_inspect.pdf
Standards of safety and purity.

Meat Product Formulation and Labeling

http://datcp.state.wi.us/fs/business/food/labeling/pdf/meat_form_label.pdf

Before a meat or custom/not-for-sale product can be marketed in Wisconsin, its formula must be approved by the Division of Food Safety. Formulations, or formulas, are intended to be a guide to the manufacture of an item of more than one ingredient. In addition to meat, this could include water, spices, cures, flavoring, binders, or extenders.

Other Meat Business Resources

http://datcp.state.wi.us/fs/consumerinfo/food/publications/pdf/start_meat_business.pdf
DATCP

"Starting a Meat Business in Wisconsin"

www.uwex.edu/ces/agmarkets/publications/documents/A3811-15.pdf
University of Wisconsin Cooperative Extension
Direct marketing meat fact sheet.

www.uwex.edu/ces/agmarkets/publications/documents/A3809.pdf
UW Cooperative Extension and Wisconsin DATCP
"Direct Marketing Meat" A comprehensive guide for Wisconsin meat producers.

State Regulations

The State of Wisconsin has developed food regulations for farmers wishing to market to consumers and to grocery stores, restaurants, and institutions. Contact DATCP's Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us for more information. Read the following pages for a summary of state requirements by product and market.

Local Regulations

Counties, townships, and cities are local government units that may have regulations that apply to your business. Some typical kinds of regulations include:

- Limits on size or location of advertising signs
- Permits required for excavating or new building construction
- Local health codes regarding food preparation and sale
- Zoning regulations on types of enterprises that can be conducted in certain areas
- Requirements for size and placement of parking areas
- Requirements for bathroom and hand washing facilities (especially for agritourism enterprises)

Local government officials and farmers who have started new enterprises agree that it is far better to work together early to avoid problems, rather than trying to fix things that were not properly done or permitted. County and city governments divide up their responsibilities among departments, and the department names can vary from place to place. Rural townships may have their own planning and zoning guidelines. It is best to check with both county and township officials before proceeding on any farm business expansion.

To find out the name(s) of local officials:

- Check your county's website.
- Call the county courthouse administrative office.
- Check the Wisconsin Towns Association website: www.wisctowns.com/town_sites.html

Weights and Measures

The same weights and measures laws apply to direct marketers of farm produce as to all other retailers. Scales must meet standards for commercial scales set by the National Institute of Standards and Technology (NIST). They must be "legal for trade", National Type

Evaluation Program (NTEP) approved (if put into service after January 1, 1997), and be able to be calibrated. Scales do not need to be registered, but are subject to inspection by a state or local representative of weights and measures.

If a commodity is weighed at the time of sale, the scale's indicator must be visible to the consumer. By law, liquid commodities shall be sold by liquid measure and non-liquid commodities shall be sold by weight. The law permits other methods of sale only where the method is in general use and does not deceive the consumer. One exception is eggs. They are sold by both count and size. Closed containers of apples must comply with the USDA grade standards, which must be stated on the container.

Chapter 91 of the Wisconsin Administrative Code provides rules for selling fresh fruits and vegetables. Some, like apples, corn and cantaloupe can be sold by weight or count, while others, like asparagus, beans and potatoes must be sold only by weight.

If an item is packaged before sale, it must be labeled according to the requirements of Chapter 90 of the Wisconsin Administrative Code. The label must list the name of the food, any ingredients other than the raw product, net weight, liquid measure or count as required—metric translations are optional but may be helpful in targeting certain ethnic markets—name and address of the processor, packer or distributor, a declaration of quantity and any other information required by law, such as grade and sizes for eggs. No quantity declaration is required for packages weighed at the time of sale and for clear packages of six or fewer fruits or vegetables, if the fruit or vegetable is sold by count. If all packages are of uniform weight or measure, an accompanying placard can furnish the required label information.

When a local food producer advertises any pre-packaged food product and includes the retail price in the advertisement, the ad must list the package contents by weight or volume or state the price per whole measurement unit. (For example, \$1.25 per pound.)

See page 117 for a link to the Agriculture, Trade and Consumer Protection (ATCP) chapters of the Wisconsin Administrative Code.

State Requirements by Product and Market

VEGETABLES—Raw	
Type of Sale	Regulations
Producer Selling from Farm	No license required
Producer Selling Door-to-Door or at Farmers' Market	No license required
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No license required
VEGETABLES—Cut	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment, food processing plant, or mobile retail food establishment Additional license depends on type of cut vegetable sold Local ordinance may apply Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from producer's licensed retail food establishment or food processing plant Finished product must be fully labeled
VEGETABLES—Frozen	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Additional license depends on type of vegetable being sold Local ordinance may apply Frozen vegetables must be kept frozen Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from producer's licensed retail food establishment or food processing plant Finished product must be fully labeled

State Requirements by Product and Market

VEGETABLES—Pickled (acidified and canned)	
Type of Sale	Regulations
Producer Selling from Farm	<ul style="list-style-type: none"> Must hold a Food Processing Plant License Successfully complete an Acidified Food Training Course Utilize a scheduled recipe approved by a process authority Must comply with FDA Acidified Foods regulation 21CFR114
Producer Selling Door-to-Door or at Farmers' Market	<ul style="list-style-type: none"> Finished product must come from a licensed food processing plant Local ordinances may apply Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<ul style="list-style-type: none"> Finished product must come from a licensed food processing plant Finished product must be fully labeled
CANNED FOOD PRODUCTS (low acid)—Small Scale Processing	
Type of Sale	Regulations
Producer Selling from Farm	Home or farm-based processing not generally feasible for meats or low acid canned foods such as beans, corn, peas, etc. Inadequate processing during the canning of low-acid foods may cause these foods to become unsafe. Small-scale processing is generally impractical because the equipment needed to produce consistently safe food is highly technical and expensive.
Producer Selling Door-to-Door or at Farmers' Market	Not applicable
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Not applicable
HERBAL AND FLAVORED VINEGAR	
Type of Sale	Regulations
Producer Selling from Farm	<ul style="list-style-type: none"> Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	<ul style="list-style-type: none"> No license required Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store,	Finished product must come from licensed retail food establishment or food processing plant

State Requirements by Product and Market

FRUIT—Raw	
Type of Sale	Regulations
Producer Selling from Farm	No license required
Producer Selling Door-to-Door or at Farmers' Market	No license required
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No license required
FRUIT—Cut	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Local ordinance may apply Additional license depends on cut fruit being sold
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
FRUIT—Frozen	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Additional license depends on type of fruit being sold Local ordinance may apply Frozen fruit must be maintained frozen Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from licensed retail food establishment or food processing plant Finished product must be fully labeled

State Requirements by Product and Market

FRUIT-BASED BAKERY ITEMS	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Mobile retail food establishment license required for unpackaged product sales Local ordinance may apply
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
BAKERY ITEMS	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Mobile retail food establishment license required for unpackaged product sales
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
DRY FOOD MIXES AND BLENDS	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Mobile retail food establishment license required for unpackaged product sales
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled

State Requirements by Product and Market

JAMS, JELLIES	
Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Product must come from a licensed retail food establishment or food processing plant Local ordinance may apply Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
MAPLE SYRUP	
Type of Sale	Regulations
Producer Selling from Farm, Door-to Door or at Farmers' Market	No license required Food must be handled in a way that assures food safety Maple syrup must be fully labeled
Producer Distributing to Grocery Store, Restaurant, or Institution	Food processing plant license required Maple syrup must be processed in a commercial facility Maple syrup must be fully labeled
APPLE CIDER	
Type of Sale	Regulations
Producer Selling from Farm	No license required Cider must be pressed and bottled at producer's orchard Cider must be fully labeled including approved warning statement
Producer Selling Door-to-Door or at Farmers' Market	No license required Cider must be pressed and bottled at producer's orchard Local ordinance may apply Cider must be fully labeled including approved warning statement
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed food processing plant Must comply with juice HACCP and 5-log reduction Finished product must be fully labeled
HONEY	
Type of Sale	Regulations
Producer Selling from Farm, Door-to Door or at Farmers' Market or Distributing to Grocery Store, Restaurant, or Institution	No license required for honey sold as beekeeper's own that has no added color, flavors, or ingredients Honey must be handled in a way that assures food safety Honey must be fully labeled including Graded or labeled "Ungraded"

State Requirements by Product and Market

LIVESTOCK—Cattle, Swine, Sheep, Goats, Ratites	
Type of Sale	Regulations
Producer Selling from Farm	<p>Retail food establishment license required</p> <p>Livestock must be processed at a state or federally inspected facility</p> <p>Meat may be weighed on-farm with approved scale or weighed by package at processor</p> <p>Product storage must be clean and located in a clean, neat area (house or shed allowed)</p> <p>Product storage must be used exclusively to store meat sold to customers</p> <p>Frozen meat must be maintained frozen</p> <p>Unfrozen meat products must be maintained at internal temperature of 41°F or below</p> <p>Meat must be fully labeled</p>
Producer Sells Live Animals <i>and</i> Consumer Arranges for Processing	No license required
Producer Selling Door-to-Door or at Farmers' Market	<p>Mobile retail food establishment license required</p> <p>Local ordinance may apply</p> <p>Livestock must be processed at a state or federally inspected facility</p> <p>Meat may be weighed on-farm with approved scale or weighed by package at processor</p> <p>Product storage must be used exclusively to store meat sold to customers</p> <p>Product storage must be located in a clean, neat area (house or shed allowed)</p> <p>Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Meat must be fully labeled</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>Warehouse license required</p> <p>Livestock must be processed at a state or federally inspected facility</p> <p>Registration as meat distributor required</p> <p>Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained frozen</p> <p>Unfrozen meat products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Meat must be fully labeled</p>

State Requirements by Product and Market

CAPTIVE GAME ANIMALS/EXOTICS—Pheasants, Deer, Bison	
Type of Sale	Regulations
<p>Producer Selling from Farm</p>	<p>Retail food establishment license required Livestock must be processed at a state or federally inspected facility Meat may be weighed on-farm with approved scale or weighed by package at processor Product storage areas must be located in a clean, neat area (house or shed allowed) Product storage must be used exclusively to store meat sold to customers Frozen meat must be maintained frozen Unfrozen meat products must be maintained at internal temperature of 41°F or below Meat must be fully labeled</p>
<p>Producer Sells Live Animals <i>and</i> Consumer Arranges for Processing</p>	<p>No license required</p>
<p>Producer Selling Door-to-Door or at Farmers' Market</p>	<p>Mobile retail food establishment license required Local ordinance may apply Livestock must be processed at a state or federally inspected facility Product storage must be used exclusively to store meat sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Frozen meat must be maintained frozen Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled</p>
<p>Producer Distributing from Farm to Grocery Store, Restaurant, or Institution</p>	<p>Warehouse license required Registration as meat distributor required Livestock must be processed at a state or federally inspected facility Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained in a frozen state Unfrozen meat products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled</p>

State Requirements by Product and Market

RABBITS	
Type of Sale	Regulations
Producer Selling from Farm	<p>No license or inspection required for home slaughter or sale</p> <p>Producer maintains custody of meat until sold</p> <p>Meat can only be sold directly to consumer</p> <p>Meat must be handled in a way that assures food safety</p> <p>Frozen meat must be maintained frozen</p> <p>Unfrozen meat products must be maintained at internal temperature of 41°F or below</p> <p>Meat must be fully labeled including “Not inspected”</p>
Producer Selling Door-to-Door or at Farmers’ Market	<p>Mobile retail food establishment license required</p> <p>Local ordinance may apply</p> <p>Rabbit must be processed at a licensed food or meat processing plant</p> <p>Frozen meat must be maintained frozen</p> <p>Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Meat must be fully labeled including “Not inspected”</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>Finished product must come from a licensed retail food establishment or food processing plant</p> <p>Frozen meat must be maintained frozen</p> <p>Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Meat must be fully labeled including “Not inspected”</p>
AQUACULTURE—Farmed Fish and Seafood	
Type of Sale	Regulations
Producer Selling from Farm	<p>Retail food establishment or food processing plant license required</p> <p>Fish must be fully labeled</p>
Fee Fishing	<p>Fish eviscerated and filleted as a service to paying fee fishing customers is not licensed by Division of Food Safety</p>
Producer Selling Door-to-Door or at Farmers’ Market	<p>Mobile retail food establishment license required</p> <p>Frozen fish must be maintained frozen</p> <p>Unfrozen fish products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Fish must be fully labeled</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>License required depends on license type at farm</p> <p>Frozen fish must be maintained frozen</p> <p>Unfrozen fish products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Fish must be fully labeled</p>

State Requirements by Product and Market

POULTRY—Farm-Raised Chickens, Ducks, Geese, Guinea Hens, Squab, Turkeys	
Less than 1,000 birds per year	
Type of Sale	Regulations
<p>Producer Selling from Farm</p>	<p>No license or inspection required for home slaughter and sale Birds must be healthy and come from producer’s own flock Poultry can only be sold directly to consumer Producer maintains custody of birds until sold Processed poultry must be handled in a way that assures food safety Frozen poultry must be maintained frozen Unfrozen poultry must be maintained at internal temperature of 41°F or below Poultry must be fully labeled including “Not inspected”</p>
<p>Producer Selling Door-to-Door or at Farmers’ Market</p>	<p>Mobile retail food establishment license required Local ordinance may apply Poultry must be processed at a state or federally inspected facility Frozen poultry must be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled</p>
<p>Producer Distributing from Farm to Grocery Store, Restaurant, or Institution</p>	<p>Warehouse license required Registration as meat distributor required Poultry must be processed at a state or federally inspected facility Warehouse freezer and producer’s vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled</p>

State Requirements by Product and Market

POULTRY—Farm-Raised Chickens, Ducks, Geese, Guinea Hens, Squab, Turkeys	
More than 1,000 birds per year	
Type of Sale	Regulations
Producer Selling from Farm	<ul style="list-style-type: none"> Retail food establishment license required Poultry must be processed at a state or federally inspected facility Product storage must be used exclusively to store poultry products sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Frozen poultry must be maintained frozen Unfrozen poultry products must be maintained at internal temperature of 41°F or below Poultry must be fully labeled
Producer Selling Door-to-Door or at Farmers' Market	<ul style="list-style-type: none"> Mobile retail food establishment license required Local ordinance may apply Poultry must be processed at a state or federally inspected facility Product storage must be used exclusively to store poultry products sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Frozen poultry must be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<ul style="list-style-type: none"> Warehouse license required Registration as meat distributor required Poultry must be processed at a state or federally inspected facility Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled
EGGS	
Type of Sale	Regulations
Producer Selling from Farm	<ul style="list-style-type: none"> No license required Eggs must be sold directly to consumer Must be handled in a way to assure food safety Used carton labels can't be misleading (remove original labeling when re-using cartons)
Producer Selling Door-to-Door or at Farmers' Market	<ul style="list-style-type: none"> Mobile retail food establishment license required Food processing plant license required Eggs must be kept at 41°F or below Eggs must be fully labeled
Producer Distributing from Farm to Grocery Store,	<ul style="list-style-type: none"> Food processing plant license required Eggs must be fully labeled

State Requirements by Product and Market

DAIRY—Fluid Milk, Cream, Butter	
Type of Sale	Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	<p>Dairy Farm license required for persons or businesses to operate a dairy farm</p> <p>Dairy Plant license required to process all dairy products</p> <p>License required for persons to be in charge of or supervise the making of butter that will be sold</p> <p>Dairy products must be maintained at internal temperature of 41°F or below</p> <p>Dairy products must be fully labeled</p>
Producer Selling Door-to-Door or at Farmers' Market	<p>Mobile retail food establishment license required</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>No additional license required when dairy products come from producer's licensed dairy plant</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>
DAIRY—Yogurt, Kefir, Ice Cream, Flavored Milk, Sour Cream	
Type of Sale	Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	<p>Dairy Farm license required for persons or businesses to operate a dairy farm</p> <p>Dairy Plant license required to process all dairy products</p> <p>Dairy products must be maintained at internal temperature of 41°F or below</p> <p>Dairy products must be fully labeled</p>
Producer Selling Door-to-Door or at Farmers' Market	<p>Mobile retail food establishment license required</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>No additional license required when dairy products come from producer's licensed dairy plant</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p>

State Requirements by Product and Market

DAIRY—Raw Milk Cheese	
Type of Sale	Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	<p>Dairy Farm license required for persons or businesses to operate a dairy farm</p> <p>Dairy Plant license required to process all dairy products</p> <p>Dairy products must be maintained at internal temperature of 41°F or below</p> <p>License required for persons to be in charge of or supervise the making of cheese that will be sold</p> <p>Dairy products must be fully labeled</p>
Producer Selling Door-to-Door or at Farmers' Market	<p>Mobile retail food establishment license required</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>No additional license required when dairy products come from producer's licensed dairy plant</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>
DAIRY—Pasteurized Milk Cheese	
Type of Sale	Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	<p>Dairy Farm license required for persons or businesses to operate a dairy farm</p> <p>Dairy Plant license required to process all dairy products</p> <p>License required for persons to be in charge of or supervise the making of cheese that will be sold</p> <p>Dairy products must be maintained at internal temperature of 41°F or below</p> <p>Dairy products must be fully labeled</p>
Producer Selling Door-to-Door or at Farmers' Market	<p>Mobile retail food establishment license required</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	<p>No additional license required when dairy products come from producer's licensed dairy plant</p> <p>Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)</p> <p>Dairy products must be fully labeled</p>

FOOD SAFETY, FOOD LIABILITY, AND FARM INSURANCES

Marketing Fresh, Raw Fruits and Vegetables

Farmers in Wisconsin are considered an “approved source” for fruits and vegetables they raise themselves. They can sell any quantity, to any person or business, without a food license. Even though no licensing is required, farmers still have to take reasonable care to avoid contamination of their produce with disease organisms. Food safety starts in the field and continues through the process of harvesting, washing, packaging, storing, and transporting fruits and vegetables.

Marketing Eggs

Farmers can sell shell eggs produced by their own laying flock on their farm. No license is required if selling on their farm, but farmers are required to be licensed if they are selling off their property such as to grocery stores, restaurants, or food services. Farmers are considered an “approved source” for shell eggs if they are licensed, follow the safe handling guidelines for shell eggs, and properly label the eggs as defined in Chapter 88.08 of the Wisconsin Administrative Code. Eggs are a perishable product, and must be handled properly to ensure food safety. See page 117 for a link to the Agriculture, Trade and Consumer Protection (ATCP) chapters of the Wisconsin Administrative Code.

Marketing Processed or Prepared Foods

You must be licensed to sell processed or prepared foods. This requires an approved kitchen separate from a home kitchen. Those selling a canned pickled product are encouraged to take a training course in safe canning procedures. The training courses also teach how to conduct pH testing of your product. For more information, call the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

Marketing Meat or Poultry

Farmers can sell meat and poultry products that have been processed at licensed and inspected processing facilities. The rules vary depending on the type and quantity of meat you are selling and to whom you are selling it. For more information on rules and regulations for meat and poultry, go to pages 103 and 106.

Marketing Dairy Products

Dairy products can be produced, processed, and sold directly from the farm with appropriate licensing and in a facility that meets state and federal standards. Training and certifications are required for making cheese and butter. For more information on marketing dairy products, go to page 108.

Food marketers must be familiar with and comply with state and federal food laws. In Wisconsin, the Department of Agriculture, Trade and Consumer Protection (DATCP) is responsible for administering laws concerning weights and measures, packaging and labeling, food advertising and trade practices, and food production and protection (food safety).

Contact DATCP’s Division of Food Safety regional office as your first step to obtain food safety information as it relates to food marketing or food processing. Call either the Madison office at 608-224-4700 or the Eau Claire office at 715-839-3844.

Food Safety Guidelines

Wisconsin’s Food Law states only safe and wholesome food can be offered for sale. It is illegal to manufacture, prepare for sale, store, or sell food unless the food is protected from dust, insects, and any other unclean, unhealthy, or unsanitary condition. To prevent contamination, equipment must be suitable for the type of product being sold.

Learning about safe food handling is good business for any farmer who wants to market a food product. When you sell a food product to the public, even if you aren’t required to have a license, you still need to follow safe food handling practices. Handling food safely can protect your customers from illness and you from liability. Some of the best practices for handling food are common sense, but some practices are not obvious. Restaurant and food service personnel are well-trained in food safety. If you are bringing food products to sell to them, they need to see you are handling products correctly or they may refuse to accept a shipment from you.

Food sold directly from the farm often comes under greater scrutiny than food sold through the typical distributor or grocery store channels. Some in the food industry have a perception that food right from the farm is less safe. Farmers can overcome that perception by carefully

following the food industry standards for safe handling of food. If your potential buyers see you are following good practices, it will increase their comfort level in buying directly from a farmer. For more information on Good Agricultural Practices (GAP) and Good Handling Practices (GHP), go to page 112.

It is helpful to learn the guidelines the food industry follows. Hazard Analysis and Critical Control Points (HACCP) is an internationally accepted protocol for ensuring food safety. The HACCP procedures are useful information not only for farmers, but for anyone who is processing or preparing a food for sale to the public. For more information go to: <http://sop.nfsmi.org/HACCPBasedSOPs.php>

Food Safety Concerns

Cross-Contamination

Cross contamination occurs when disease-causing organisms move from one type of food to another, or from the food handling environment onto food. Some examples include:

- Using a knife and cutting board to cut up a chicken. The knife or cutting board is not cleaned and hands are not thoroughly washed before cutting up lettuce for a salad. The lettuce can pick up salmonella or other bacteria from the chicken residue left on the knife, cutting board, or hands.
- Using a utensil to place pieces of raw meat in a pan for cooking. The same utensil is not cleaned before it is used to remove the cooked meat from the pan, moving the germs from the uncooked meat onto the cooked pieces.

Food Contamination on the Farm

Food contamination can happen in the field during the growing season, harvest and packaging, or transport, all before the products get to point-of-sale. Contamination can be caused by fecal material coming in contact with vegetables or water-borne bacteria. Some examples include:

- A field worker fails to wash hands thoroughly after using the bathroom and returns to picking vegetables.
- Rain water flows across a barnyard and past a nearby packing shed. The water splashes on a crate of lettuce being hauled to the shed, thus contaminating the lettuce with barnyard germs.

Preventing Food Contamination in the Field

Ways to prevent contamination include:

- Keep pets and livestock out of areas where food is grown, processed, packaged, transported, or otherwise handled.
- Be aware of wildlife in your fields, remove or cover wild animal feces if possible, and avoid picking fruits or vegetables from areas right next to wild animal feces.
- Pay attention to the routes you take on your farm. Avoid tracking soil or mud from livestock areas into vegetable or fruit areas.
- Direct rain run-off from livestock areas away from vegetable or fruit areas.
- If manure is used for fertilizer, allow plenty of time for it to break down between spreading and harvest of a crop. The USDA Organic program rules require that manure must be tilled into the soil at least 120 days prior to harvest of a crop that has direct contact with the soil (such as lettuce), and at least 90 days prior to harvest of a crop that does not have direct contact with the soil (such as sweet corn).
- If you irrigate, look for ways to avoid contamination of irrigation water.

Preventing Food Contamination During Packing, Storing, and Transport

Ways to prevent contamination include:

- Wash hands again, and again, and again.
- Keep watch for anything that could cause cross-contamination.
- Make sure water used for washing fruits and vegetables is from a clean source and is not contaminated on its way to the wash area.
- When washing fruits and vegetables, it is generally best to wash them under running water that can drain away rapidly. Soaking a batch of vegetables in a tub of water can cause cross-contamination if one of the vegetables is contaminated.
- Keep clean, washed, ready-to-eat vegetables and fruits separate from raw vegetables and fruits.
- Keep packaging areas clean. Clean packing tables with a disinfectant solution in between batches of fruits or vegetables.
- Don't stack dirty things on top of clean things. Keep meat, poultry, and egg products physically separated from fruit and vegetable products.
- When transporting, don't load produce with non-produce items.

What is GAP/GHP?

There is an increasing focus in the marketplace on good agricultural practices to verify farms are producing fruits and vegetables in the safest manner possible. Third-party audits are being used by the retail and food services industry to verify their suppliers conform to specific agricultural practices. *Good Agricultural Practices* (GAP) include on-farm production and post-production processes resulting in safe and quality food products. *Good Handling Practices* (GHP) include those used in handling and packing operations that minimize microbial contamination of fresh fruits, vegetables and tree nuts.

The U.S. Department of Agriculture (USDA) Agricultural Marketing Service, in partnership with state departments of agriculture, offers a voluntary, audit-based program to verify agricultural practices. GAP/GHP audits verify the implementation of a basic food safety program on the farm. This includes examining the farm practices and handling/packing procedures focusing on packing facilities, storage facilities, and wholesale distribution centers. These audits are based on the U.S. Food and Drug Administration's Guidelines to Minimize Microbial Contamination for Fresh Fruits and Vegetables and are a fee-based service.

USDA-trained and -licensed auditors provide GAP/GHP certification. GAP certification audits are conducted during harvest when harvest crews are at work. GHP audits are performed when the packing operation is running and workers are present. This federal/state audit program does not cover processed fruits and vegetables. (Inspection of food processors is provided by DATCP's Division of Food Safety.)

The GAP certification process covers three sections of the USDA Federal/State Audit Checklist for farm operations that do not pack their own products:

1. General questions
2. Farm review
3. Field harvest and field packing

The GHP certification process is an add-on for farm operations that conduct packing of fresh fruits and vegetables. The process includes three additional sections in the audit checklist:

4. Packing house review
5. Storage and transportation (optional)
6. Traceback (optional)

Every operation must compile a food safety program that outlines the standard operating procedures and policies that are in practice for the requirements in each section of the audit. In certain circumstances, documentation must also be provided to substantiate practices or analyses of possible contamination.

Go to www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5050869 to view the full USDA Audit Verification Checklist. General questions and parts 1–5 apply to GAP/GHP farm operation audits.

Contact Tim Leege at 715-345-5212 or via email at tim.leege@wisconsin.gov

Prevent Food Contamination During Processing and Preparation

Ways to prevent contamination include:

- Wash hands again, and again, and again.
- Watch for anything that could cause cross-contamination.
- Clean and sanitize all utensils, cutting boards, countertops, or other surfaces in between batches of food.
- Wash all vegetables and fruits prior to processing and keep separate from unwashed vegetables and fruits.
- Keep meat, poultry, and egg products physically separated from fruit and vegetable products. In a refrigerator, store raw meats that might drip juices in a container that will not leak.
- Follow safe canning procedures.

Produce from Flooded Areas

Generally speaking, state and federal food safety regulations do not cover flooding situations. Regulations governing manure and pesticides also do not address flooding. However, produce that has come in contact with flood water is considered adulterated and cannot be sold for human or animal consumption. For more information go to www.uwex.edu/ces/ag/issues/ExtensionResponds-Flood.html for resources on flood issues regarding homes, agricultural production, and frequently asked questions.

Go to www.datcp.state.wi.us/flood2008/VegetableFloodGuidelines.pdf for DATCP's June 2008 fact sheet: "Produce from flooded areas: Considerations for growers, packing houses, and processors"

On-Farm Food Safety

Regardless of the size of your farm business or the products grown, all farmers selling food products for public consumption must be aware of food safety and the tips they can observe to minimize contamination.

Public concern about food safety has increased in recent years and farmers should be aware that proper steps need to be taken with their products to eliminate possible avenues of contamination. Safe produce begins with the production and handling practices on the farm. Products grown and sold with little biological contamination are less likely to result in health hazards caused by poor handling during later preparation stages. Farmers and their employees have the critical job of minimizing product contamination by learning about potential sources of contamination and by using Good Agricultural Practices (GAPs).

GAPs are a set of recommendations that can improve the quality and safety of the food products grown. These general guidelines can be incorporated into or adapted by any production system. GAPs focus on four primary components of production and processing: soils, water, hygiene, and surfaces.

Soils

Manure is a good form of fertilizer but contains pathogens which may be harmful if there has been insufficient time for bacteria to break down volatile components. You can minimize the risk of manure contamination by using the following steps:

- Allow a minimum of 120 days between manure application and fruit and vegetable harvest.
- Incorporate manure into soil or use a cover mulch after application to reduce risk of product contamination from rain or irrigation splash.
- Use aerobic composting of manure which destroys microbes.
- Apply manure in fall to allow competing bacteria to neutralize volatile components.



Photo courtesy Luna Circle Farm

Food safety starts on the farm and is a consideration from post-harvest handling through sale to the consumer. Proper handling techniques prevent contamination of food during packing, storing, and transport.

Water

Water used for irrigation, cooling, processing, or cleaning equipment and facilities should be free of microbial contaminants. Avoid using surface water for post-harvest handling procedures. Regularly test your water supply for bacteria contamination. Additionally, water sanitation products are available for produce washing water.

Hygiene

Proper hygiene and health, clean clothes and shoes, and safe practices can assure safe food. Provide clean and appropriately stocked restroom and hand washing facilities for field and processing employees to decrease the risk of product contamination.

Surfaces

Produce comes in contact with surfaces during harvest and processing. These include containers, transport bins, knives, and other utensils, sorting and packaging tables, and storage areas. Basic GAPs to help ensure clean surfaces include:

- Keep potential contaminants such as soil and manure out of the processing area or facility.
- Remove spoiled produce in the field.
- Clean and sanitize equipment and facilities daily.
- Control animal contamination.

Source: On-farm Food Safety: Guide to Good Agricultural Practices (GAPs), Iowa State University Extension PM 1947a. This publication has several references and resources for more information about general produce food safety, GAPs, and food safety plans with websites listed. www.extension.iastate.edu/Publications/PM1974A.pdf

Resources for On-Farm Food Safety

www.gaps.cornell.edu/educationalmaterials.html
 Cornell University
 Click On “Food Safety Begins on the Farm”
A Grower’s Guide to Good Agricultural Practices for Fresh Fruits and Vegetables.

www.gaps.cornell.edu/rks.html
 Cornell University
Farm and packinghouse recordkeeping worksheets that can be customized to fit a farm’s standard operating procedures.

www.gaps.cornell.edu/Eventscalendar/USDA_GAP_GHP_Audit_Matrix_PP.pdf
 Cornell University
Preparing for a USDA GAP/GHP Audit. Shows examples of different logs that can be used in preparing for an audit.

www.oregon.gov/ODA/ADMD/docs/pdf/gap_safety_program.pdf
 Oregon Department of Agriculture
Sample Food Safety Program that can be modified to fit a farm operation.

www.uwex.edu/ces/agmarkets/publications/documents/A3811-17.pdf
 UW Cooperative Extension
“Fruit and Vegetable Safety on the Farm”

www.oznet.ksu.edu/library/fntr2/foodasyst/foodasys.pdf
 Kansas State University
A food safety risk management guide for the producer. Includes an overall checklist for food safety risks during production and marketing of beef, poultry, and produce.

www.wisconsinartisan.com/food_safety_study_guides.html
 Wisconsin Dairy Artisan Network
Link to food safety study guides for state dairy licensing.

<http://datcp.state.wi.us/fs/business/food/publications/index.jsp>
 Wisconsin Department of Agriculture, Trade and Consumer Protection
Food code fact sheets.

<http://agriculture.sc.gov/UserFiles/file/GAPGHP%20Brochure.pdf>
 U.S. Department of Agriculture
GAP/GHP program brochure includes answers to frequently asked questions.

www.cfsan.fda.gov/~dms/prodguid.html
 U.S. Food and Drug Administration
 “Guidelines to Minimize Microbial Contamination for Fresh Fruits and Vegetables”



Photo courtesy Tara Kindschi

Eggs are a perishable product and must be handled properly to ensure food safety.

Processed Food Safety

Fruits, vegetables, and other food products can be processed on a small scale if safe and sanitary methods of processing and handling are followed. These processed foods include jams and jellies, pickled or acidified fruits and vegetables, herbal or flavored vinegars, and even baked goods.

Farm-based processing is generally not feasible for meats or low-acid canned foods such as beans, corn, and peas. Inadequate processing during the canning of low-acid foods may cause these foods to be unsafe. Small scale processing of these foods is generally impractical because the equipment needed to produce consistently safe food is highly technical and expensive.

Certain kinds of foods are “potentially hazardous.” This term applies to food that may become unsafe if not held at appropriate temperature of 41°F or below or 135°F or above, depending on the product. Potentially hazardous foods of animal origin include products such as milk, milk products, eggs, meat, poultry, and fish. Foods of plant origin that are potentially hazardous include plant foods that are heat-treated, raw sprouted seeds (such as alfalfa sprouts), cut melons, and garlic-in-oil mixtures. Potentially hazardous foods must be handled with appropriate temperature control to ensure food safety.

If you start a small-scale business processing foods such as pickled products, herbal vinegars, dressings, or any food sold in air-tight containers (canned food), state and federal regulations require you use an approved written process, or recipe. You must submit your scheduled process (recipe) to DATCP’s Division of Food Safety (DFS) prior to licensing. DFS does not approve processes, but will review and evaluate the process based on available scientific data resources. You must submit the process, or recipe, to a “competent process authority” for evaluation. A process authority would either provide you with a written statement that your process is safe, or may recommend you do further testing before the process can be approved.

If you intend to sell your product outside of Wisconsin, or use ingredients originating from outside Wisconsin, you must file your process

with the U.S. Food and Drug Administration (FDA). Since almost all processes use an ingredient from an out-of-state source, you will invariably have to file your process with the FDA if you thermally process low-acid or acidified food products. Operating under a Hazard Analysis and Critical Control Points (HACCP) plan requires filing your process with the FDA and is not necessary for acid foods. Retailing an acidified food requires an approved process, applying for a variance, and passing better processing school.

For more information on obtaining an approved written process prior to licensing, call the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

For HACCP guidelines through FDA, go to: www.cfsan.fda.gov/~brd/haccp.html

Liability Concerns

Most farms and farm businesses, and certainly farms with direct and intermediate marketing enterprises, have complex mixtures of potential personal and business liabilities. Insurers nationwide are gaining experience with alternative farm enterprises. Because farm insurance needs are complex, you should work directly with an insurance agent to identify your particular needs and to obtain the kinds of coverage necessary.

Farmers who market products need to regularly review their insurance needs with an insurance agent and attorney. Liability questions are more challenging than those raised by simple physical property coverage. Insurance companies offer a diverse range of coverage. Individual policies are available for physical loss of property, liability, and workers' compensation, as well as coverage for other specific needs. The alternative most local food marketers select is a package policy that combines all types of coverage in one policy.

Liability and Farm Insurances

Farmers are exposed to liability for their enterprises, whether conducted on the premises or away from them, such as while selling at a farmers' market. You are also exposed as a result of injuries to you or one of your employees. If your product causes harm to the buyer, you may be held liable. Liability insurance is



Photo courtesy Department of Tourism

Besides assessing rules and regulations for your business, you must determine the risk involved in your enterprise. Whether selling on-farm or through various markets, farmers need to regularly review insurance needs for their business.

essential to pay for sums you may become legally obligated to pay.

The main areas of insurance needed typically include liability for products sold, for visitors to the farm, for farm workers, as well as coverage for the value of crops grown and property and equipment owned.

Product Liability

Liability for the food that you sell is called "product liability." This is handled differently depending on where and how much product you sell. On-farm sales may be covered through your regular property insurance package, but don't assume that is the case. Ask your insurance agent if you are covered if someone gets sick from food that you sold. If you are selling to grocery stores or food services, they may require you to carry separate product liability coverage. Some farmers' markets require each vendor to carry their own liability coverage. If you are selling product through a distributor, you probably will be required to carry product liability coverage. Following safe food handling and food processing practices are necessary

COLLABORATIVE MARKETING

Working together to accomplish marketing goals is often referred to as collaborative marketing. This may include farmers and consumers or nonprofit groups working together to benefit the farmer and/or buyers. A present shift in public perception is that local farmers need the support of their communities to stay viable. By working together, groups can provide a market for small farmers who can then afford to stay on the land. It is a circular system in which all participants can benefit and customers gain access to farm products in abundance.

Examples of collaborative marketing groups include multi-stakeholder cooperatives, aggregation partnerships, produce auctions and more.

Wisconsin Produce Auctions

Produce auctions are a one-stop sales outlet for local growers where they can access many markets through selling cooperatively. Some auctions use an order buyer system which shifts the buying responsibility to a professional auction floor trader. USDA grading standards are used and uniform packaging and product size are required where possible. This website provides locations and contact information for produce auctions located in Dalton, Cashton and Fennimore. <http://ifmwi.org/auctions.aspx>

Creating a local food supply that meets the needs of the producers and the institutions has to involve all parts of the food chain.

Mary Anderson, Producers & Buyers Co-op

Collaborative Marketing

Benefits

- Can accomplish goals together that may not be achievable alone
- Allows producers to focus on growing
- Can pool products and gain access to large-volume markets

Challenges

- Group decisions may override individual ones
- Group meetings may be needed to determine direction
- Efforts may be disrupted by staff or budgeting changes

Resources for Collaborative Marketing Groups

Collaborative Marketing - A Roadmap and Resource Guide for Farmers

Minnesota Institute for Sustainable Agriculture
www.extension.umn.edu/distribution/businessmanagement/DF7539.html

Outlines steps needed to organize a farmer-owned marketing cooperative.

Collaborative Marketing Resource Guide

University of Minnesota Extension
www.extension.umn.edu/distribution/businessmanagement/components/7539_d_1.html

A resource guide for identifying agencies, organizations, and businesses that may be able to provide technical and financial assistance, as well as other services.

Cooperatives: Their role for farm producers

UW Cooperative Extension
www.uwex.edu/ces/agmarkets/publications/documents/A3811-3.pdf

A resource that explains the different types of cooperatives and how to start them.

UW Center for Cooperatives

University of Wisconsin
www.uwcc.wisc.edu

Provides information and outreach programs on cooperatives.

PROFILE

Wisconsin Grass-fed Beef Cooperative



Bob Van De Boom, President
www.WisconsinGrassFed.coop



The Wisconsin Meadows brand (shown above) stems from collaborative marketing made possible by the Wisconsin Grass-fed Beef Cooperative. Picture below is the Cooperative's President Bob Van De Boom with his wife, Beth, out on their farm.



The Wisconsin Grass-fed Beef Cooperative got its start at a grazing conference several years ago. Laura Paine, a Department of Agriculture, Trade and Consumer Protection employee, contacted farmers and ranchers who were interested in forming a grass-fed beef cooperative. After an initial meeting brought these individuals together, the WGBC was born.

“A steering committee of seven people pursued what needed to be done,” explains Cooperative President Bob Van De Boom. This committee decided on protocol for the cattle and the structure of the organization, and eventually became the Cooperative’s Board of Directors.

The Cooperative currently provides beef for 27 regular customers in a variety of markets, including health food stores, Braise Restaurant Supported Agriculture (see page 83) and Community Supported Agriculture. The Cooperative sets prices and provides a sales sheet to customers. Occasionally it offers special deals. “During fourth of July we had a burger special for our biggest customer,” Van De Boom explains.

Sales and marketing have been one of the larger successes of the Wisconsin Grass-fed Beef Cooperative. This stems from the members decision to sell its meat under its own brand, Wisconsin Meadows. The group also hired a sales and marketing manager to reach out to new customers and provide demonstrations on grass-fed beef at stores around the state.

“Right now our bottleneck is finding enough cattle year round so we can continue to grow,” says Van De Boom. In addition to marketing to customers, the Cooperative is currently searching for new members by setting up booths at pasture walks and conferences. Another issue has been communication between board members, Van De Boom explains. “Being across the state makes it hard to meet face-to-face.”

Now the Cooperative has 55 members and a full-time sales and marketing manager. Most of the day-to-day operational decisions are made by the sales and marketing manager, but the Board of Directors decides larger issues through email or during monthly conference calls. If needed, an issue is taken directly to the members at the annual meeting.

Laura Paine at WI DATCP continues to play a key role as adviser to the group. Leadership and diversity in the board members has given the Cooperative a strong foundation and benefit. This can be seen in the different roles members fill, as one of the members designed several Wisconsin Meadows logos and consulted a focus group for input. Another example is that members with backgrounds in sales and cattle production have contributed their unique knowledge and experience to build and improve the Cooperative.

Van De Boom advises producers looking to work cooperatively to find dedicated, communicative leaders.

PROFILE

Producers must learn how institutions are accustomed to ordering and receiving their food, which is very different from working with individuals or selling at a farmers market.

Mary Anderson
Producers & Buyers Co-op

Producers & Buyers Co-op

Mary C. Anderson
www.ProducersAndBuyers.com



How did the Co-op start?

In 2008, Sacred Heart Hospital in Eau Claire approached the River Country Resource Conservation and Development Council about creating an organization that would link local producers to institutional food services. The hospital had committed itself to spending 10 percent of its \$2 million food budget to local food and needed a way to meet that goal. A consortium of interested parties met and ultimately formed the Producers & Buyers Co-op.



Developing the Co-op was no easy feat, according to Mary C. Anderson, RCD Resource Specialist. Producers, processors, institutions and others “spent countless hours working out the details, developing open communication between the partners and finding creative solutions to the hurdles encountered along the way.”

What were some challenges?

One issue the Co-op still encounters is the lack of buyer education on the differences between industrial and local food. Consumers don’t always understand the differences in quality, sustainability, or cost of production that come with purchasing local food. There is also a lack of local meat and produce processors. “The Co-op often has to schedule meat processing weeks to months in advance,” Anderson adds.

The lack of local infrastructure has been an issue for the Co-op. “Institutions are used to ordering and having product the next day, so their in-house storage is limited,” says Anderson. “The product cost for storage has to be passed on to institutions, making local food less competitive.” The Co-op had to develop a transportation system for itself, as well as find ways to meet the packaging and labeling needs of the institution.

What resources have been helpful to you?

One key resource for the Co-op was the Wisconsin Department of Agriculture, Trade and Consumer Protection’s Buy Local, Buy Wisconsin grant. The Co-op also made use of other DATCP resources on business financing and planning.

“One of the seven guiding principles for cooperatives is ‘Cooperatives helping cooperatives,’” says Anderson. “The consortium received a lot of valuable assistance from others, including Just Local Food Cooperative in Eau Claire, the Southeast Minnesota Food Network, the Viroqua Food Cooperative, the Cooperative Foundation, and Margaret Bau, USDA-Rural Development’s Cooperative Development Specialist.”

What tips do you have for producers who would like to sell to institutions?

“Creating a local food supply that meets the needs of the producers and the institutions has to involve all parts of the food chain,” says Anderson. “Producers must learn how institutions are accustomed to ordering and receiving their food, which is very different from working with individuals or selling at a farmers market.”

To succeed at selling to institutions, all stakeholders must demonstrate commitment and leadership. Anderson explains, “Commitment to the vision and dedication to the implementation are keys to success.”

Recommended citation format for this publication:

Barham, James, Debra Tropp, Kathleen Enterline, Jeff Farbman, John Fisk, and Stacia Kiraly. *Regional Food Hub Resource Guide*. U.S. Dept. of Agriculture, Agricultural Marketing Service. Washington, DC. April 2012. <<http://dx.doi.org/10.9752/MS046.04-2012>>

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Regional Food Hub Resource Guide

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Acknowledgements

This guide was made possible by contributions from many dedicated people. The authors would like to especially thank our partners in the National Food Hub Collaboration for their leadership and guidance:

Marty Gerencer, Morse Marketing Consultants and National Good Food Network
Benjamin Vitale and Mike Janis, National Association of Produce Market Managers
Steve Davies and Kelly Verel, Project for Public Spaces
Errol Bragg, Carlos Coleman, Adam Diamond, Nina Fallenbaum, Andrew Jermolowicz, Lucas Knowles, Mark Lipson, Stephanie Ritchie, Colleen Rossier, and Wendy Wasserman, USDA's Know Your Farmer, Know Your Food Regional Food Hub Subcommittee

The authors also wish to acknowledge several colleagues for providing guidance and direction for the National Food Hub Collaboration, and for their research contributions:

Joe Colyn, Originz, LLC
Carolyn Dimitri, New York University
Warren King, WellSpring Management
Salima Jones-Daley, Yale University
Lucy Myles, Tufts University
Steve Warshawer, Beneficial Farm CSA

The authors were fortunate to have some of our peers review this manuscript in its various forms, providing many insightful and challenging comments that ultimately made this a stronger work. Many thanks to:

Erica Block, Local Orbit
Kate Clancy, Food Systems Consultant
Bob Corshen, Community Alliance with Family Farmers
Gail Feenstra, University of California, Davis
Chris Harmon, Center For Agricultural Development and Entrepreneurship
Alan Hunt, Local Food Strategies
Rebecca Jablonski, Cornell University
Jim Matson, Matson Consulting
Will Meadows, Lawrence University
Nessa Richman, Brightseed Strategies
Vanessa Zajfen, San Diego Unified School District

Finally, the authors would like to express their deepest appreciation for the regional food hubs that are profiled in this guide. Thank you for making sure we got the information right, for providing images to help enliven this guide and, most importantly, for your dedication and passion for helping farmers and your communities, and for playing such a vital role in creating more robust regional food systems.

Gary Peterson, Agriculture and Land-Based Training Association
Kathlyn Terry, Appalachian Sustainable Development
Steve Warshawer, Beneficial Farm CSA
Benjamin Vitale, Central New York Regional Market
Tatiana Garcia-Granados, Common Market
Christa Sorenson, Co-op Partners Warehouse
Katie Peterman, CROPP Cooperative
Ginny Crothers and Sandi Kronick, Eastern Carolina Organics
Dan Carmody, Eastern Market Corporation
Sheri Griffin, Farm Fresh Rhode Island
Jeffrey Randol and Nancy Smith, Farm to Family Naturally, LLC
Matt Ewer, Green B.E.A.N Delivery
Sona Desai, Intervale Center, Intervale Food Hub
Kate Collier and Emily Manley, Local Food Hub
Bob Waldrop, Oklahoma Food Cooperative
Susan Futrell, Red Tomato
Laura Avery, Santa Monica Farmers Markets
Jim Crawford and Jeff Taylor, Tuscarora Organic Growers Cooperative
Kevin Lyons, Walsma and Lyons

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Introduction

The impetus for this guide and the work it reflects originated with the establishment of USDA's "Know Your Farmer, Know Your Food" (KYF2) Initiative. Launched in 2009, the mission of KYF2 is to strengthen the critical connection between farmers and consumers and support local and regional food systems. As such, it is closely aligned with the broader mission of USDA to support agriculture, rural development, and healthy nutrition. While there is no office, staff, or budget dedicated to KYF2, Deputy Secretary Kathleen Merrigan chairs a task force of USDA employees representing every agency within the Department in order to break down bureaucratic silos, develop commonsense solutions for communities and farmers, and foster new partnerships inside USDA and across the country.

The KYF2 task force recognized early that one of the recurring challenges faced by producers is the lack of distribution infrastructure and services that, if made available, would allow them to take greater advantage of the growing demand for locally and regionally grown food in larger volume markets (such as grocery stores, restaurants, schools, hospitals, and universities). As one response to this challenge, KYF2 established a regional food hub subcommittee to examine the role of regional food hubs in improving market access for producers along with their potential for expanding the availability of healthy, fresh food in communities, including underserved communities.

In order to engage a diverse group of informed and motivated stakeholders in this endeavor, USDA partnered with the Wallace Center¹ at Winrock International to establish the National Food Hub Collaboration in October 2010. Along with USDA and the Wallace Center, founding members of the Collaboration include the National Good Food Network,² the National Association of Produce Market

Managers,³ and the New York City-based nonprofit Project for Public Spaces.⁴ Since its establishment, the National Food Hub Collaboration has worked to identify and profile regional food hubs across the country and collect and analyze data on the scope and scale of food hub operations in order to more clearly understand their potential role and impact in the U.S. food system as well as the ongoing challenges and impediments they face.

Research to date has included developing a database of regional food hub operations (see Appendix 1); conducting a focus group with key leaders in the wholesale market industry; carrying out an online national survey of food hubs and public markets; conducting follow-up phone interviews with a subsample of surveyed food hubs; and most recently, conducting an online survey of wholesale markets to determine the availability of infrastructure and services that could be used by regional food hubs (see Appendix 4 for more background on research methods and results).

This document is a direct outgrowth of the Collaboration's work and accomplishments over the past year. By compiling relevant and practical information, the Collaboration hopes to share lessons learned, promote the continued success of active food hubs, and spur the development of new food hub operations.

The Role of Regional Food Hubs

Having surveyed and interviewed many of the currently operating regional food hubs in the United States, the Collaboration has formed a much clearer picture of the role of food hubs in our evolving food system:

- **Regional food hubs are increasing market access for local and regional producers:** Many farmers and ranchers—especially smaller operations—are challenged by the lack of distribution and processing infrastructure of appropriate scale that would give them wider access to retail, institutional, and commercial foodservice markets, where demand for local and regional foods continues to rise. Food hubs offer a combination of production, distribution, and marketing services that allows them to gain entry into new and additional markets that would be difficult or impossible to access on their own.
- **Regional food hubs complement and add considerable value to the current food distribution system:** For institutional and retail buyers that would like to "buy local," food hubs can reduce transaction costs by providing a single point of purchase for consistent and reliable supplies of source-identified products from local and regional producers. Furthermore, by fulfilling small farm aggregation functions, regional food hubs can add significant value to the more traditional distribution channels by partnering with regional food distributors—along with their national food distribution clients and partners—enabling them to offer a broader and more diverse selection of local or regional products than they would be able to source otherwise.
- **Regional food hubs are having significant economic, social, and environmental impacts within their communities:** Even though many food hubs are relatively new, they demonstrate innovative business models that can be financially viable and also make a difference in their respective communities. Economically, they are showing

1 wallacecenter.org

2 www.ngfn.org

3 www.napmm.org

4 www.pps.org

impressive sales performance and helping to retain and create new jobs in the food and agricultural sectors. Socially, food hubs are providing significant production-related, marketing, and enterprise development support to new and existing producers in an effort to build the next generation of farmers and ranchers. In addition, many food hubs make a concerted effort to expand their market reach into underserved areas where there is lack of healthy, fresh food. Environmentally, food hubs are helping to build producers' capacity to develop more reliable supplies of sustainably grown local and regional products and are reducing energy use and waste in the distribution process.

- **The success of regional food hubs is fueled by entrepreneurial thinking and sound business practices coupled with a desire for social impact:** Food hub operators are skilled business people who have identified a challenge—how to satisfy retail and institutional market demand to source from small and midsize producers—and have deftly come up with regionally appropriate solutions that not only result in positive economic outcomes but also provide valuable services to producers and their wider community. Food hub operators represent a new kind of food entrepreneur, one that is increasingly demonstrating a financially sound business model that can be both market *and* mission driven.

USDA and its partners in the National Food Hub Collaboration readily recognize that regional food hubs on their own will not be able to solve the myriad of distribution challenges—not to mention production and processing challenges—that hinder producers' abilities to take full advantage of the growing consumer demand for locally grown food. This will require greater

engagement with the existing food distribution and wholesale industry (such as grower-shippers, specialty and broadline distributors, wholesalers, brokers, produce wholesale markets, and terminal markets) to determine how food hubs can complement and add value to the already critical role that these operations are providing in moving food to markets.

The good news is that this engagement is already occurring, as regional food hubs partner with produce distributors to offer such services as producer training and coordination, source verification, aggregation, and marketing that enable distributors and their customers greater access to the local and regional products. Furthermore, because food hubs are largely defined by a set of business practices and not by any one legal structure, several produce distributors and wholesale markets are adjusting their operations to meet their customers' demand for source-identified local and regional products—essentially turning their businesses into regional food hubs. It is within the context of these shifts in the formation of strategic partnerships and the transformation of business practices that the greatest potential for systems to change in local and regional food economies can and will occur.

Purpose and Content of the Guide

The target audiences for this guide are food entrepreneurs and their supporters who are interested in starting food hubs and operators of food hubs who are interested in expanding. This guide will also help philanthropic foundations, public agencies, lending institutions, and economic development organizations understand the nature, function, and operating models of food hubs, helping them to engage hubs in their areas. Both newly established and more seasoned regional food hubs have

expressed certain needs as they start or grow their business. This guide addresses some of those needs by answering a number of frequently asked questions, including:

- What is a regional food hub?
- What kind of impacts are regional food hubs having in their communities?
- What are some of the barriers impeding regional food hub growth and how might they be addressed?
- What financial resources are available to support regional food hub development?

In order to answer these and other relevant questions, this guide is organized into four main sections:

Clarifying the Regional Food Hub Concept

With the growing interest in regional food hubs from a wide array of food systems funders, planners, businesses, researchers, and service providers, there is a need to clarify exactly what a regional food hub is and what it is not. The first section of this guide provides the answers to some of the most frequently asked questions about the food hub concept and its role in regional food systems development.

Regional Food Hub Impacts

An increasingly important set of questions that have been posed to the Collaboration is what kind of economic, social, and environmental impacts are regional food hubs having in their communities. Although there is still much work to be done in this area, this section illustrates the myriad of ways that food hubs are exerting positive impacts on local community development and quality of life.

Economic Viability of Regional Food Hubs, Barriers to Growth, and Strategies To Address Them

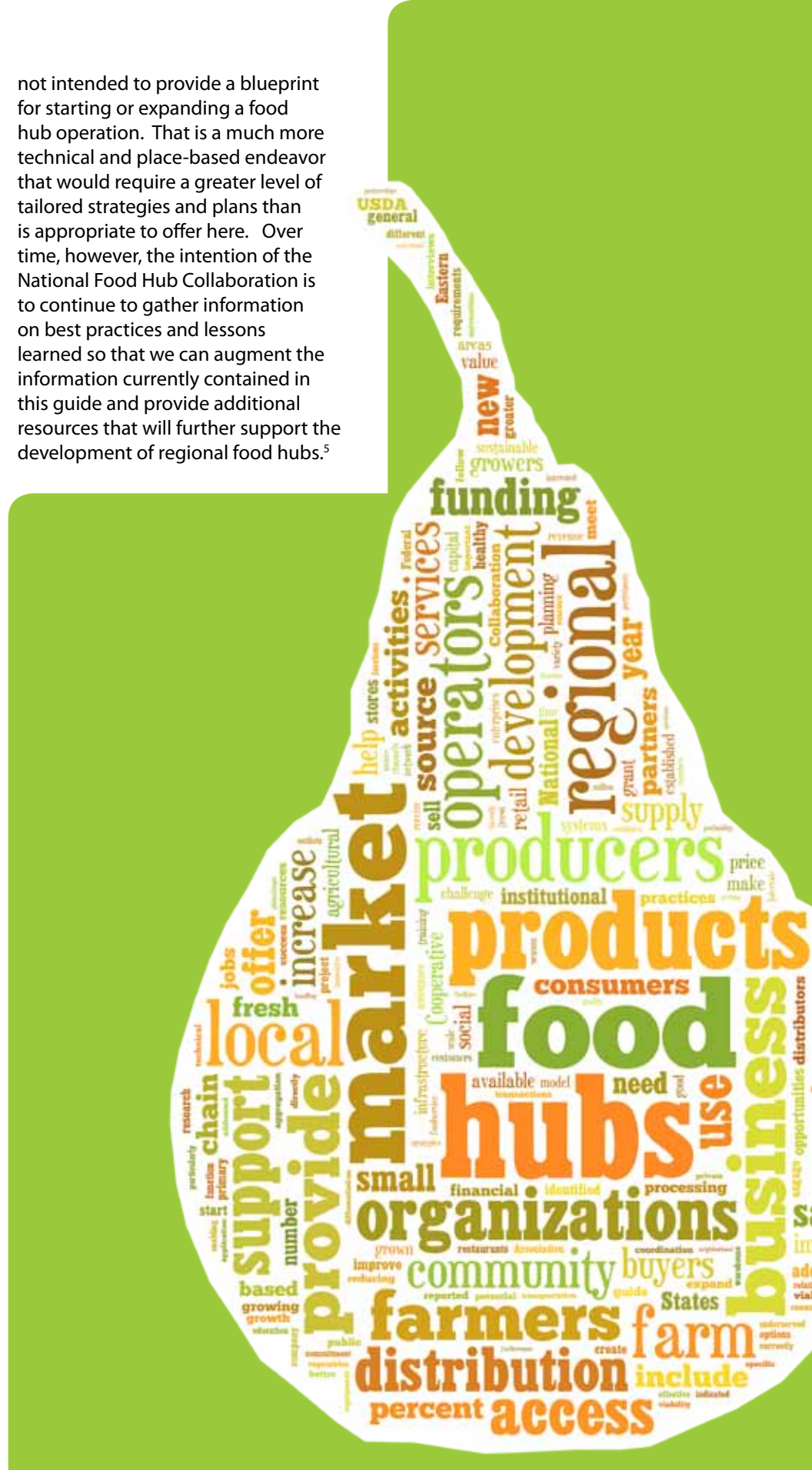
Based on follow-up interviews with surveyed food hubs and additional discussions with other food hub operators, this section begins by exploring whether or not food hubs can be financially viable businesses while remaining true to their economic, social, and environmental missions. This section continues by highlighting some of the more persistent barriers to business growth faced by food hub operators, and offers a number of strategies for addressing them.

Resources Available To Support Regional Food Hub Development

As regional food hubs continue to gain momentum and expand their operations, one of their primary needs is accessing financial capital and support for business development. A variety of funding options is available from both Federal and non-Federal sources to finance different stages of food hub development, from business planning and technical assistance to working capital and physical infrastructure improvements. This section—and most of this guide—is dedicated to helping food hub operators and supporters better understand and navigate through the variety of financial and human resources available to them.

Taken as a whole, this resource guide is designed to give readers a greater understanding of what regional food hubs are, their impacts, strategies to assist their success and growth, and direction on where to find financial resources to support them. It should be noted that this guide is

not intended to provide a blueprint for starting or expanding a food hub operation. That is a much more technical and place-based endeavor that would require a greater level of tailored strategies and plans than is appropriate to offer here. Over time, however, the intention of the National Food Hub Collaboration is to continue to gather information on best practices and lessons learned so that we can augment the information currently contained in this guide and provide additional resources that will further support the development of regional food hubs.⁵



⁵ Both USDA and the Wallace Center have Web sites dedicated to research on and resources for regional food hubs. Visit the USDA Web site at www.ams.usda.gov/foodhubs and the Wallace Center's Web site at www.foodhub.info.

Clarifying the Regional Food Hub Concept

The regional food hub concept has sparked interest from a wide array of food systems funders, planners, businesses, researchers, and service providers. Along with this interest has come some confusion on what a regional food hub is and what it is not. The first section of this guide provides the answers to some of the most frequently asked questions about the food hub concept and its role in regional food systems development.

What Is a Regional Food Hub?

With the growing interest in regional food hubs, several definitions are emerging, from those that narrowly define food hubs in terms of market efficiency functions to more expansive definitions that incorporate food hubs into wider visions of building a more sustainable food system. For example, the concept of “healthy food hubs”—community spaces anchored by a food store where other social and financial services are co-located—has gained currency in some

public health and urban planning circles. The concept is attractive for its consumer-centric focus and goal of increasing healthy food access, but the regional food hub concept has a quite different focus and function.

Having engaged and learned from a great number of food hub stakeholders, the National Food Hub Collaboration has refined its working definition to more adequately reflect the full range of food hub enterprises operating in the United States. The Collaboration proposes the following definition:

A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.

Regional food hubs are key mechanisms for creating large, consistent, reliable supplies of mostly locally or regionally produced foods. At the core of food hubs is a business management team

that actively coordinates supply chain logistics. Food hubs work on the supply side with producers in areas such as sustainable production practices, production planning, season extension, packaging, branding, certification, and food safety—all of which is done to enable these producers to access wholesale customers, such as buyers for foodservice institutions and retail stores. Simultaneously, food hubs also work on the demand side by coordinating efforts with other distributors, processors, wholesale buyers, and even consumers to ensure they can meet the growing market demand for source-identified, sustainably produced, locally or regionally grown products.

A good example of a regional food hub is Eastern Carolina Organics (ECO), a privately held limited liability company (LLC) based in Pittsboro, NC, that was started by a group of farmers in 2004 through a local nonprofit called the Carolina Farm Stewardship Association (CFSA). ECO markets and distributes local organic produce from 40 farmers to more than 150 customers, including grocery stores, food cooperatives, buying clubs, restaurants, school foodservice providers,

Defining Characteristics of a Regional Food Hub

Regional food hubs are defined less by a particular business or legal structure, and more by how their functions and outcomes affect producers and the wider communities they serve. Defining characteristics of a regional food hub include:

- **Carries out or coordinates the aggregation, distribution, and marketing of primarily locally/regionally produced foods from multiple producers to multiple markets.**
- **Considers producers as valued business partners** instead of interchangeable suppliers and is committed to buying from small to mid-sized local producers whenever possible.
- **Works closely with producers**, particularly small-scale operations, to ensure they can meet buyer requirements by either providing technical assistance or findings partners that can provide this technical assistance.
- **Uses product differentiation strategies to ensure that producers get a good price for their products.** Examples of product differentiation strategies include identity preservation (knowing who produced it and where it comes from), group branding, specialty product attributes (such as heirloom or unusual varieties), and sustainable production practices (such as certified organic, minimum pesticides, or “naturally” grown or raised).
- **Aims to be financially viable while also having positive economic, social, and environmental impacts within their communities**, as demonstrated by carrying out certain production, community, or environmental services and activities.



Farmers and staff of Eastern Carolina Organics.

How Do Regional Food Hubs Help Farmers and Ranchers?

Many farmers and ranchers are challenged by the lack of distribution and processing infrastructure of appropriate scale that would give them wider access to retail, institutional, and commercial foodservice markets, where demand for local and regional foods continues to rise.⁶ There are three primary reasons why this lack of infrastructure stifles the development of regionally based food systems:

Limited Market Options and Revenue Opportunities

Although many smaller farmer and rancher operations have taken advantage of direct-to-consumer marketing outlets (such as farmers markets, farm stands, and community supported agriculture) to sell their products, they often lack the volume and consistent supply necessary to attract retail and foodservice customers. This problem is particularly acute for operators of mid-sized farms, who are too large to rely on direct marketing channels as their sole market outlet but too small to compete effectively in traditional wholesale supply chains.

and colleges and universities. By pooling diverse harvests from farmers in several regions of North Carolina, they are able to meet the demand for a steady stream of high-quality local, organic, seasonal food choices throughout the year.

Along with coordinating supply chain logistics, many food hubs have made investments in food distribution infrastructure. They often own or lease a warehouse that functions as a drop-off point for producers and a pickup point for distribution firms and other customers. Food hub activities at a warehouse may include dry and cold storage, grading, packing, labeling, and light processing (trimming, cutting, and freezing), all of which are done to ensure that food hubs can meet their wholesale customers' purchasing standards. Many food hubs own or lease trucks that are used for on-farm pickup or for delivery to retail stores or institutional foodservice establishments.

There are, however, some food hubs that have not invested in distribution infrastructure but have opted to develop strategic partnerships with other supply chain actors who can provide warehousing, processing, and

transportation services. A good example of this is Red Tomato, a nonprofit marketing and distribution organization based in Canton, MA. Founded in 1996, Red Tomato arranges the aggregation, transportation, and sale of a wide variety of produce supplied by 35–40 farmers to grocery stores and distributors in the Northeast. It never physically handles the product sold under its name but instead relies on farmers and contract trucking firms to provide aggregation and transportation services.



Boxes of heirloom tomatoes with the Red Tomato brand.

⁶ See Market Demand for Local Food on page 10 of this document for more information on the current market demand for local and regional foods.

Limited Distribution and Marketing Capacity

Producers often don't have the available capital or access to facilities to store, process, and distribute their products. Furthermore, due to limited staff or lack of experience, they are not always able to devote the attention necessary to develop successful business relationships with key wholesale buyers or have the resources to develop an effective marketing strategy by themselves.

High Transaction Costs

Wholesale buyers often find it too costly to purchase products directly from numerous farms and prefer to reduce transaction costs by buying product from distributors.

Consequently, regional food hubs have emerged as an effective way to overcome these infrastructural and market barriers. For those smaller and mid-sized producers who wish to scale up their operations or diversify their market channels, food hubs offer a combination of production, distribution, and marketing services that allows them to gain entry into new and additional markets that would be difficult or impossible to access on their own. For larger producers, food hubs can provide the product-differentiation strategies and marketing services to ensure the best possible price in the market place. Moreover, for wholesalers, distributors, retailers, and foodservice buyers who would like to purchase larger volumes of locally and regionally grown products, food hubs lower the procurement costs by providing a single point of purchase for consistent and reliable supplies of source-identified products from local and regional producers.

How Do Regional Food Hubs Differ From Other Local Food Distributors?

While many regional food hubs are local food distributors, they are much more than this. Food hubs are examples of innovative, value chain-based business models that strive to achieve

triple bottom line (economic, social, and environmental) impacts within their communities. They do this by offering a suite of services to producers, buyers, and the wider community.

First and foremost, regional food hubs actively seek to provide new market outlets for small and mid-sized local and regional producers. As such, food hubs often provide, or find partners to provide, technical assistance to producers in such areas as production planning, season extension, sustainable production practices, food safety, and post-harvest handling—all of which increases the capacity of these producers to meet wholesale buyer requirements (such as quality, volume, consistency, packaging, liability, and food safety). Food hubs also work with producers to add value to their products through a number of product differentiation strategies, which include identity preservation (knowing who produced it and where it comes from), group branding, traceability, provenance, product attributes (e.g., heirloom, unusual varieties), and sustainable production practices (such as certified organic, minimum pesticides, and “naturally” grown or raised). Depending on their physical infrastructure capacity, some food hubs also offer others services, such as bulk purchasing of inputs, light processing, and product storage.

Because most food hubs are firmly rooted in their community, they often carry out a number of community services. These include donating to food banks, increasing consumer awareness of the benefits of buying local food, organizing educational farm tours, offering farm apprenticeships, increasing healthy food access by establishing delivery mechanisms into underserved areas, and—for food hubs with a retail component—carrying out activities such as SNAP redemption, nutrition and cooking education, and health screenings.

All of this is not to say that a local produce distributor cannot be a regional food hub. Many local produce distributors operate as food hubs, and they all share the following attributes:

Types of Services/Activities Offered by Regional Food Hubs

Operational Services

- Distribution
- Aggregation
- Brokering
- Branding and market promotion
- Packaging and repacking
- Light processing (trimming, cutting, and freezing)
- Product storage

Producer Services

- Actively linking producers and buyers
- Transportation, on-farm pick up
- Production and post-harvest handling training
- Business management services and guidance
- Value-added product development
- Food safety and good agricultural practices (GAP) training
- Liability insurance

Community/ Environmental Services

- Increasing community awareness of “buy local” benefits
- Distributing to nearby food deserts⁷
- Food bank donations
- Youth and community employment opportunities
- SNAP⁸ redemption
- Health screenings, cooking demonstrations
- Transportation for consumers
- Recycling and composting programs

⁷ For food desert definition, refer to www.ers.usda.gov/data/fooddesert/documentation.html

⁸ Supplemental Nutrition Assistance Program, also known as “food stamps”

- At the core of their business model is the commitment to buy from small to mid-sized local growers whenever possible.
- They work closely with their producers to build their capacity to meet wholesale buyer requirements.
- They ensure a good price for their growers' products by using product differentiation strategies to command a premium in the marketplace.
- They ultimately they see their producers as valued partners rather than interchangeable suppliers.

A good example is Walsma and Lyons, a privately held fresh produce distribution company that has operated near Grand Rapids, MI, since 1949. The company has long-established relationships with more than 15 small and mid-size growers. Walsma and Lyons connects growers with food safety information and ensures they meet buyers' GAP requirements, repacks to make orders smaller and more manageable for foodservice customers, provides liability insurance, and preserves the regional identity of products so growers can earn a higher premium.

How Are Different Types of Regional Food Hubs Classified?

Regional food hubs are generally classified by either their structure or their function. One way to classify food hubs by structure is by their legal business structure, which includes: nonprofit organizations (which often develop out of community-based initiatives), privately held food hubs (a limited liability corporation or other corporate structure), cooperatives (owned either by producers and/or consumers), and publicly held food hubs (often the case where a city-owned public market or farmers market is carrying out food hub activities).

The legal structure of a food hub often influences its operation and function, particularly in such areas as capital investment, risk management, and liability exposure. For example, nonprofit food hubs have greater access to grant programs and donations than privately held food hubs because nonprofits are eligible for more Federal and State assistance programs than private entities. On the other hand, nonprofit food hubs have greater difficulty accessing loans, revolving lines of credit, and



At the Oklahoma Food Cooperative's warehouse on delivery day — local products are dropped off by farmers and then sorted and delivered to a number of sites for consumers to pick up.

other forms of private investment than for-profit business entities. As another example, producer cooperatives have the advantage of tapping member equity and taking advantage of business services offered by cooperative extension programs, but find fewer grants and loan programs available to them than nonprofit organizations.

Food hubs can be functionally categorized by the primary market they serve. These markets can be delineated as:

- Farm-to-business/institution model
- Farm-to-consumer model
- Hybrid model

Under the farm-to-business or -institution model, food hubs sell to wholesale market buyers, such as food cooperatives, grocery stores, institutional foodservice companies, and restaurants. Under this model, food hubs provide new wholesale market outlets for local growers that would be difficult or impossible for them to access individually.



Staging area at Walsma and Lyons' warehouse.

While this is one of the primary purposes of a food hub, some food hubs focus on the farm-to-consumer model. In this case, the food hub is responsible for marketing, aggregating, packaging, and distributing products directly to consumers. This includes multi-farm community supported agriculture (CSA) enterprises such as Beneficial Farms, online buying clubs such as Oklahoma Food Cooperative, food delivery companies such as Green B.E.A.N. Delivery, and mobile markets such as Gorge Grown Mobile Farmers' Market.

Under the hybrid model, the food hub sells to wholesale market buyers and also directly to consumers. A good example of the hybrid food hub model is the Intervale Food Hub, a 22-member farmer collaborative managed by the Intervale Center in Burlington, VT. The Intervale Food Hub sells its farmers' products directly to consumers through a CSA with more than 300 members, and it sells wholesale to 12 restaurants and caterers, two schools, and a local hospital.

Are Farmers Markets or Public Markets Regional Food Hubs?

Farmers markets and public markets are excellent places for household consumers to buy locally and regionally grown products directly from producers, but one of the main purposes of a regional food hub is to provide producers with access to larger volume markets as an alternative to direct-to-consumer marketing options. Regional food hubs do this by actively coordinating supply chain activities, seeking new markets for producers, and building strategic partnerships with processors and other distributors so that the producer members of the food hub can meet the quality and quantity requirements demanded by commercial and institutional buyers. By contrast, in most cases, managers of farmers markets or public markets are not involved in such activities and therefore would not be considered

regional food hubs. Nevertheless, some farmers markets and public markets have begun to take on these aggregation and strategic marketing roles and, as such, could be classified as a food hub.



A wholesale buyer picking up an order at the Santa Monica Farmers Market.

A good example of this is the Santa Monica Farmers Markets, a group of four publicly operated farmers markets that opened in Santa Monica, CA, between 1981 and 1995. In addition to the 185 producers selling directly to consumers, the market provides fresh produce to the local Santa Monica Malibu Unified school district for a year-round "farmers market salad bar." Fresh produce is ordered in advance from farmer vendors, and produce is packed and ready to be picked up by the schools before the markets open.

The same circumstance is true of other retail outlets that sell locally grown food, such as food cooperatives or grocery stores. Most of these retail outlets do not work directly with local and regional producers to help them secure multiple wholesale market channels for their products. They may procure food products from several local producers to sell in their own stores, but they are only classified as regional food hubs if they also offer a variety of services (such as aggregation, distribution, processing, brokering, market development, or branding) that enable producers to access new wholesale markets beyond their own stores. Consequently, most food retail outlets are not regional food hubs; instead, they are crucial markets that purchase local and regional

Types of Regional Food Hubs

Food Hub Legal Status	Number	Percentage
Privately held	67	40%
Nonprofit	54	32%
Cooperative	36	21%
Publicly held	8	5%
Informal	3	2%

Market Model	Number	Percentage
Farm to business/institution (F2B)	70	42%
Farm to consumer (F2C)	60	36%
Hybrid (both F2B and F2C)	38	22%

* Based on a working list of 168 regional food hubs identified by the National Food Hub Collaboration (last updated Dec. 1, 2011).

products from food hubs. That said, there are some exceptions to the rule: a handful of food retail outlets have developed subsidiaries that offer a variety of production, distribution, and marketing services for local and regional producers that extend beyond the immediate needs of their stores.

Two good examples of this are La Montanita Food Cooperative in New Mexico and the Wedge's Co-op Partners in St. Paul, MN. La Montanita established the Regional Foodshed Initiative in 2007 to expand purchasing and distribution of sustainably grown regional products from small and mid-size producers for the co-op's four stores, and to assist regional producers in accessing other wholesale market channels for their products. The Co-op Partners Warehouse, started in 1999 by the Wedge Food Cooperative, uses its own fleet of trucks as well as contract trucking companies to sell primarily organic produce supplied by a network of 30 or so farmers in Minnesota and Wisconsin to other consumer cooperatives, health food stores, buying clubs, and restaurants in the Upper Midwest.

Are Traditional Wholesale Markets and Terminal Markets Regional Food Hubs?

If the managers of a wholesale or terminal market function mostly as property managers, and are primarily in the business of leasing space to wholesalers and other tenants, they would not be considered a regional food hub. However, as is the case with some farmers markets, several wholesale and hybrid wholesale-farmers markets function as food hubs because the market's management has taken an active role in engaging in a number of food-hub-related activities.

A good example of this is the Central New York Regional Market in Syracuse, NY, which operates both a wholesale market and a farmers market. Along with the market's participation in electronic benefits transfer (EBT), SNAP (USDA's



Products being unloaded at La Montanita's Cooperative Distribution Center.

Supplemental Nutrition Assistance Program, once called food stamps) and other supplemental nutrition programs, the market operates the "Farm Fresh" Mobile Market, which acts as an effective delivery mechanism to increase access of healthy foods in underserved communities.

Even if these traditional wholesale and terminal markets are not classified as food hubs, they can still play a vital role in supporting the development of robust regional food systems. Many wholesale market sites already have distribution infrastructure in

place (such as warehouse space, variable temperature storage units, and processing equipment) that is suitable for food hub activities. Existing wholesale and terminal market facilities with excess capacity, along with other large-scale food warehouses (such as those managed by food banks), are often among the most cost-effective locations available to food hub operators and planners, who can take advantage of the existing infrastructure and renovate it as needed to fit their business needs (see Appendix 3 for locations of wholesale and terminal market facilities in the United States).



The Central New York Regional Market during their Saturday farmers market.

Market Demand for Local Food

“A much higher proportion of people eat locally grown foods than organic foods. When they think local, they think fresh and want to support local growers/packers.”

- National Grocers Association's 2011 Consumer Survey Report

According to a recent study by USDA's Economic Research Service, local food sales through all marketing channels in the United States were estimated to be \$4.8 billion in 2008 and are projected to climb to \$7 billion in 2011.⁹

A critical factor often overlooked in the assessment of local and regional food systems is the fact that most demand for local and regional food occurs outside of direct-to-consumer marketing channels (such as farmers markets, CSAs, and farm stands). The majority of local and regional food sales in the United States occur in the retail and foodservice sector, among establishments appealing to consumers at all levels of income.

Restaurants, retail grocery establishments, and schools continue to embrace the local and regional food trend in an attempt to appeal to the taste buds and interests of their patrons, who increasingly make food purchases at establishments that feature local and regional food options:

- In a 2011 consumer survey, 86 percent of respondents called the presence of local foods “very important” or “somewhat important” to their choice of food store, up from 79 percent in 2009.¹⁰
- In a 2011 survey of nearly 1,800 chefs, locally grown foods was picked as the top restaurant trend for 2012, which is the fourth year in a row as the top trend.¹¹
- In January 2011, Bon Appetit Management Company, which runs more than 400 corporate and university cafes in 30 different States, reached its goal of contracting with 1,000 small farmers, fishers, and food artisans through its Farm to Fork program.¹²
- The number of farm to school programs, which use local farms as food suppliers for school meal programs, totaled more than 2,000 in 2011, a five-fold increase since 2004.¹³

9 Low, Sarah A., and Stephen Vogel. Direct and Intermediated Marketing of Local Foods in the United States, ERR-128, USDA, Economic Research Service, November 2011. www.ers.usda.gov/Publications/ERR128

10 National Grocers Association's 2011 Consumer Report. www.supermarketguru.com/public/pdf/Consumer-Panel-Survey-2011.pdf

11 National Restaurant Association's Chef Survey: What's Hot in 2012.

www.restaurant.org/pressroom/social-media-releases/images/whatshot2012/What's_Hot_2012.pdf

12 Bon Appetit's Farm to Fork Program. www.bamco.com/sustainable-food-service/farm-to-fork-folks

13 National Farm to School Network. Farm to School Programs in the US (Estimated). www.farmtoschool.org/index.php

Do Regional Food Hubs Sell Only Local and Regional Food Products?

Many regional food hubs buy outside their region during the off-season, especially if their primary product is fresh produce. For business reasons, they need to operate on a year-round basis unless their infrastructure and other assets can be used for other purposes to generate revenue in the off-season. Furthermore, wholesale buyers need products throughout the year; food hubs that offer similar quality non-local products during the off-season are better positioned to keep the buyers engaged and committed to their business relationship. Nevertheless, with continued improvements in season extension and food preservation techniques; diversification of product lines to year-round products such as meat, dairy, and value-added products; and the overall increase of local supply, it may become increasingly financially viable over time for food hubs to deal exclusively in local and regional food products.

What Is the Role of Food Hubs in Regional Food System Development?

In many parts of the country, wide gaps exist in local distribution and processing infrastructure, making it difficult for small and mid-sized growers to gain access to markets where there is unmet demand for source-identified, sustainably produced products from local and regional producers. Regional food hubs are increasingly filling a market niche that the current food distribution system is not adequately addressing—the aggregation and distribution of food products from small

and mid-sized producers into local and regional wholesale market channels (retail, restaurant, and institutional markets). Additionally, because food hubs provide a number of additional services that build the capacity of local producers and also engage buyers and consumers to rethink their purchasing options and habits, food hubs are emerging as critical pillars for building viable local and regional food systems.

Although regional food hubs are filling a market niche of small farm distribution, this does not mean they do not engage with conventional supply chains. In fact, many food hubs complement and add value to these more traditional distribution channels by enabling regional food distributors—and their national food distribution clients and partners—to offer a broader and more diverse selection of local or regional products than they would otherwise be able to source. In addition, they often add significant value to conventional supply chains by providing a reliable supply of source-identified (and often branded) local products that conform to buyer specifications and volume requirements and still enable their clients to “tell the story” behind the product. For

this reason, regional distributors—and even broadline, full-service national distribution companies like Sysco—are beginning to view food hubs as critical partners instead of competitors to ensure they can meet the market demand for locally and regionally grown food.¹⁴

A good example of this mutually beneficial collaboration is the business relationship between the Local Food Hub in Charlottesville, VA, and Keany Produce Company—a regional produce distributor based in Landover, MD, that services restaurants, hotels, and corporate and Federal cafeterias—including USDA’s cafeteria—in the greater Washington, DC, area. While the Local Food Hub’s primary business is as a local distributor of fresh produce, moving products from 50 local farmers to more than 100 businesses and institutions in Central Virginia, it is also serves as an aggregation hub for a number of broadline and specialty food distributors, like Keany Produce. By working with the Local Food Hub, Keany sources a greater volume of high quality, locally grown products from small and mid-sized family farms than it could otherwise and better meets the growing demands of its customer base.



The Local Food Hub is both a local food distributor and an aggregation hub for other distributors and wholesalers.

¹⁴ For a case study of Sysco’s partnership with food hubs in Michigan, see Sysco’s Journey from Supply Chain to Value Chain at the National Good Food Network’s Web site: ngfn.org/resources/research-1/innovative-models/

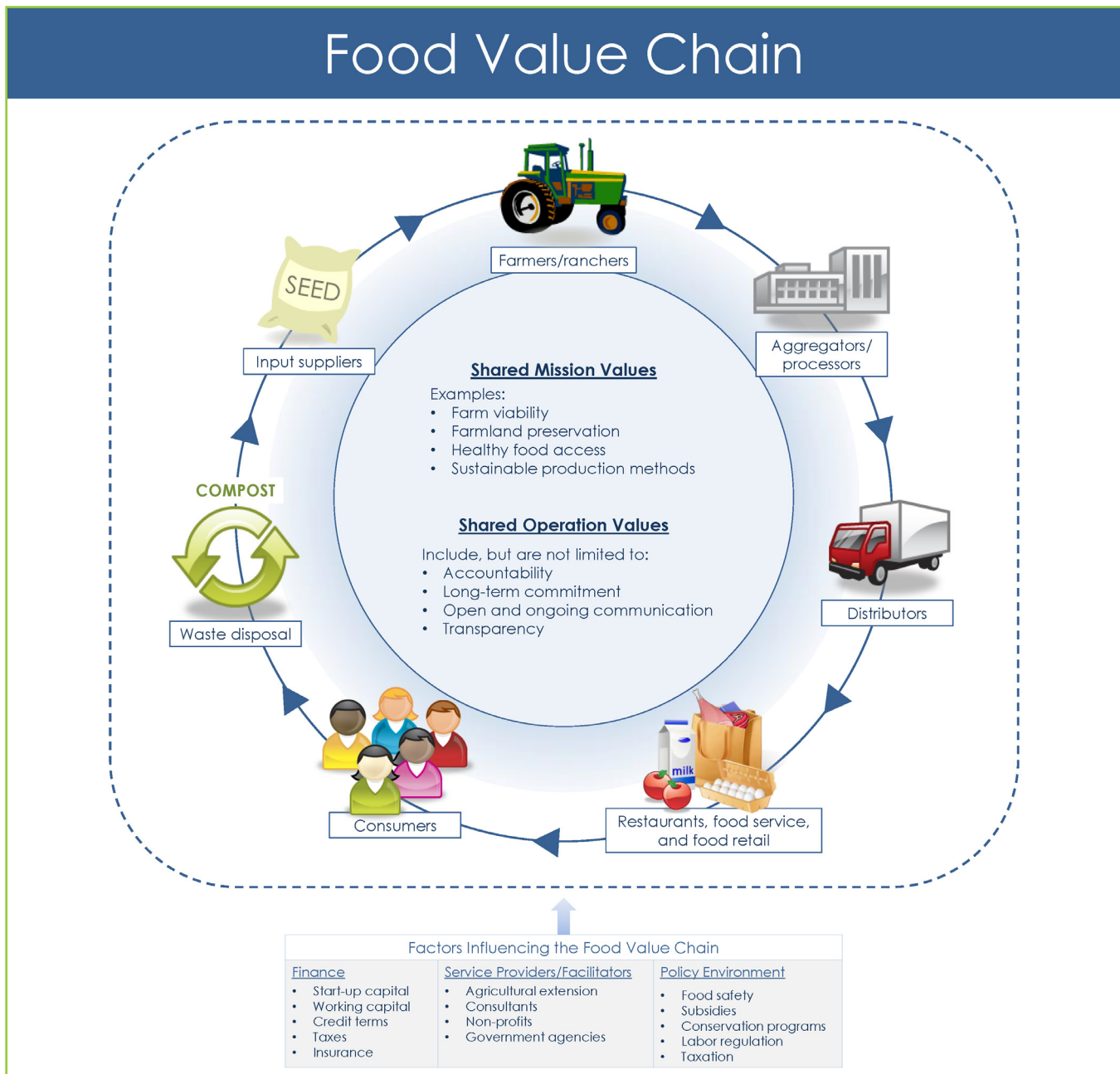
What Is the Relationship Between Regional Food Hubs and Food Value Chains?

Food value chains are collaborative business networks comprising food producers, processors, distributors, marketers, and buyers who jointly plan and coordinate their activities to achieve common financial goals while advancing an agreed-upon set of social or environmental values, such

as farmland preservation, sustainable agriculture, small farm viability, or healthy food access. They attempt to enhance efficiency and profitability among all segments of the chain by improving information flows and transparency along the chain, embedding jointly held values in their business plans, and using product differentiation strategies to increase the economic value of the products sold.

Food hubs are often at the heart of value chains. By working closely with producers and other supply chain actors (distributors, processors, and

buyers), food hubs can provide the distribution infrastructure and logistical support needed to develop value-added products and find the local and regional markets where there is demand for such products. Just as critically, food hubs also play an essential role in building effective information flows and transparency among the value chain partners, enabling every partner in the supply network to fully understand the operating costs of production, processing, transportation, and marketing, all of which helps to ensure that value chain partners can negotiate acceptable returns.



What Role Does Technology Play in the Development of Regional Food Hubs?

It is not coincidental that the emergence of the regional food hub concept is occurring at a time when technology is increasingly accessible and portable, making it easier and quicker than ever for anyone to implement cost-effective communication, data sharing, and inventory management tools that are tailored to meet specific local needs. Regional food hubs are taking advantage of these technological tools, enabling them and their partners to share information almost instantaneously, have a virtually real-time picture of their business operations, and carry out transactions at the click of a button.

The technological tools most commonly used to connect buyers, sellers, and other value chain actors in the same locality or region can be divided into two categories. The first set of tools might be best thought of as “relationship creators,” which give producers the ability to market themselves and their available products to prospective buyers. While virtual marketplaces such as these allow local and regional buyers and sellers to introduce themselves to each other and initiate conversations that may lead to business transactions, the actual transactions themselves do not take place on the electronic platform. The transaction and the

delivery logistics are carried out and managed by the buyer and seller directly. These tools are for buyers who prefer to deal directly with producers without using the services of food hubs. Examples of such “relationship creator” tools include Market Maker¹⁵ and Ecotrust’s Food Hub.¹⁶

Other tools are designed to be used by food hubs as an integral way to manage their business. For example, Local Dirt¹⁷ is a versatile tool that enables food hubs to communicate to buyers the volume and types of products available from its producers in real time, along with the capability to carry out online transactions and coordinate delivery logistics. Alternatively, Local Orbit¹⁸ advertises itself as a comprehensive food hub “back office in a box.” It is designed to give food hubs the software tools and capabilities they need to run their business, including a customized sales portal, marketing support, and services such as payment processing. Another source of services for food hubs are open source software systems, such as Local Food Cooperative Software,¹⁹ the one used by the Oklahoma Food Co-op. Free to use, this software was designed for the Oklahoma Food Co-op, an early online food co-op. This software makes some assumptions about the way that the food hub logistics work (for example, it assumes a maximum order order-delivery cycle of once a week). Nonetheless, it could be a valid and cost-effective option for some food hub operations.²⁰



15 national.marketmaker.uiuc.edu

16 food-hub.org

17 localdirt.com

18 localorb.it

19 www.localfoodcoop.org

20 The National Good Food Network webinar, The Farmer and the Dell: Technology for Good Food, provides an overview of the role of technology in food systems development. ngfn.org/resources/ngfn-cluster-calls/ngfn-cluster-calls#september-15-2011

Regional Food Hub Impacts

Although the primary focus of the National Food Hub Collaboration research to date has been to understand the characteristics, successes, and challenges of food hub operations, the Collaboration has started to document some of the economic, social, and environmental impacts that food hubs are having in their communities. The evidence of the impacts of food hubs highlighted in this section comes from several sources, including the National Food Hub Collaboration's online survey of regional food hubs (hereinafter called "2011 NFHC survey"), follow-up phone interviews with food hub operators, and from other primary and secondary sources such as annual reports, news articles, and presentations.²¹ The section begins by showcasing the variety of ways that food hubs are impacting their local economies and then continues by highlighting how food hubs create social and environmental benefits in their communities.

1 in 8 unemployed residents, as well as increase annual regional output by \$4.2 billion and increase State and local tax collections by \$126 million.²² More specifically, a food hub feasibility study recently conducted in southern Wisconsin estimates that a food hub operation running at full capacity could create 400 jobs and inject an additional \$60 million into the local economy. Furthermore, it would be able to serve as many as 50 family farm businesses in the southern Wisconsin region with the potential to increase their overall farm revenue by \$900,000 to \$1.8 million.²³

Although many food hubs are at the beginning stages of their business development, they have already proven to be considerable revenue generators in their local and regional economies. Based on the 2011 NFHC survey, food hubs gross nearly \$1 million in annual sales on average, with many showing double- and even triple-digit

annual sales growth. For example, the Oklahoma Food Cooperative, which started in 2003 with 36 consumers and \$3,500 in sales in its first month of operation, now generates about \$70,000 in monthly sales of products from approximately 200 producers.²⁴ In addition, from 2007 to 2008, it saw a 52 percent increase in gross revenues; in some months it saw annual increases in sales revenue of as much as 80 percent.²⁵ The Local Food Hub (LFH) in Charlottesville, VA, opened in July 2009 and ended that year with \$75,000 in sales. In 2010, LFH grossed \$365,000 and is on track to nearly double this in 2011 with \$675,000 in annual gross sales.²⁶ Vermont's Intervale Food Hub has grown from \$93,000 in gross revenue in 2008 to an expected \$400,000 by the end of 2011. Intervale is currently implementing plans to expand its warehouse facility to accommodate this market, with the expectation of surpassing \$1 million in sales by 2015.²⁷

Economic Impacts

Food hubs provide opportunities for more local food procurement at a larger scale, which can create jobs, generate business taxes, and increase earnings throughout the region as production increases locally. Various studies have examined the local economic impacts of shifting food purchases to local food. A study conducted in Northeast Ohio found that if the 16-county Northeast Ohio Region were to meet 25 percent of its need for food with local production, it would result in 27,664 new jobs, providing jobs for



The Intervale Food Hub has witnessed remarkable sales growth due to high demand for locally grown food.

21 See Appendix 4 for more information on research conducted by the National Food Hub Collaboration.

22 Masi, B., L. Shaller, and M. Shuman (December 2010). *The 25% Shift: The Benefits of Food Localization for Northeast Ohio and How to Realize Them*. www.neofoodweb.org/sites/default/files/resources/the25shift-foodlocalizationintheNEOregion.pdf

23 Dane County Planning and Development Department (September 2011). *Southern Wisconsin Food Hub Feasibility Study*. pdf.countyofdane.com/Purchasing/RFI_111101_Packing_House_Study.pdf

24 blogs.usda.gov/2010/12/16/oklahoma-food-co-op-from-buying-club-to-food-hub

25 *Community Food Enterprise: Local Success in a Global Marketplace*. (2009) The Wallace Center at Winrock International and Business Alliance for Local Living Economies. www.communityfoodenterprise.org/download-the-book

26 Barham, James (2012). *Regional Food Hubs: One Solution for Overcoming Barriers for Local Producers*. Presentation at the Agricultural Outlook Forum. February 24, Washington, D.C. www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5097265

27 Correspondence with Sona Desai, Food Hub Manager, Intervale Center, August 24, 2011

As food hubs become more successful at scaling up the production and delivery of local food, economic gains have been realized in some communities where the food hubs operate. More money is generated within the local economy, within the food hub business itself, with the producers who sell through the food hub, and with the businesses who buy their products. The following questions answer some of the more pertinent issues related to how food hubs contribute to job creation, producers' income, and the longer term viability of farms and other agriculture-related businesses.

What Impacts Are Regional Food Hubs Having on Job Creation?

Regional food hubs create jobs directly, for the operation of the hub, and also indirectly, as a supportive environment for job opportunities for the region—including agricultural jobs and other jobs along the supply chain. Here are some ways in which food hubs foster jobs within the food hub and the agriculture sector:

Job Creation Within the Regional Food Hub

According to the 2011 NFHC survey, food hubs themselves create an average of seven full-time jobs and five part-time jobs. Although the majority of food hubs have been in operation for less than 5 years, food hubs have an immediate impact on job creation. For example, the Local Food Hub, which began operations in 2009, has already created 15 paid jobs at its distribution and farm operations.

As food hubs grow and reach more producers and buyers, job opportunities within the food hub will continue to increase. For example, Farm to Family Naturally, will be expanding its operation and opening the St. Louis Farm Fresh Food Hub. The expansion will increase its reach into school systems, corner stores, human service networks, and institutional foodservice operations, all in areas with low access to fruits and vegetables. With this expansion, Farm to Family Naturally will increase its number of employees from 50 to 100–125 full-time employees.²⁸

CROPP Cooperative is a clear demonstration of the impact regional food hubs can have on job creation. CROPP currently has more than 530 full-time employees. It buys from and promotes its 1,650 producers nationwide. Despite its national presence, its business model has a strong emphasis on linking regional supply to regional markets. For example, CROPP works with producer pools from specific geographic regions to produce and distribute Organic Valley Brand© milk regionally as much as possible and identifies the region in which the milk was produced on each milk carton.²⁹

Retaining and Creating Other Agricultural Jobs and Businesses

Food hubs can also help retain local agricultural jobs through their efforts to make farming more profitable. For example, a study of the economic impact of Green B.E.A.N. Delivery—a food delivery service company with operations in Indiana, Ohio, and Kentucky—estimates that since its start in 2007, the company has invested more than \$2 million in local food economies and created more than 100 jobs throughout the Midwest.³⁰ Similarly, the Local Food Hub has reinvested



Green B.E.A.N. Delivery food bin getting packed for delivery.

more than \$850,000 in the local farming community by purchasing from local producers. Its purchasing, distribution, sales and accounting services have increased sales by area family farms helping to support these local business owners and their 200 plus employees. Furthermore, the 120 active buyers of product from Local Food Hub report increasing their local food purchases by an average of 30 percent as a result of working with Local Food Hub.³¹

Food hubs can also exert a positive influence on the creation and success of new businesses that sell local and regional products. For example, Eastern Carolina Organics (ECO) notes that many food enterprises, such as CSAs and buying clubs, formed in the past few years rely heavily on Eastern Carolina Organics distribution services.³² Likewise, the Intervale Food Hub recently partnered with One Revolution,³³ a delivery enterprise that delivers half of Intervale's 300-plus CSA shares by bicycle. One Revolution has relied on Intervale, who is its largest customer, to build its business and garner additional support from the community.³⁴

28 Interview with Nancy Smith, Farm to Family Naturally, LLC Principal, and Carol Coren, Cornerstone Ventures January 18, 2011. Follow-up with Jeffrey Randol, advisor, August 23, 2011

29 Correspondence with Katie Peterman, Cooperative Affairs, Organic Valley Family of Farms, September 13

30 www.insideindianabusiness.com/newsitem.asp?ID=49316

31 Barham, James (2012). *Regional Food Hubs: One Solution for Overcoming Barriers for Local Producers*. Presentation at the Agricultural Outlook Forum. February 24, Washington, D.C. www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5097265

32 Interview with Sandi Kronick, CEO, Eastern Carolina Organics, January 26, 2011

33 www.onevt.com

34 Correspondence with Sona Desai, Food Hub Manager, Intervale Center, August 24, 2011



A greenhouse managed by ALBA farmers.

In some instances, food hubs are actively creating job opportunities for producers by helping them establish their farming business. For example, the Agriculture and Land-Based Training Association³⁵ (ALBA), located in Salinas, CA, provided land and equipment to 39 small farm businesses in 2009 and 2010 through its Small Farm Incubator Program and its ALBA Organics distribution business, resulting in \$2.5 million in combined gross sales and creating more than 100 full-time and part-time jobs through these farms.³⁶

How Are Regional Food Hubs Affecting Producers' Bottom Lines?

Based on the 2011 NFHC survey, food hubs work with a median of 40 suppliers and, even within their relatively short time span, have been able to improve producer profitability by enhancing their access to commercial markets,

providing more reliable sources of locally and regionally produced foods for commercial clients, and developing a steadier and more diversified source of farm-based revenue for local producers.

Increasing Market Access and Reliability

One notable aspect of food hubs is that many of them work with their producers and buyers in advance of the season to coordinate production planning and pricing with anticipated demand. This helps farmers to plan what they should grow for the coming season with greater confidence that their product will find a ready market outlet at an acceptable price point, which ultimately provides them with more economic security.

Local Food Hub, Tuscarora Organic Growers Cooperative, and Intervale Food Hub are just a few examples of food hubs that have adopted this model of collaborative planning. By working with buyers to make projections on product demand and target pricing ranges, Local Food Hub is able to pre-order specific crops from producers in November and December for the following growing season. This gives producers an opportunity to make bulk



A Tuscarora Organic Growers Cooperative's truck on its way to make a delivery.

³⁵ www.albafarmers.org

³⁶ ALBA Biennial Report (2009-2010). albafarmers.org/2011-06/alba-Biennial-Report-2009-2010.pdf

seed purchases, schedule planting, and estimate their projected sales for the season. These weekly volume demand figures and pricing data help producers develop a strong business plan.

Similarly, Tuscarora Organic Growers Cooperative (TOG) coordinates crop planning with all its growers to meet weekly market demand based on a historical database for each produce item sold. As TOG's general manager stated, "Our growers make a good faith commitment to provide a weekly quantity of each produce item, and the co-op commits to a good faith effort to sell them."³⁷ Along with production planning, the Intervale Food Hub provides the producers who sell through their modified CSA program 25 percent of gross CSA sales at the beginning of the season, providing revenue at a time when cash flow is limited.³⁸

Offering Producers an Opportunity To Capture Higher Value for Their Products

Many food hubs try to—and generally do—pay higher prices to producers than they would receive in non-differentiated wholesale markets. A recent USDA Economic Research Service report that studied five local food supply chains found that producers in the local food supply chain received a greater share of the retail price than they did from a mainstream food supply chain, with producer net revenue per unit in local chains ranging from roughly equal to more than seven times the price received in mainstream chains.³⁹ Here are some of the ways that food hubs are helping producers get better prices for their products:

Tuscarora Organic Growers (TOG) uses a cooperative business model; it directs 75 percent of its revenue to participating growers and 25 percent to food hub operations. It also surveys



Heirloom tomatoes being packed at the Local Food Hub's warehouse.

its producers every year to make sure they are satisfied with the prices that TOG pays and it evaluates market pricing twice a week to determine a competitive and fair price for its producers.

Jim Crawford, owner of New Morning Farm in Pennsylvania and Board President and current and founding member of TOG, described the benefits of a food hub to producers best by saying:

Our co-op is our food hub. We built it, we're very proud of it, and it certainly enhances the profitability of our farms. We—the grower members—own the business, set its policies, and share in the profits. By planning our crops together, by pooling our produce, and by sharing the use of the co-op's staff and services, we can get economies of scale and far better access to the market. It's our co-op that gives us the competitive edge in the "dog-eat-dog" wholesale produce world.⁴⁰

Intervale Food Hub works collaboratively with its producers to determine prices for their products based on actual production costs for the producers and what the market can realistically bear. As a result, Intervale producers generally net about 60 to 70 percent of the income obtained from CSA sales and 85 percent of the income from wholesale distribution through the hub.⁴¹

In a similar vein, the Local Food Hub ensures that 80 percent of the price paid by buyers goes back to the farmer.⁴² They survey their producers annually to make sure they are satisfied with the prices they receive. Through the 2010 survey, where producers were asked to rate the prices from poor to excellent, Local Food Hub found that 100 percent of its producers rated the prices they received from fair to excellent.⁴³

Increased Producer Profitability and Viability

By offering producers larger sales volumes, more stable sources of income, and higher returns, food hubs provide opportunities for producers to expand and diversify production, which often translates into increased profitability

37 Interview with Jeff Taylor, General Manager, Tuscarora Organic Growers Cooperative, January 19, 2011

38 Schmidt, M.C., J.M. Kolodonisky, T.P. DeSito, F.C. Conte. (August 25, 2011) "Increasing farm income and local food access: A case study of a collaborative aggregation, marketing, and distribution strategy that links farmers to markets," *Journal of Agriculture, Food Systems and Community Development*

39 King, R.P., M.S. Hand, G.D. DiGiacomo, K. Clancy, M.J. Gómez, S.D. Hardesty, L. Lev, E.W. McLaughlin (June 2010) *Comparing the Structure, Size, and Performance of Local and Mainstream Food Supply Chains*. U.S. Department of Agriculture, Economic Research Service. www.ers.usda.gov/Publications/ERR99/ERR99.pdf

40 Correspondence with Jim Crawford, Owner of New Morning Farm, September 22, 2011

41 Schmidt, et al. (2011)

42 Barham, James (2012). *Regional Food Hubs: One Solution for Overcoming Barriers for Local Producers*. Presentation at the Agricultural Outlook Forum. February 24, Washington, D.C. www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5097265

43 Ibid

and the longer term viability of farm operations. For example, Eastern Carolina Organics (ECO) notes many of its member producers indicated that they had intended to retire or move into conventional cotton production before working with ECO. Since the establishment of ECO, one of the farmers who used to produce hundreds of acres of conventional cotton has begun to diversify into organic vegetable production, beginning with 5 acres in year 1 and increasing to 30 acres by the 3rd year.⁴⁴

Intervale Food Hub producers reported average gross sales of \$85,085 in 2007 prior to selling to the food hub. After producers began using Intervale Food Hub, their average gross sales increased to \$132,237 by the end of 2009.⁴⁵

Local Food Hub's producers have reported that they increased their farm sales by an average of 25 percent since working with the food hub, and 60 percent reported that they plan to increase production. One of Local Food Hub's producers, Whitney Critzer of Critzer Family Farm, who is now able to sell to local hospitals and universities, said that Local Food Hub provided a "good opportunity to open up a market that was not available to us otherwise, and as a result, we have expanded production of our crops considerably and hired more folks due to increased demand."⁴⁶

Social and Environmental Impacts

Along with having considerable impact on their local economies, food hubs provide a number of services and activities that drive social and environmental improvements within the communities in which they reside. These include training and professional development for those interested in pursuing or expanding agricultural careers, increasing the

availability of fresh healthy food sold in retail and institutional markets, and promoting the adoption or use of sustainable or environmentally sound agricultural production practices.

How Do Regional Food Hubs Support Rural Workforce Development?

An important amenity provided by many food hubs is free access to formal and informal training and mentoring opportunities designed to help producers at all scale levels, from beginning, transitioning, and limited-resource farmers, to mid-scale commercial farm enterprises looking

to increase their retail and foodservice revenue streams. By virtue of the active and dedicated coordination usually provided by food hub management teams, they can provide local growers and ranchers with directly relevant technical training and assistance that they might well have difficulty discovering on their own. In the 2011 NFHC survey, more than 50 percent of the food hubs reported providing production and post-harvest handling training or agriculture and crop planning training to producers. Almost 40 percent indicated that they provide both. Here are just a few specific examples:

Appalachian Sustainable Development, in Abington, VA, offers its Appalachian Harvest producers training, mentoring, consultations, and farm visits on a variety of subjects, enabling them to



ALBA supports new farmers through their Farmer Education and Small Farm Incubator Programs.

44 Interview with Sandi Kronick, CEO, Eastern Carolina Organics, January 26, 2011

45 Schmidt, M.C., A. Matthews, D. Farrell, G. Mattessich, J. Kolodinsky. Evaluation of the Intervale Food Basket: Perspectives from Participating Farmers. (December 2009). [mysare.sare.org/mySARE/assocfiles/9022865.%20Food%20Hub%20Farmer%20Evaluation%20\(2010\).pdf](http://mysare.sare.org/mySARE/assocfiles/9022865.%20Food%20Hub%20Farmer%20Evaluation%20(2010).pdf)

46 flavormagazinevirginia.com/localfoodhub

expand and improve their production and handling methods, increase sales, and strengthen their ties to local supply networks. In the past 3 years, Appalachian Harvest staff have conducted 326 farm visits and organized 75 training workshops and producer meetings.⁴⁷ They have also created a peer network for growers to provide mutual support and assistance to one another and matched more experienced growers with newer growers to provide one-on-one mentoring sessions. This gives new farmers, or those new to organic production methods, opportunities to receive customized practical training in an unfamiliar field.

Agricultural Land Based Training Association (ALBA), in Salinas, CA, supports new farmers through its Farmer Education Program and Small Farm Incubator Program, which provides graduates of the Farmer Education Program with land leases and access to equipment so that they can launch their own farm businesses. It also offers food safety training, a growing need for producers who seek access to commercial market channels. In 2010, it provided 40 small farmers with a "turn-key" food safety plan with standard operating procedures appropriate to the scale of their operation.⁴⁸ ALBA has also helped 25 farmers conduct self-assessments of their farm operations for US GAP and GLOBALG.A.P certification requirements. ALBA has also had a strong track record of success helping small-scale minority farmers, particularly Latino farmers, in the Salinas valley make the transition from agricultural worker to farm entrepreneur and pursue agriculture as an economically viable career. In 2009 and 2010, ALBA graduated 44 growers from its farmer education program and helped establish 25 new farm businesses, providing farmers with access to information, operating capital, and opportunities to access land.⁴⁹



Produce being sorted and packed for delivery at Appalachian Harvest's warehouse in Duffield, VA.

Intervale Center's Farm Program, in Burlington, VT, leases land, equipment, greenhouses, irrigation, and storage facilities to small independent farmers. Each year, between one and three new farm businesses join the program as incubators, receiving subsidized rental rates, business planning support, and mentoring from established growers. Through their "Success on Farms" program, Intervale offers a 2-year business planning program to 10 to 15 farmers throughout Vermont every year, working one-on-one with farmers to provide specialized support and training in business planning and management designed to help growers better understand their real costs of production, manage their cash flow, set prices, and gauge their expected revenues. The Intervale Center has also partnered with New Farms for New Americans to help refugees create their own successful farm- and food-based businesses by developing training curricula and working with farmers one-on-one to help them improve their business and marketing skills.

How Do Regional Food Hubs Increase Healthy Food Access?

Many regional food hubs are seeking ways to increase access to healthy and affordable local foods in their communities, especially in low-income "food desert" neighborhoods, where food shopping choices and access to high-quality fresh fruits and vegetables are limited. By providing services such as insurance, quality control, distribution, and processing and establishing relationships among buyers, food hubs help eliminate the barriers along the supply chain that make it difficult for producers to meet the requirements of wholesale buyers that operate in food desert neighborhoods, such as schools, hospitals, and neighborhood stores. Of the 72 food hub managers surveyed by the National Food Collaboration in 2011, 47 percent reported that they were actively distributing products to nearby food deserts, thereby increasing access to fresh locally grown foods in areas that

47 Appalachian Sustainable Development Final Narrative Report to W.K. Kellogg Foundation Food and Society Grant Program, June 2011

48 ALBA. Healthy Urban Food Enterprise Development Center Quarterly Report submitted to the Wallace Center, April 27, 2011

49 ALBA Biennial Report (2009-2010). albfarmers.org/2011-06/alba-Biennial-Report-2009-2010.pdf



Eastern Market makes Michigan-grown fresh products more readily available through its Double Up Food Bucks Voucher Program.

otherwise might not receive them. In addition, even in cases where food hubs might not be actively supplying fresh local food to underserved communities, they often partner with organizations that are working to increase food access.

Where food hubs sell directly to consumers, many food hubs accept SNAP (USDA's Supplemental Nutrition Assistance Program) benefits (formally known as food stamps), making their products even more accessible to consumers. The 2011 NFHC survey shows that approximately 25 percent of food hubs indicated that they accept SNAP or FMNP (Farmers Market Nutrition Program) benefits.

Many food hubs also have initiatives that support food assistance programs, such as those operated by food banks and hunger relief organizations, by supplying these organizations with

“seconds.” Seconds are wholesome fruits and vegetables that do not conform to standard retail or foodservice cosmetic or size requirements, and therefore are hard to sell in most fresh market channels. Food hubs (and growers in general) benefit from such transactions by receiving a better price from food banks and hunger organizations than they would from selling these products to a processor, and food banks and hunger organizations benefit by receiving more and fresher food than they would normally receive through standard donations, which they can then offer to their clients. Here are some examples of how food hubs are increasing access to healthy foods in various ways:

Detroit's Eastern Market is currently partnering with the Detroit Public Schools to help them meet their goal of converting 30 percent of their \$16 million annual food purchases from

highly processed foods to Michigan-grown and minimally processed foods by overcoming supply chain barriers.⁵⁰ Eastern Market also works with partner organizations to bring food from its wholesale market into underserved communities. For example, through a partnership with Gleaners Community Food Bank and the Greening of Detroit, Eastern Market helps offer the Fresh Food Share Food Box Program which purchases food at wholesale prices to provide food boxes at affordable prices to residents in the Near East side of Detroit. In addition, Eastern Market works with community groups to build a sustainable network of neighborhood markets and to operate farm stands at places that cannot support a farmers market. Through partnerships with 14 community groups, healthcare organizations, and neighborhood markets, the Farm Stands Program seeks to increase resident and participant engagement around healthy eating choices to enhance the culture of wellness in the City of Detroit and throughout Southeast Michigan.⁵¹ As a major gathering place for consumer-direct retail purchases as well as wholesale transactions, Eastern Market also processes up to \$30,000 in SNAP transactions each month and participates in the Double Up Food Bucks Voucher Program⁵² which matches up to \$20 of consumers' SNAP benefits when they purchase Michigan-grown fruits and vegetables at Eastern Market, increasing their purchasing power.⁵³

Local Food Hub sells products to area hospitals to increase healthy options in cafeterias and on patient trays, including fresh tomatoes, salad mix, summer squash, strawberries, and apples.⁵⁴ It also provides more than 45 public and private schools with access to fruits, vegetables, and educational materials for snack programs, home economics classes, and special events. In addition, it partners with the local Boys and Girls Club to

50 Food Hubs: Viable Regional Distribution Solutions. Presented at the Sustainable Agriculture and Food Systems Funders Forum, June 22, 2011, www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091774

51 Detroit Eastern Market Web site. www.detroiteasternmarket.com/page.php?p=1ands=24

52 www.doubleupfoodbucks.org

53 Food Hubs: Viable Regional Distribution Solutions. Presented at the Sustainable Agriculture and Food Systems Funders Forum, June 22, 2011, www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5091774

54 Ibid

organize “pop-up” local food markets in low-income neighborhoods and with Parks and Recreation to provide a summer food program. Local Food Hub has donated more than 100,000 pounds of produce to area food banks, soup kitchens, and homeless shelters, and 25 percent of the organic produce from its own 6 cultivated acres at the educational farm is donated to area food banks.⁵⁵

Agricultural Land Based Training Association (ALBA) just recently started a new Fruit and Veggie Prescription program in partnership with the Health Clinic of the Salinas Valley, where residents receive prescriptions from doctors along with vouchers to purchase fruits and vegetables from ALBA Organics. ALBA is also testing selected products with a company that owns 50 WIC-only stores⁵⁶ in an effort to increase WIC participants’ access to fresh produce options.⁵⁷

Farm Fresh Rhode Island offers a Healthy Food, Healthy Families Program which provides Nutrition Education at Farmers Markets and \$25 in Fresh Bucks that can be used at the farmers market. In a survey of program participants, Farm Fresh Rhode Island found that 40 percent of respondents (66 participants) reported increasing their fruit and vegetable intake by at least 1 serving.⁵⁸

Appalachian Sustainable Development runs a Healthy Families-Family Farms initiative that raises money through fundraising programs to purchase seconds from Appalachian Harvest farmers at a discounted price. These seconds are then donated to Feeding America, which distributes the produce to area food pantries. Since its inception in 2004, the initiative has donated nearly 500,000 pounds of fresh produce to local food pantries.



Appalachian Sustainable Development staff dropping off produce at a local food bank.

How Do Regional Food Hubs Support the Use of Environmentally Sustainable Production Practices?

Many food hubs source product from growers and ranchers who employ some form of sustainable agricultural practices, such as integrated pest management or organic production methods and, in some cases, restrict producer members to growers and ranchers who conform to a set of practices. They also work closely with producers to provide training and technical assistance directly or, by partnering with other service providers, to encourage the use of sustainable production practices.

Red Tomato supports sustainable production practices with its Eco Apple™ program. Through this program, Red Tomato certifies producers who follow Red Tomato’s protocol and includes them in its marketing program under the Eco Apple™ brand. To establish this brand identity, Red Tomato worked with the Integrated Pest Management (IPM) Institute of North America, as well as scientists and growers, to set standards based on the latest IPM techniques. It developed an “Advanced IPM” protocol that relies on a minimally toxic method of pest control.⁵⁹ In addition to this strict protocol, Red Tomato helps facilitate a network of learning among its member producers, keeping them up to date on the latest research and practices through monthly calls with Red Tomato’s science advisors and the IPM Institute and an annual meeting with producers featuring

55 Correspondence with Kate Collier, Founder and Co-Director, Local Food Hub, September 13, 2011 and the Local Food Hub Web site: localfoodhub.org/about/mission

56 WIC-only stores sell only food items listed on the WIC program (USDA’s Special Supplemental Nutrition Program for Women, Infants, and Children), and cater to WIC participants

57 ALBA, Healthy Urban Food Enterprise Development Center Quarterly Report, submitted to the Wallace Center, April 27, 2011

58 Farm Fresh Rhode Island’s Healthy Food, Healthy Families Program 2010 Survey Results

59 Red Tomato Web site, Eco Apple Program redtomato.org/ecoapple.php and fruitgrowersnews.com/index.php/magazine/article/7599

experts in the field of pest management. Starting in 2005 with 6 participating orchards totaling approximately 400 acres, the program now consists of 22 orchards on more than 1,000 acres.⁶⁰

Other examples of food hubs offering training and support in sustainable production practices include Local Food Hub, which offers IPM workshops to its producers. It also surveys its producers each year to find out what types of workshops their producers are interested in and it seeks experts in the field to provide these workshops to its producers. In its most recent survey, many producers indicated they were interested in learning about high-tunnel season extension (68%), organic and no-till vegetable production (58%), and Integrated Pest Management (64%).⁶¹

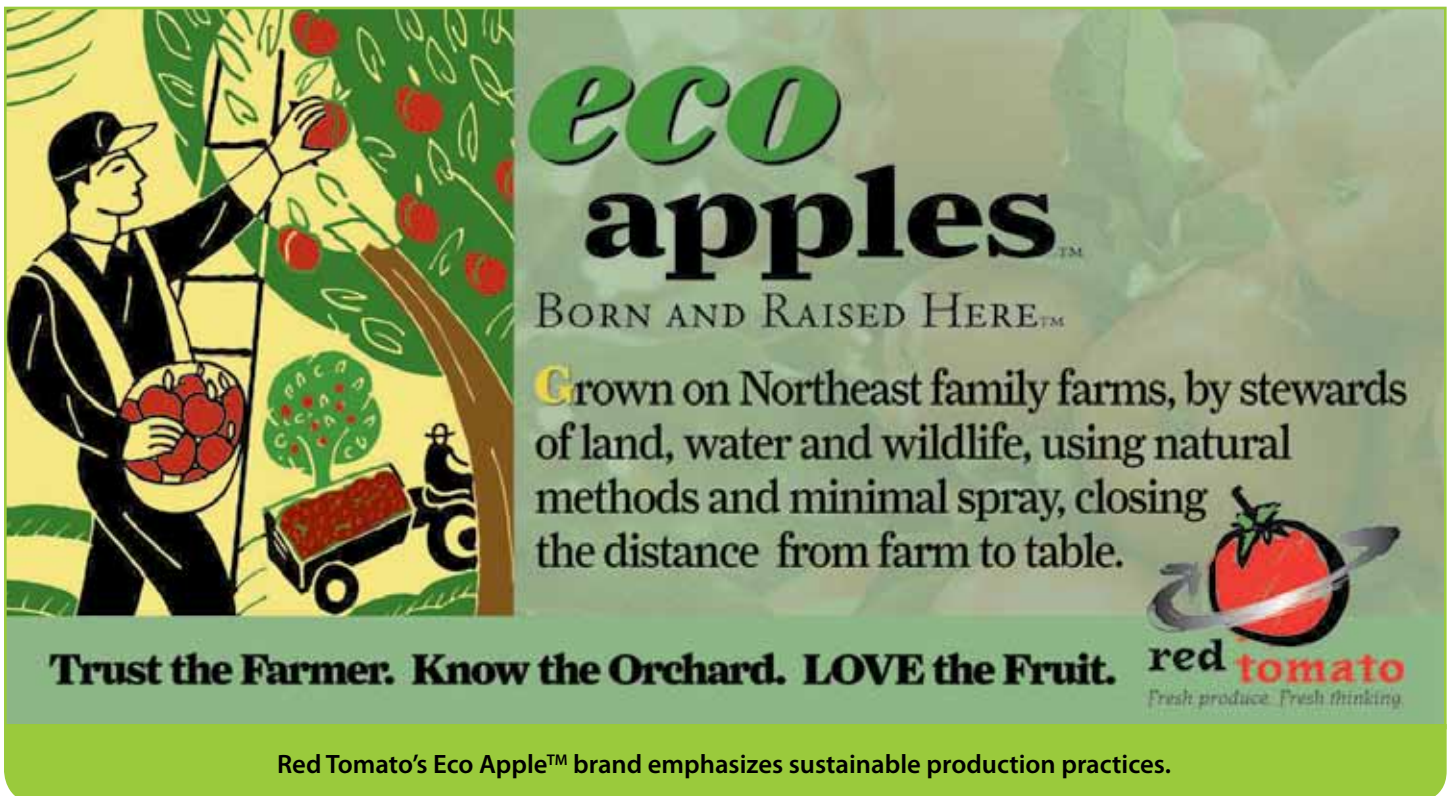
Meanwhile, in Vermont, the Intervale Center's Farm Program leases land, equipment, greenhouses, irrigation, and storage facilities to small independent farmers that follow organic standards, helping them establish farm businesses. The result has been the conversion of more than 120 acres of land into organic agriculture.⁶²

How Do Regional Food Hubs Help Reduce Energy Use and Waste in Their Operations?

Many regional food hubs are concerned with their environmental impact and look towards ways to reduce waste, energy use, and their

associated costs. The 2011 NFHC survey shows that half the food hubs have recycling programs, 44 percent have composting programs, and 22 percent have energy-saving programs.

In addition, because food hubs serve as intermediaries between producers and wholesale markets, they reduce the number of trips producers take to deliver products to buyers, saving fuel and money for their producers. A study sponsored by USDA's Economic Research Service in 2010 found that the most fuel-efficient supply chain for four out of five different food products was the intermediated local supply chain.⁶³ This study compared mainstream, intermediated local (through a food hub), and direct (farmers market) supply chains of five foods: apples in New York, blueberries in Oregon, spring mix



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Crown on Northeast family farms, by stewards of land, water and wildlife, using natural methods and minimal spray, closing the distance from farm to table.

Trust the Farmer. Know the Orchard. LOVE the Fruit.

red tomato
Fresh produce. Fresh thinking.

Red Tomato's Eco AppleTM brand emphasizes sustainable production practices.

60 Correspondence with Sue Futrell, Communications Manager, Red Tomato, October 4, 2011

61 Correspondence with Kate Collier, Founder and Co-Director, Local Food Hub, September 13, 2011

62 Correspondence with Sona Desai, Food Hub Manager, Intervale Center, August 24, 2011

63 King, R.P., M.S. Hand, G.D. DiGiacomo, K. Clancy, M.J. Gómez, S.D. Hardesty, L. Lev, E.W. McLaughlin (June 2010) Comparing the Structure, Size, and Performance of Local and Mainstream Food Supply Chains. U.S. Department of Agriculture, Economic Research Service. www.ers.usda.gov/Publications/ERR99/ERR99.pdf

in California, beef in Minnesota, and fluid milk in the Washington, DC, area. Though the mainstream supply chain tended to use fuller, larger trucks, the greater number of food miles traveled resulted in more fuel usage per 100 pounds of product moved, which did not offset the efficiency gained by transporting larger loads. Similarly, though the direct chain tended to have fewer total food miles traveled than the intermediated supply chain, the greater number of very small loads carried by the direct marketers led to higher fuel use per 100 pounds of product transported, which did not offset the efficiency gained by traveling less miles.

Here are a few examples of how specific food hubs are reducing waste and energy use in their operations:

The CROPP Cooperative, based in La Farge, WI, reduces waste and uses alternative energy sources in several ways. It carries out on-site composting at its headquarters and recycling programs at all its facilities.⁶⁴ It is also in the process of getting its headquarters certified as a LEED-EBOM building, which is the LEED⁶⁵ rating system for existing buildings that “maximize operational efficiency while minimizing environmental impacts.”⁶⁶ In addition, CROPP oversees renewable energy projects at several locations, including solar trackers, solar thermal collectors, wind turbines, and solar photovoltaic panels.

Central New York Regional Market in Syracuse, NY, has employed several methods to save on its electric costs. It replaced its aging high-intensity discharge (HID) lights with light-emitting diode (LED) lights, which are more energy-efficient and durable and provide better color rendition. The market also installed solar energy panels on the roofs of its market sheds and connected them to special, deep-cycle storage batteries. Electricity produced by solar panels during the day is stored in the batteries and then used to power lights and equipment for the farmers market during early morning hours.



Central New York Regional Market has replaced these HID lights (shown) in their market sheds with more energy efficient LED lights.

Tuscarora Organic Growers (TOG) Cooperative in southeastern Pennsylvania reduces the amount of waste the cooperative generates by maintaining a consistent quality product. This reduces the level of waste the cooperative generates and minimizes the volume of product returns it must handle. Because of its high quality standards and excellent production coordination, it has managed to achieve an impressive product shrink rate of 1–2 percent.⁶⁷ The small amount of food waste TOG generates is composted and used by TOG’s member farmers.

Local Food Hub in Charlottesville, VA, offers a composting program at its warehouse; compost is picked up there and used by its producers.⁶⁸ Local Food Hub sells products that can be discounted and sold or donated to area food banks and composts the remainder. It also reduces waste by picking up empty produce cartons from its buyers for re-use by its producers, reducing waste and expenses.

64 Correspondence with Evan Roberts, Sustainability Department, Organic Valley Family of Farms, September 12, 2011

65 Leadership in Energy and Environmental Design, a “green” rating system developed by the U.S. Green Building Council

66 U.S. Green Building Council Web site, Existing Buildings: Operations and Maintenance. www.usgbc.org/DisplayPage.aspx?CMSPageID=221

67 Interview with Jeff Taylor, General Manager, Tuscarora Organic Growers Cooperative, January 19, 2011

68 Correspondence with Kate Collier, Founder and Co-Director, Local Food Hub, September 13, 2011

Economic Viability of Regional Food Hubs, Barriers to Growth, and Strategies To Address Them

As part of the National Food Hub Collaboration's baseline assessment of regional food hubs, a subset of food hubs that participated in the online survey was selected for follow-up telephone interviews (see Appendix 4 for more background on research methods and results). Twenty food hub operators were interviewed in January and February of 2011. They were asked questions about the economic viability of their businesses, the challenges they were facing, and the opportunities they saw emerging for business growth and market expansion. The section begins by exploring one of the most frequently asked questions about regional food hubs: Can these value chain enterprises operate both economically viable business and address desired social and environmental objectives? This section continues by highlighting some of the more persistent growth barriers as well emerging market opportunities, and concludes by offering a number of strategies for ensuring the future growth and success of regional food hubs.

Are Regional Food Hubs Economically Viable Business Ventures?

Of the 20 food hub operators that participated in follow-up telephone interviews, 17 indicated that they were already economically viable businesses, meaning that revenue generated from sales covers the core operational costs of aggregating, distributing, and marketing food products, or were well on their way to achieving this. Ten of these food hubs identified themselves as economically viable businesses at the

time of the interview, five estimated that they would likely break even financially within 1 to 3 years, and two others stated more generally that they were "very close" to break-even status or "on track" to get there in a short period of time.

Based on the profiles of the food hub interviewed, the viability of a food hub was not based on geographic location or type of legal structure (such as privately held company, cooperative, or nonprofit). However—and not surprisingly—food hubs that had been in business for a longer time were more likely to say that they were already economically viable. The median years of operation for economically viable food hubs was 9.5 years, compared to only 5 years for food hubs that are not yet economically viable. It is also worth noting that all the economically viable food hubs reported minimum gross sales of \$1 million per year and median gross sales of \$6 million per year, compared to a median of \$500,000 in gross sales for food hubs that had not yet achieved economic viability (see Appendix 4 for more results).

While most food hub operators are optimistic about their future economic viability, they are still concerned about how they will manage their future business growth. Several food hub operators cited the need to invest in additional infrastructure, such as larger warehouse space, more trucks, more sophisticated IT platforms for transactions and logistics, and additional cooler and freezer units. They didn't foresee being able to make these investments without relying on external support.

Several food hub operators also stated that their reliance on in-kind contributions, such as free warehouse space and labor, will need to be addressed in order to achieve long-term viability. As one food hub operator

stated: "We're getting space that we can use—1,500 square feet—and we have it free . . . We're not bouncing checks, we have money in the bank, but we are not exactly economically viable because we are not paying for the full cost of our business." Another food hub expressed its need for growth like this: "We need to increase sales and provide more revenue to cover costs. That includes the cost of salaries. There will always be an element of volunteer contributions, but we need to get a workforce that is paid."

Another challenge for many food hubs is investing in growth while supporting their broader social missions, such as supporting small and mid-sized producers and helping to improve food access to the underserved. As one food hub operator stated, the business will "probably still seek funding to be able to offer other services such as technical assistance [to producers]," even though it expects soon to break even in covering their basic operational



Vans from Green B.E.A.N. Delivery ready to deliver produce boxes directly to customers' homes or workplaces. Green B.E.A.N. Delivery operates in Indianapolis, Cincinnati, Columbus, and Louisville.

expenses. Many other food hubs share this sentiment. While many food hubs are well positioned to be economically viable businesses that can carry out the core aggregation and distribution functions without external subsidies, they recognize that they need further support/partnerships if they are to offer a variety of complementary producer and community services.

Furthermore, it should be noted that operators from even the most well-established food hubs expressed caution about the precarious nature of the food distribution business, where products are highly perishable, margins are razor-thin, and the vagaries of the weather can have a decisive impact on the success or failure of the business. The operator of one of the longest standing producer-owned food hubs in the United States stated that, even though the business is generating enough revenue to meet its expenses, it still feels as if it is “teetering on the edge.” The manager of another food hub that has been in operation for more than 30 years called her business “viable, but certainly vulnerable.”

What Are Some of the Most Persistent Challenges Facing Regional Food Hubs?

Balancing Supply and Demand

The challenge cited most often by the interviewed food hub operators was the difficulty of balancing supply and demand. Most of these food hubs are finding that the demand for locally produced food is simply greater than their regions can supply, especially within certain product categories. One food hub operator, whose organization handles exclusively organic foods, finds that there are too few organic farmers operating in



A driver from Common Market, a food hub based in Philadelphia, picking up peaches from one of their farmers.

his region to satisfy the demand for locally produced organic food items. Another operator identified seasonal fluctuations in supply as a particularly difficult challenge to overcome, noting that “there is not enough product to buy, especially in the winter months. Growers are not interested in ‘switch seasons’ farming,” which would require reducing production in the summer and increasing production in the winter with season-extension practices. Other operators found the challenge of managing supply and demand to vary by product. As one food hub Midwest operator stated, “We have an oversupply of meat and an undersupply of fresh produce and value-added products.”

Price Sensitivity

Despite abundant indications of firm and growing demand for locally and regionally produced foods among consumers, many wholesale buyers still resist paying more for food items from a food hub than they would from another distribution entity, regardless of the food hub’s comparative advantage in supplying fresh, source-identified food straight from local small and mid-scale farms. This buyer resistance to paying a premium for local and regionally grown food can discourage wholesale buyers from making long-term purchasing commitments. As stated by one of the

interviewed food hub managers, “the businesses have to care about buying a higher priced product,” and not all of them do. To overcome this challenge, several food hubs noted that they have been obliged to dedicate resources to customer-oriented education and advocacy around the issue of the “true costs” of production in order to improve customers’ (and commercial buyers’) willingness to pay for food hub merchandise. Accentuating the problem is the fact that the distance from rural production areas to urban markets can be quite extensive, making it even more difficult for food hub managers to deliver merchandise at a mutually satisfactory price.

Managing Growth

Another challenge cited by many of the food hub operators interviewed was the difficulty in effectively managing their growth to keep pace with market demand. As one food hub operator stated: “We’ve grown to an extent where we have outgrown capacity in terms of our physical infrastructure and business system. We are faced with the need to expand our cooling facility and to implement more sophisticated accounting and management systems. [We] didn’t invest adequately in infrastructure as we were going along, we just didn’t know what the potential



Co-op Partners' warehouse in St. Paul, MN. Co-op Partners sells primarily organic produce supplied by a network of 30 or so farmers in Minnesota and Wisconsin during the growing season and from West Coast sources the rest of the year.

was." This sentiment was echoed by another food hub operator who said: "trying to grow the business means more sales, more members, and additional distribution sites." They see the challenge as "doing this work in a measured way, growing the business at the right pace."

Access to Capital

Another challenge closely tied to growth management is the difficulty food hubs are having in accessing capital. Many of the interview participants identified access to capital as a primary limiting factor to growth. The lack of capital access was linked not only to infrastructural investments, but also to the difficulty of securing short-term revolving credit lines to maintain an adequate cash flow for payments. As described by one food hub operator, "We aim to pay farmers in 2 weeks, while many of our customers take 6 to 8 weeks to pay us, so we need to finance these receivables." Beyond the food hubs themselves, problems pertaining to capital access were also cited as a persistent challenge for producers. Several food hub managers noted that the growers they work with also suffer from inadequate access to capital, which affects their ability to produce larger volumes of high quality products.

Other Notable Challenges

Other challenges cited by food hub operators included: dependence on volunteer labor, finding reliable seasonal and part-time staff, meeting buyer specifications for product quality and consistency, inventory management, and maintaining farm identity all along the supply chain. Several food hub operators also noted the challenge their smaller scale producers face in meeting the food safety requirements of some of their buyers, as well as the potential challenge their producers will face in complying with upcoming food-safety regulations.

What Opportunities Exist for Regional Food Hub Expansion and Market Growth?

Almost all the food hub operators who participated in the 2011 NFHC survey and follow-up interviews indicated that opportunities exist to expand their operations. They cited tapping new markets and increasing their product offerings as the two clearest paths for expansion. As part of the 2011 survey, respondents were asked to list their primary and secondary market outlets;

primary markets are those market channels that comprise a majority of their sales, and secondary markets are other market channels in which they participate but which comprise a smaller portion of their overall sales. Including both primary and secondary markets, the top market outlets for food hubs include: restaurants (84%), grocery stores (69%), colleges and universities (62%), food cooperatives (53%), other distributors (53%), and school foodservice providers (53%). It is worth noting that colleges and universities remain more of a secondary rather than a primary market for food hubs, a trend reflected in other institutional markets as well. For example, only 16 percent of the surveyed food hubs listed hospitals as a primary market, but 27 percent listed them as a secondary market. These findings were reinforced during the follow-up interviews with food hub operators; many respondents mentioned that demand was beginning to emerge from institutional market channels, such as universities and hospitals, and from certain price-sensitive market channels, such as public school systems, Federally funded senior meal programs, and food banks, but that the volume of food purchased by these entities was not equivalent to that purchased by non-institutional customers.

In terms of the types of products that food hubs offer to their clientele, the 2011 NFHC survey shows that almost all food hubs (96%) sell fresh produce, and the majority of food hubs also sell a variety of other products, including eggs (76%), dairy (64%), meat (62%), poultry (62%), and grains (56%), along with a number of value-added products. While fresh produce is central to most of the food hubs' overall sales, many food hub operators indicated in the follow-up interviews that they intend to increase their product offering to include more proteins, grains, and value-added products as a way to keep pace with customer demand and to ensure that they can offer products year round.

Several food hubs see processing as a potential way to use "seconds,"⁶⁹ reducing waste and increasing revenue for producers. They also see

⁶⁹ Seconds are wholesome fruits and vegetables that do not conform to standard retail or foodservice cosmetic or size requirements, so are hard to sell in most fresh-market channels.

processing as a way to increase the number of shelf-stable products the hub distributes, which would enable them to offer a greater variety of off-season products and keep buyers engaged on a year-round basis. A few of the food hubs interviewed intend to obtain processing equipment to develop value-added products; others said they are actively pursuing new business partnerships with existing processors to perform this function for them.

What Support Needs for the Further Development of Regional Food Hubs Have Been Identified?

Based on the 2011 NFHC survey, many food hubs are currently in start-up or an early development phase. Most are under 5 years old, generate an average of nearly \$1 million in gross sales annually, are operated by seven full-time staff (on average), and rely a good deal on volunteer labor (five people on average). Given their early stage of development, many food hubs still rely

on grant money to provide services and carry out essential operational activities. To help food hub operators increase their economic viability and help them contribute to job creation and market development, the following areas of assistance need to be addressed:

Financial Support

The development and expansion of food hubs usually require significant upfront investment in fixed assets such as warehouses, pallet jacks, forklifts, coolers, trucks, packing crates, sorting lines, and other handling equipment. This type of infrastructure usually needs to be financed, but food hubs often find it hard to access capital. Grant funds to support start-ups and expansions are needed to invest in these fixed assets, and also to position hubs as better candidates for loans. Hubs could also benefit from the innovative and creative loan options that are beginning to emerge from social enterprise organizations, Community Development Financial Institutions, and even some USDA loan programs. These low-interest loans could be (and often are) accompanied by hands-on technical assistance to support the sustained success of the hub.

Beyond loan capital, food hubs would benefit from the establishment of less traditional sources of equity investments or gift capital, such as those that could be sourced at acceptable terms from cooperative membership, local community investing programs, crowd-funding, and social venture capital investments.

Innovative and Flexible Business Strategies

Greater creativity and innovation are needed to position food hubs so they can more quickly adapt to an ever-changing marketplace. Innovation is needed in areas such as financing, securing land and facilities, producer coordination, handling and delivery logistics, business management tools and IT platforms, and marketing techniques—all of which will help food hubs better manage and achieve their stated goals. Private foundations and government entities both have a role to play by providing seed money to “on the ground” pilot projects, which would allow for more experimental approaches in food hub development and explore how economic, social, and environmental goals could be better intertwined in food hub activities.

Business Development Services

Many food hub operators need training in aspects of business development. Because food hub businesses try to be fiscally sound and attain certain social and environmental goals, balancing these demands in a single business plan can be a very complex and daunting endeavor. The success of food hubs could also be enhanced by the availability of examples of food hub business models at different stages of development, from start-up to mature phases, which provide insight into potential markets and products, anticipated volumes of product handled over time and their revenue, and the operating and investment costs associated with various stages of growth. A food hub “community of practice”⁷⁰ could help facilitate the exchange of helpful business intelligence.



In the process of unloading a farmer delivery of produce at the Appalachian Harvest warehouse in Duffield, VA.

70 Communities of practice are groups of people in organizations who come together to share what they know, to learn from one another regarding some aspects of their work, and to provide a social context for that work. For more information, see www.leopold.iastate.edu/sites/default/files/copresourceguide.pdf

Resources Available To Support Regional Food Hub Development

As food hubs continue to gain momentum and expand their operations, one of the primary needs is accessing capital and support for business development. A variety of funding options is available from both Federal and non-Federal sources to finance different stages of food hub development, from business planning and technical assistance to working capital and physical infrastructure improvements. This section is dedicated to helping food hub operators and supporters understand and navigate through the variety of financial and human resources available to them.

What Funds Are Available From the Federal Government To Support Food Hubs?

Many Federal grant and loan programs could potentially finance various aspects of food hub operations. The National Food Hub Collaboration has identified more than 30 of these Federal programs (20 programs from USDA alone) that either have a proven track record or have the greatest potential to fund food hub work. Table 1 on page 35 lists each program's eligible applicants and funding activities.

It is important to keep in mind that many Federal funding opportunities are administered through State or regional agency offices. For example, many of

the funding opportunities available at USDA's Farm Service Agency, Natural Resources Conservation Service, and Rural Development agencies are administered at the State level, and the personnel responsible for these programs are usually housed at USDA Service Centers. For the location of a USDA Service Center in your State, see the Service Center Locator.⁷¹

Food hub operators and their partners are also strongly encouraged to contact grant program personnel to ensure their eligibility prior to applying for any program; grant focal areas and eligible entities can change from time to time. Also, because application submission deadlines can vary from year to year, it is important to check with program personnel and their respective Web sites for any updates on application deadlines and other pertinent information. A list of Federal grant programs may be found at Sources of Funding Within the Federal Government.

Other resources available at the State and local level, such as USDA Service Centers, the Cooperative Extension System⁷² and Small Business Administration offices,⁷³ and Cooperative Development Centers,⁷⁴ can all provide a wealth of information in researching and preparing government grant applications.

While it is important to pay attention to program eligibility requirements, don't be overly restrictive in determining whether or not a particular grant program is suitable. It's also important to take an expansive approach to funding opportunities—be creative and

resourceful! For example, some of the grant programs listed in this guide may best be used by food hub operators through partnerships with an eligible organization that can supply such core activities as production or marketing training or technical assistance for growers and suppliers. Finally, in addition to this resource guide, food hub operators and their partners should review several other excellent guides and Web sites when investigating funding for food-related enterprises (see Appendix 5). Particularly useful is USDA's Know Your Farmer, Know Your Food⁷⁵ Web site, which provides a comprehensive list of funding programs that support local and regional food systems.

Preparing for Federal Funding

When preparing to apply for Federal funding, it is important to note that many Federal grant programs will only accept electronic applications submitted through Grants.gov,⁷⁶ a centralized Governmentwide portal. Registering with Grants.gov is an essential first step in the application submission process. Organizations applying for a Federal Government grant will usually be required to have a Data Universal Numbering System (DUNS) number,⁷⁷ an Employer Identification Number (EIN),⁷⁸ and be enrolled with the Central Contractor Registration.⁷⁹

71 offices.sc.egov.usda.gov/locator/app

72 www.csrees.usda.gov/Extension

73 www.sba.gov/about-offices-list/2

74 www.cooperationworks.coop/

75 www.usda.gov/knowyourfarmer

76 www.grants.gov

77 fedgov.dnb.com/webform

78 www.irs.gov/businesses/small/article/0,,id=98350,00.html

79 www.bpn.gov/ccr/default.aspx

Are Funds Available From Philanthropic Foundations?

Philanthropic foundations have a growing interest in local and regional food systems and their relationship to health, economic development, the environment, and a number of other underlying aspects. However, food hubs have only just begun to receive the attention of many philanthropic organizations, so not many—with some notable exceptions discussed below—explicitly support food hub projects in their program descriptions.

Philanthropic foundations tend to place a priority on funding a body of work that will lead to particular set of desired outcomes or impacts rather than awarding grants to particular types of activities. Consequently, when preparing grant proposals for philanthropic organizations, it is important to emphasize the expected impact of the project and demonstrate how the project will contribute to the fulfillment of the foundation's goals. Nevertheless, because of the diverse

range of activities food hubs engage in and their corresponding objectives—from highly localized, geographically concentrated impacts, such as improving access to healthier food in a specific neighborhood, to those of a regional scope, such as preserving farmland and farm-related jobs, and those of global scope, such as reducing greenhouse gas and other pollutants—food hub operators and their partners have substantial latitude in developing grant proposals that could potentially attract the interest of a range of philanthropic organizations with distinctly different missions. For more information about the relationship between food systems work and impacts that are likely to be of interest to foundation grant makers, see *A Grant Maker's Guide to Food Systems for the Good of the Community*.⁸⁰

Table 1 offers a list of foundations that fund activities in the areas of food systems, health, food access, economic development and environmental sustainability. The examples provided in this section of the guide and in Table 1 do not mean these foundations will fund food hubs, only that they have funded food systems or at least have an

interest in some of the economic, social, or environmental impacts that food hubs can offer. It is not intended to be an exhaustive list. More information about these foundations and others can be found at Sustainable Agriculture and Food Systems Funders.⁸¹

What Are Some Examples of Philanthropic Foundations That Fund Regional Food Hubs?

Many private philanthropic foundations fund projects related to food systems in the United States, and many of these are interested in what food hubs have to offer. The examples below will give you some ideas for the types of private funders to research and pursue.

Some foundations have local food systems directly “in their sights.” The Blue Moon Fund⁸² is interested in building human and natural resilience to a changing and warming world. They use natural, social, and financial capital to implement new models in high-biodiversity regions around the world, including the Chesapeake/Appalachia region. On their Web site they list several “jewels”—ideas they feel are promising for reaching their goals. Among the jewels is “Building Healthy Local Food Systems.” The Blue Moon Fund is clearly interested in the promise of food hubs. In 2009, Local Food Hub received a grant “to support the availability and affordability of locally grown foods by improving efficiency in the local food system and supporting existing farms and incubating new ones.”

The W.K. Kellogg Foundation is one of the Nation's largest foundations; its mission is to “support children, families, and communities as they Strengthen and create conditions that propel



At the Local Food Hub's educational farm in Scottsville, VA – a certified organic farm that serves as a community based learning center, providing farm education classes, workshops, and community events.

80 bit.ly/grantmakers-guide

81 www.safsf.org/who/directory.asp

82 bluemoonfund.org

vulnerable children to achieve success as individuals and as contributors to the larger community and society.” Common Market in Philadelphia was awarded a \$1.1 million grant from the Kellogg Foundation to expand the impact of its food hub. Among the activities funded, the grant paid for critical physical infrastructure to scale up operations and reduce costs. The Common Market won the award because its work increases the quality and quantity of fresh, healthy, and affordable food available to vulnerable communities and it was clear to the Kellogg Foundation that these outcomes would not happen as fast or as well without the food hub activities to support them.

The Ford Foundation, another of the larger philanthropies in the United States, has been a supporter of food systems for many years. Its areas of focus are diverse, several of them overlapping with food hub interests. The Detroit Eastern Market was awarded a \$500,000 grant from the Ford Foundation under its “Promoting Metropolitan Land-Use Innovation” initiative. Three other Ford Foundation initiatives that might fund food hub work are “Climate Change Responses That Strengthen Rural Communities,” “Expanding Community Rights over Natural Resources” and “Ensuring Good Jobs and Access to Services.”

A list of philanthropic organizations that might help fund food hubs can be found at Sources of Funding from Foundations and Nonprofits.

As one might imagine, there are many more small foundations than large, national-scale foundations. Smaller foundations and family trusts often have a specific regional focus and might be interested in funding food hub activities within their targeted geographic area. Learn more about small foundations at Association of Small Foundations.⁸³

Can Regional Food Hubs Secure Funding Support From a Variety of Sources That Have Different Interests?

Starting or expanding a food hub is capital intensive, and individual funders are not always able to cover all the costs associated with the full realization of a food hub operation. Therefore, many enterprising food hub managers have sought funding from a variety of public and private sources. One example of this is Detroit’s Eastern Market.

A public market for more than a hundred years located in the center of Detroit, Eastern Market is transforming itself so it serves as a true hub of fresh, healthy food, running programs that are intended to increase producer access to markets and retail access to fresh, locally grown food in underserved communities. Eastern Market Corporation (EMC), the nonprofit organization that manages the market, has developed a comprehensive vision; it has found that different pieces of its

vision are attractive to different funders. Capital improvements to the market have been funded partly by the City of Detroit and partly from funds that EMC has secured from a variety of foundations and corporations. Three philanthropic organizations that have national scopes, but are particularly focused on Detroit—the Kresge Foundation, the Ford Foundation, and the W.K. Kellogg Foundation—have been key supporters. EMC has also received modest financial support through a USDA cooperative research agreement. Each funder has a slightly different reason for wanting to improve the market:

Kresge Foundation’s Community Development program aims to create opportunities and improve the quality of life for underserved and marginalized populations. The program has a primary focus on Detroit, making the Eastern Market an excellent candidate because the Market’s vision includes several programs that target underserved populations in the vicinity of the market site. This foundation also has a health program, which has objectives similar to Eastern Market’s objectives. This allows the foundation to meet multiple goals with one grant.



Detroit’s Eastern Market, established in 1891, is one of the nation’s oldest publicly owned wholesale-retail markets.

83 www.smallfoundations.org



Detroit's Eastern Market on "Flower Day."

What Are Some Other Sources of Capital To Support Regional Food Hubs?

Many businesses dip into personal assets, borrow money from family, or tap their credit cards when starting up. If the business is a cooperative, it raises capital from members who invest at the inception and own part of the business. At some point, businesses often look outside these immediate sources to secure a loan, a line of credit, or an equity investment of some type. Food hubs are essentially small businesses and follow this pattern, but also have options not available to many small businesses. Because most food hubs are social enterprises, they may be an attractive investment to social enterprise investors. A variety of organizations are looking for investments that have social or environmental benefits along with financial returns. However, to qualify for a social enterprise loan or equity investment, the food hub management must be able to reassure the investors it will pay it back. Taking out a loan (debt capital) to start or expand a food hub may seem logical, yet there are some important questions to answer.

- Do you expect enough revenue growth to feel confident you can repay a loan?
- Do you have documentation that will instill confidence that you are a reasonable investment risk?
 - Significant equity (enough of your assets paid for) in the hub
 - A written business plan
 - Buyer contracts or commitments that support your loan application
 - Financial records showing your income, expenses, and assets for several years
- Are the terms competitive, reasonable, and within your means?

The Ford Foundation's Promoting Metropolitan Land-Use Innovation program seeks to develop concurrent innovative land use, community planning, and infrastructure development strategies that drive regional development efforts. The Eastern Market's physical infrastructure supports regional commerce in an integrated way that it is attractive to Ford's Land-Use program.

The Kellogg Foundation has supported capital improvements and operations of the market with multiple grants. A recent grant fits squarely into two of the Kellogg Foundation's focus areas: Healthy Kids (with Eastern Market's emphasis on healthy, locally grown food) and Civic Engagement (since Eastern Market is knitted into the fabric of city life in Detroit).

USDA's Agricultural Marketing Service entered into a cooperative research agreement with EMC in 2010 as part of its general mandate to identify emerging market opportunities for

agricultural producers that promise to offer improved returns to growers. The 2-year agreement seeks to expand access to fresh fruits and vegetables at inner-city retail outlets through increased market operations and to improve the coordination of deliveries between producers and wholesale vendors through logistical services such as joint purchasing and refrigerated storage.

Another grant of note secured by Eastern Market is from the Herrick Foundation. Herrick is smaller than the other grantors, but also has a special interest in Detroit and is interested in technological solutions to problems. Herrick's funding is being used to incorporate Local Orbit's software into Eastern Market's operations. Local Orbit provides Eastern Market with an online platform to facilitate the buying and selling of Michigan-grown products. This meets the foundation's goal of applying technology for social impact, and it helps more producers gain direct market access to Detroit customers.

Food hubs and other local food enterprises often find it difficult to secure a loan from traditional lenders. Many lenders see these enterprises as too risky or not fitting a mold which with they are familiar. It is true, many food hubs do not fit conventional models, their assets may not be as secure, and their markets can be less developed. However, there are a growing number of options for accessing loans, and the field is changing quickly.

Several types of entities make loans to local food businesses, each with their own goals, reasons, and terms. A growing number of them focus on financing social enterprises and want to support businesses that seek social and or environmental outcomes in addition to financial outcomes. Some examples include the following:

RSF Social Finance⁸⁴ offers several loan and equity investment options, with food and agriculture being one of three focus areas. For example, through the RSF Program Related Investment Fund, loans of \$50,000 or greater are available to nonprofit and for-profit social enterprises involved in “food production, food access, value-added processing, distribution, retail, and waste management.” The first program-related investment (PRI) through this program was made to Common Market, a Philadelphia food hub with more than 60 customers and 100 farmer suppliers. PRIs are investments made by foundations—or organizations they choose to make those investments for them (such as RSF)—that support the foundation’s mission. They usually are repaid with interest and within an established timeframe. Even though a growing number of foundations are establishing PRI options, they remain difficult to access. However, the work of organizations like RSF and others is

making it easier to secure a PRI, and we expect to see more activity in this sector in the near future. To learn more about PRIs, see the PRI Makers Network.⁸⁵

Whole Foods Market has a Local Producer Loan Program⁸⁶ that makes low-interest loans between \$10,000 and \$100,000. The loan cannot exceed 80 percent of the total project costs. The program attempts to minimize the fees, interest rates, and paperwork that usually accompany a loan. Whole Foods wants to “make it easier for them [farmers and producers] to grow their businesses and bring more local products to market. That’s good for us and good for you.” Many of the loans fund small businesses that make and sell products that meet Whole Food standards; many food hubs could be a good fit for this program.

Food hubs are also, of course, eligible for more conventional funding, and should consider loans from the Farm Credit System (FCS).⁸⁷ FCS is a network of financial cooperatives that is the leading provider of credit to young, beginning, and small farmers in the country. Under the current structure, only farmers can receive an FCS loan. Each independent lender in FCS has its own level of understanding of food hubs. The Farm Credit Council (FCC), a sister organization to FCS, is working hard to build understanding among lenders. For example, FCC has worked with partners to develop the Field Guide to a New American Foodshed,⁸⁸ which provides case studies and financial information to show what these new food enterprises look like and how they operate.



Common Market products displayed at Philadelphia grocery store.

84 rsfsocialfinance.org

85 www.primakers.net

86 www.wholefoodsmarket.com/values/local-producer-loan-program.php

87 www.farmcreditnetwork.com/about/locations

88 www.foodshedguide.org

Community Development Financial Institutions (CDFIs) are organizations that provide credit to underserved markets and populations, and often offer less-than-market rates and significant technical assistance. CDFIs are certified by the U.S. Treasury Department. They are described in detail in the Federal Resources section of this guide. See CDFI Coalition⁸⁹ for a list of certified CDFIs by State and by type. The site also contains a searchable award database.

In addition to these loan programs, there are other regional or innovative options that may be applicable. For example, The Carrot Project⁹⁰ in the Northeast makes loans to small and mid-sized farms and farm-related businesses that use sustainable or organic practices

and serve local or regional markets. These loan funds can be used to cover a wide variety of business costs, and both on-farm and off-farm enterprises are eligible. As described on its Web site, The Carrot Project's loan programs include two distinct operating models. One model provides capital to lenders who, in turn, issue promissory notes and commit to lend the capital. In the second model, money is posted as collateral for a lending partner that uses its own capital to make the loans.

Another innovative idea is reflected in the work of Kickstarter,⁹¹ which has been described as "crowd funding." Kickstarter and others like it (Indie GoGo⁹² and Profunder⁹³) use an online platform to solicit small gifts from a large number

of people, which can add up to a large amount. Projects are described, along with a funding goal and time limit. If a posted project reaches its funding goal before the timeframe ends, it receives the money. The funds are a gift, not a loan. Any project can be posted, including food hubs and other local-food enterprises. To be successful at this type of financing, it is important to have excellent communications and Web skills so you can effectively promote and solicit contributions for the project.

For more information, ideas, and sources see Finance for Food,⁹⁴ FamilyFarm's Financial Resources page,⁹⁵ and Sustainable Agriculture & Food Systems Funders.⁹⁶



Sources of Funding Within the Federal Government

The National Food Hub Collaboration has identified more than 30 Federal programs (20 programs from USDA alone) that either have a proven track record or have the greatest potential to fund food hubs. Tables 1 and 2 are summaries of the information in the listing below. Table 1 shows what the funds can be used for, and Table 2 shows the types of organizations that are eligible for each fund.

89 cdfi.org

90 thecarrotproject.org

91 www.kickstarter.com

92 www.indiegogo.com

93 www.profunder.com

94 www.financeforfood.com

95 www.familyfarmed.org/FinancialResources

96 www.safsf.org

Table 1. Uses of funds available from the Federal Government

This table describes uses to which funds from various grants can be put. For more details about grants, look up the program in the section following table 2.

Program	Planning ⁹⁷	Construction	Land ⁹⁸	Equipment	Marketing	Working Capital	Training ⁹⁹
USDA, Rural Development							
Community Facilities Grants and Loans		X	X	X			
Business & Industry Guaranteed Loan Programs		X	X	X		X	
Rural Business Enterprise Grant (RBEG)	X	X	X	X		X	X
Rural Business Opportunity Grant (RBOG)	X						X
Value-Added Producer Grant (VAPG)	X				X	X	
Intermediary Relending Program	X	X	X	X		X	
Rural Microentrepreneur Assistance Program	X		X	X	X	X	X
Rural Economic Development Loan and Grant Program (REDLG)	X	X					X
Rural Energy for America Program Grants/Renewable Energy Systems/Energy Efficiency Improvement Program	X			X			X

97 Includes research, feasibility studies, business planning

98 Land for lease or purchase

99 Includes technical assistance

Program	Planning	Construction	Land	Equipment	Marketing	Working Capital	Training
USDA, National Institute of Food and Agriculture							
Sustainable Agriculture Research and Education Program (SARE)							X
Community Food Projects Competitive Grant Program	X	X			X	X	
Beginning Farmers and Rancher Development Program				X (non-fixed)			X
Agriculture and Food Research Initiative - Global Food Security	X						
USDA, Risk Management Agency							
Risk Management Education and Outreach Partnership Cooperative Agreements Program							X

Program	Planning	Construction	Land	Equipment	Marketing	Working Capital	Training
USDA, Agricultural Marketing Service							
Farmers Market Promotion Program (FMPP)	X			X	X		X
Specialty Crop Block Grant Program	X				X		X
Federal-State Marketing Improvement Program (FSMIP)	X				X		X
USDA, Farm Service Agency							
Farm Storage Facility Loan Program	X	X		X			
USDA, Natural Resources Conservation Service							
Environmental Quality Incentives Program (EQIIP)	X	X		X			X
Conservation Innovation Grants (CIG)	X (feasibility studies only)				X		X

Program	Planning	Construction	Land	Equipment	Marketing	Working Capital	Training
U.S. Department of Commerce							
Public Works and Economic Development Program		X		X			
Economic Adjustment Assistance Program	X	X		X	X	X	X
U.S. Department of Health and Human Services (HHS)							
Communities Putting Prevention to Work							X
Community Transformation Grants	X (Evaluation studies only)						X
Community Economic Development Grants		X	X	X	X	X	X

Program	Planning	Construction	Land	Equipment	Marketing	Working Capital	Training
U.S. Department of Housing and Urban Development (HUD)							
Sustainable Community Regional Planning Grant	X		X				X
Community Challenge Grant	X		X				X
Community Development Block Grant Program		X	X	X		X	X
Rural Housing and Economic Development Program		X	X	X		X	X
U.S. Department of Treasury							
Community Development Financial Institutions (CDFI) Program (apply to a CDFI)	X	X	X	X	X	X	X
New Market Tax Credit (apply to Community Development Entity)						X	

Table 2. Entities eligible for Federal grant funds

This table describes the organizations eligible to receive grant funds. For more details about grants, look up the program in the section following this table.

Program	Nonprofit	For profit	Co-op	Public	Tribal	Individual	Research
USDA, Rural Development							
Community Facilities Grants and Loans	X			X	X		
Business & Industry Guaranteed Loan Programs	X	X	X	X	X	X	
Rural Business Enterprise Grant (RBEG)	X			X	X		
Rural Business Opportunity Grant (RBOG)	X		X	X	X		
Value-Added Producer Grant (VAPG)			X			X	
Intermediary Relending Program	X		X	X	X		
Rural Microentrepreneur Assistance Program	X				X		X
Rural Economic Development Loan and Grant Program (REDLG)	X	X	X	X	X	X	X
Rural Energy for America Program Grants/Renewable Energy Systems/Energy Efficiency Improvement Program		X	X			X	

Program	Nonprofit	For profit	Co-op	Public	Tribal	Individual	Research
USDA, National Institute of Food and Agriculture							
Sustainable Agriculture Research and Education Program (SARE)	X					X	X
Community Food Projects Competitive Grant Program	X						
Beginning Farmers and Rancher Development Program	X	X	X	X			X
Agriculture and Food Research Initiative - Global Food Security							X
USDA, Risk Management Agency							
Risk Management Education and Outreach Partnership Cooperative Agreements Program	X	X	X	X	X		X

Program	Nonprofit	For profit	Co-op	Public	Tribal	Individual	Research
USDA, Agricultural Marketing Service							
Farmers Market Promotion Program (FMPP)	X	X	X	X	X		
Specialty Crop Block Grant Program				X			
Federal-State Marketing Improvement Program (FSMIP)				X			X
USDA, Farm Service Agency							
Farm Storage Facility Loan Program							
USDA, Natural Resources Conservation Service							
Environmental Quality Incentives Program (EQIIP)			X		X	X	
Conservation Innovation Grants (CIG)	X			X	X	X	

Program	Nonprofit	For profit	Co-op	Public	Tribal	Individual	Research
U.S. Department of Commerce							
Public Works and Economic Development Program	X			X	X		X
Economic Adjustment Assistance Program	X			X	X		X
U.S. Department of Health and Human Services (HHS)							
Communities Putting Prevention to Work				X			
Community Transformation Grants	X			X	X		
Community Economic Development Grants	X						

Program	Nonprofit	For profit	Co-op	Public	Tribal	Individual	Research
U.S. Department of Housing and Urban Development (HUD)							
Sustainable Community Regional Planning Grant	X			X			
Community Challenge Grant				X	X		
Community Development Block Grant Program				X			
Rural Housing and Economic Development Program	X			X	X		
U.S. Department of Treasury							
Community Development Financial Institutions (CDFI) Program (apply to a CDFI)	X						
New Market Tax Credit (apply to Community Development Entity)	X						

USDA, Rural Development

Rural Business Enterprise Grant (RBEG)

Administered by Rural Business—Cooperative Service.

Supports the development of physical infrastructure and facilities, including food processing, marketing, and distribution business ventures for locally grown agricultural products. Examples of eligible fund use include: Acquisition or development of land, easements, or rights of way; construction, conversion, or renovation of buildings, plants, machinery, equipment, access streets and roads, parking areas, and utilities; pollution control and abatement; capitalization of revolving loan funds, including loans for start-ups and working capital; training and technical assistance; distance adult learning for job training and advancement; rural transportation improvement; and project planning.

Authorized activities: Research and feasibility studies, business planning, construction, land lease or purchase, equipment purchase, working capital, and training and technical assistance.

Funding: There is no maximum, but grants generally range from \$10,000 up to \$500,000. Smaller projects are given higher priority.

Eligible applicants: Rural public entities, Indian tribes, and rural nonprofit organizations.

Example project: Coast Grown in San Luis Obispo, CA, received an \$88,000 RBEG grant in 2007 to form the Coast Grown Cooperative of 18 independent farms and ranches along California's Central Coast and to build the first mobile harvest unit in California. The grant helped pay for a producer survey, cooperative feasibility report, mobile unit feasibility report, business plan, articles of incorporation, by-

laws, quality standards, ranch facility requirements, hazard analysis plan, standard sanitation operation plan, all mobile unit permits and guidelines, Web site, logo and brochures, new member application packet, and helped to seat a board of directors and hire a CEO.

For more information: RBEG Program.¹⁰⁰

Contact: Information and grants are disbursed on the state level. Find your local Rural Development office at Agencies and Offices.¹⁰¹

Rural Business Opportunity Grant (RBOG)

Administered by Rural Business—Cooperative Service.

Supports training and technical assistance for business development, including food processing, marketing, and distribution business development for locally grown agricultural products. Emphasizes activities that promote “best practices” in sustainable economic development for rural communities. RBOG funds may not be used for real estate acquisition or development, grant application costs, costs incurred prior to the grant award, or political activities. This is not a working capital grant; money cannot be used for operation expenses.

Authorized activities: Research and feasibility studies, business planning, training, and technical assistance.

Funding: Varies annually. In 2011 funding was up to \$50,000 per application for single-State projects. For multi-State projects, funds of up to \$150,000 were available. Each applicant must compete nationally for funds. Funds may be used for a project period not to exceed 2 years.

These programs are administered by the States' offices of the U.S. Department of Agriculture's Rural Development agency. Find your State office at Rural Development Agencies and Offices.¹⁰²

www.rurdev.usda.gov/recd_map.html

Eligible applicants: Public bodies, nonprofit corporations, tribes, and rural cooperatives with primarily rural-resident members. The focus is on communities that have experienced long-term population decline or job deterioration, trauma due to natural disasters or fundamental structural changes, or are persistently poor. This is not a grant for individuals or businesses.

Example project: The Ecotrust FoodHub in Portland, OR, received nearly \$250,000 to build up food-hub.org, an online directory and marketplace to help wholesale food buyers and sellers connect and do business. RBOG funding is being used to increase recruitment of producers and buyers in rural communities throughout the Pacific Northwest and to provide the training and assistance necessary to ensure FoodHub meets its business, procurement, and marketing goals.

For more information: RBOG.¹⁰³

Contact: Find your local Rural Development office.¹⁰⁴

Value-Added Producer Grant (VAPG)

Administered by Rural Business—Cooperative Service.

Supports the production of value-added agricultural products from commodities. Grants may be used for planning activities and for working capital for

100 www.rurdev.usda.gov/rbs/busp/rbeg.htm

101 www.rurdev.usda.gov/recd_map.html

102 www.rurdev.usda.gov/recd_map.html

103 www.rurdev.usda.gov/rbs/coops/rbog.htm

104 www.rurdev.usda.gov/recd_map.html

marketing value-added agricultural products and for farm-based renewable energy. Ineligible uses include: planning, repairing, rehabilitating, acquiring, or constructing a building or facility; purchasing, renting, or installing fixed equipment, including processing equipment; paying for the preparation of the grant application; and paying costs incurred prior to receiving the grant. Eligible valued-added activities include commodity processing, market differentiation, commodity segregation, on-farm renewable energy, local food, and mid-tier value chain.

Authorized activities: Research and feasibility studies, business planning, and working capital.

Funding: Up to \$100,000 for planning or \$300,000 for working capital. A typical award is \$130,000.

Eligible applicants: Independent producers, farmer and rancher cooperatives, agricultural producer groups, and majority-controlled producer-based ventures. Priority will be given to applications from beginning farmers or ranchers, socially disadvantaged farmers or ranchers, or operators of small or medium-sized farms or ranches that are structured as family farms. Ten percent of funds is reserved for beginning farmers or ranchers and socially disadvantaged farmers or ranchers; an additional 10 percent of funds is reserved for mid-tier value chain projects. Local and regional supply networks are eligible to apply only for funds reserved for mid-tier value chain projects.

Example project: Grasshoppers Distribution of Louisville, KY, received a VAPG of \$85,480 in 2006 to assist its work with small-scale family agriculture producers in Kentucky and southern Indiana. It operates a community supported agriculture program and facilitates wholesale distribution to

restaurants, groceries, and special events. It also helps producers to become “KY Proud” certified, a label that promotes Kentucky agricultural products and encourages buying and eating locally.

For more information: VAPG.

Contact: Grant applications are first screened through each State’s USDA Rural Development Office.

Business and Industry Guaranteed Loan Program (B&I)

Administered by Rural Business—Cooperative Service

The B&I Guaranteed Loan Program improves, develops, or finances business, industry, and employment and improves the economic and environmental climate in rural communities by bolstering the existing private-credit structure through guarantees of high-quality loans that will provide lasting community benefits. Private lenders are provided loan guarantees by USDA to ensure better terms. Loans may be used to prevent businesses from closing or provide expanded job opportunities; to convert, enlarge, repair, modernize, or otherwise develop a rural business; to purchase and develop land, easements, rights-of-way, buildings, or facilities; and to purchase equipment, leasehold improvements, machinery, supplies, or inventory.

Authorized activities: Construction, land lease or purchase, equipment purchase, and working capital.

Funding: The total amount of Agency loans to one borrower must not exceed \$10 million. The Administrator may, at the Administrator’s discretion, grant an exception to the \$10 million limit for loans of \$25 million under certain circumstances. The Secretary of Agriculture may approve guaranteed loans in excess of \$25 million, up to \$40 million, for rural cooperative organizations that process value-added agricultural commodities.

Eligible applicants: Cooperative organizations, corporations, partnerships, or other legal entities organized and operated on a profit or nonprofit basis; Indian tribes on Federal or State reservations or other Federally recognized tribal groups; public bodies; or individuals. A borrower must be engaged in or proposing to engage in a business that will provide employment; improve the economic or environmental climate; promote the conservation, development, and use of water for aquaculture; or reduce reliance on nonrenewable energy resources by encouraging the development and construction of solar energy systems and other renewable energy systems.

Example project: Organic Renaissance, LLC, in Athol, MA, helps connect local growers to restaurants and retailers by assisting with transportation, aggregation, and distribution while preserving direct relationships between buyers and sellers. In 2010, it received a \$450,000 B&I guaranteed loan from GFA Federal Credit Union to expand its operations; build a 100-percent hydro-powered aggregation facility; build up its online ordering system and educational programs that focus on local agriculture; and for food education in the community, especially to children.

For more information: B&I.¹⁰⁵

Contact: Contact your local Rural Development office.¹⁰⁶

Community Facilities Grants and Loans Programs

Administered by Rural Housing and Community Facilities

The Community Facilities Program has the authority to provide direct and guaranteed loans and grants for the development of essential community facilities in rural areas and towns of up to 20,000 in population.

105 www.rurdev.usda.gov/rbs/busp/b&i_gar.htm

106 www.rurdev.usda.gov/recd_map.html

Authorized activities: Funds may be used to construct, enlarge, extend, or otherwise improve essential community facilities providing an essential service primarily to rural residents and rural businesses. Community facilities are limited to those providing or supporting overall community development such as healthcare facilities, public safety, and public service. All facilities financed in whole or in part with Rural Housing Service funds shall be for public use.

Funding: The average direct loan in fiscal year (FY) 2011 was \$1,140,319 and the average grant in fiscal year (FY) 2011 was \$29,825. Grant funds can be used for up to 75 percent of the cost to develop the facility. Funding for the balance of the project may consist of other CF financial assistance, applicant contributions, or loans and grants from other sources. Grant assistance will be provided on a graduated scale with smaller communities with the lowest median household incomes being eligible for projects with a higher proportion of grant funds.

Eligible applicants: Grants are available to public bodies, non-profits, and tribal governments. In addition, applicants must have the legal authority necessary for construction, operation, and maintenance of the proposed facility. Applicants must be unable to obtain needed funds from commercial sources at reasonable rates and terms.

Example project: In 2010, Polson Loaves and Fish Pantry in Montana received a \$20,000 grant to purchase a walk-in freezer to supplement its storage capacity, and a forklift to move the donations it receives from the community.

For more information: Community Facilities Loans and Grants.¹⁰⁷

Contact: Contact your local Rural Development office.¹⁰⁸

Rural Economic Development Loan and Grant Program (REDLG)

Administered by Rural Business—Cooperative Service

Promotes rural economic development and job creation projects in rural areas. Assistance may include business startup costs; business expansion; business incubators; technical assistance; feasibility studies; advanced telecommunications services; computer networks for medical, educational, and job training services; and community facilities projects for economic development.

Authorized activities: Research and feasibility studies, business planning, construction, and training and technical assistance.

Funding: Depending on appropriations, but likely to be a \$740,000 loan maximum and \$300,000 grant maximum.

Eligible applicants: Local utilities which, in turn, pass through to local businesses (ultimate recipients) for projects that will create and retain employment in rural areas (including business ventures for producers of locally-grown agricultural products).

Example project: Examples of funded projects include capitalization of revolving loan funds, technical assistance in conjunction with projects funded under a zero interest REDLoan (to include financing of food processing, marketing and distribution business ventures and business incubators).

For more information: Funds are not distributed to States; all funds are retained in the National Office. Selections are made quarterly based on a National competition. See REDLG.¹⁰⁹

Contact: Contact your local Rural Development office.¹¹⁰

Intermediary Relending Program (IRP)

Administered by Rural Business—Cooperative Service

Finances business facilities and community development projects that alleviate poverty and increase economic activity and employment in rural communities. Examples of projects include the acquisition, construction, conversion, enlargement, or repair of a business or business facility, particularly when jobs will be created or retained; the purchase or development of land (easements, rights of way, buildings, facilities, leases, materials); the purchase of equipment, leasehold improvements, machinery, supplies start-up costs and working capital; pollution control and abatement; transportation services; and feasibility studies.

Authorized activities: Research and feasibility studies, business planning, construction, land lease or purchase, equipment purchase, and training and technical assistance.

Funding: An intermediary may borrow up to \$2 million for its first financing and up to \$1 million at a time thereafter. Total debt is capped at \$15 million. In recent years, loans to intermediaries have been capped at \$750,000. Ultimate recipients may borrow up to \$250,000.

Eligible applicants: Local governments, nonprofits, Indian tribes, and cooperatives with at least 51 percent rural membership¹¹¹ are eligible to apply.

For more information: IRP.¹¹²

Contact: Contact your local Rural Development office.¹¹³

107 www.rurdev.usda.gov/HCF_CF.html

108 www.rurdev.usda.gov/recd_map.html

109 www.rurdev.usda.gov/rbs/busp/redlg.htm

110 www.rurdev.usda.gov/recd_map.html

111 The definition of "rural" includes a population limit of 25,000

112 www.rurdev.usda.gov/rbs/busp/irp.htm

113 www.rurdev.usda.gov/recd_map.html

USDA, Agricultural Marketing Service

www.ams.usda.gov

Farmers Market Promotion Program (FMPP)

Administered by Marketing Grants and Technical Services Branch

Grant program designed to facilitate and promote farmers markets and other direct-to-consumer market channels for agricultural products. The emphasis is on direct-to-consumer marketing, including multi-farm CSAs and online buying clubs.

Authorized activities: Research and feasibility studies, business planning, equipment purchase, and training and technical assistance.

Funding: The maximum amount awarded for a proposal cannot exceed \$100,000. Approximately \$10 million each year is allocated for Fiscal Years 2011 and 2012.

Eligible applicants: Agricultural cooperatives, producer networks, producer associations, local governments, nonprofit corporations, public benefit corporations, economic development corporations, farmers market authorities, and tribal governments.

Example project: The Oklahoma Food Cooperative received \$66,200 in 2007 to enhance its distribution system with better transportation and computerized recordkeeping equipment so it could expedite the delivery of produce using a Web-based marketing and ordering system for regional producers. The cooperative is a producer- and consumer-owned cooperative based in Oklahoma City, OK. More than 200 producer members sell 6,000 individual items to co-op members using an Internet ordering portal. They run 48 member-operated distribution routes that reach cities,

towns, and hamlets across Oklahoma. All products sold through the cooperative must be produced in Oklahoma.

For more information: Competitive grants are awarded annually. For more information see FMPP.¹¹⁸

Contact: Carmen Humphrey, Program Manager: 202-720-8317 or Carmen.Humphrey@ams.usda.gov.

Federal-State Marketing Improvement Program (FSMIP)

Administered by Agricultural Marketing Service

Provides matching funds to States to explore barriers, challenges, and opportunities in marketing, transporting, and distributing food and agricultural products. Because of the program's broad flexibility, many types of projects are possible, such as determining market demand for local products, evaluating online marketing tools such as MarketMaker,¹¹⁹ developing protocols for harvesting excess crops for food banks, and developing food hub business plans.

Authorized activities: Research and feasibility studies, business planning, marketing and promotion, equipment rental, building or room rental, and training and technical assistance

Funding: Grants average \$50,000 and generally range from \$25,000 to \$135,000.

Eligible applicants: State departments of agriculture, which often partner with local organizations. See State department of agriculture Web sites for more information. Also State universities and other appropriate State agencies. This is not a grant program for individuals or individual businesses.

Example project: In 2010, the Ohio Department of Agriculture, in partnership with the Appalachian Center for Economic Networks, was awarded \$54,375 to foster development of new local food processing, aggregation, and distribution infrastructure in Ohio.

For more information: FSMIP.¹²⁰

Contact: Janise Zygmunt, Staff Officer: 202-720-5024 or Janise.Zygmunt@ams.usda.gov.

Specialty Crop Block Grant Program (SCBGP)

Administered by Agricultural Marketing Service

Enhances the competitiveness of specialty crops (fruits, vegetables, tree nuts, dried fruits, horticulture, nursery crops, and floriculture), including locally grown and consumed specialty crops. Supports a State's specialty crop funding priorities, including Statewide and local food systems, all of which must solely support specialty crops, including school and community gardens; farm-to-school programs; good agricultural practices and good handling practices certification and training for farmers; development of cooperatives and local or regional e-commerce that support the processing, aggregation, and distribution of locally grown specialty crops; and improving access to specialty crops in underserved communities.

Authorized activities: Research and feasibility studies, business planning, marketing and promotion, and training and technical assistance.

¹¹⁸ www.ams.usda.gov/FMPP

¹¹⁹ national.marketmaker.uiuc.edu

¹²⁰ www.ams.usda.gov/FSMIP

Funding: Varies by State.
Eligible applicants: Block grants are awarded directly to State departments of agriculture.

Example project: In 2010, the California Department of Food and Agriculture was awarded \$150,000 to partner with the Brentwood Agricultural Land Trust to develop a business plan to expand the Brentwood-Richmond Farm 2 Table Community Supported Agriculture (CSA),

identify efficient ways to aggregate and transport source-identified specialty crops from local producers, and provide nutrition programs to CSA families.

For more information: SCBGP.¹²¹

Contact: Trista Etzig: 202-690-4942 or trista.etzig@usda.gov; John Miklozek: 202-720-1403 or john.miklozek@usda.gov; or Jenny Greer, 202-205-3941 or jenny.greer@usda.gov.



USDA, National Institute of Food and Agriculture

Community Food Projects Competitive Grant Program (CFP)

Administered by National Institute of Food and Agriculture

Designed to increase food security in low-income communities by developing linkages between sectors of the food system, supporting the development of entrepreneurial projects, and encouraging communities' long-term planning.

Authorized activities: Research and feasibility studies, business planning, construction, working capital, and marketing and promotion.

Funding: \$10,000 to \$300,000 (lasting 1 to 3 years).

Eligible applicants: Nonprofit entities that need a one-time infusion of Federal assistance to establish and carry out multipurpose community food projects.

Example project: The American Friends Service Committee in Albuquerque received a \$300,000 grant in 2009 for 3 years of funding to develop the New Mexico Agri-Cultura Network, a local foodshed that works with

small growers, procurement agents, institutional buyers, and policymakers to bring farm-fresh produce into Albuquerque public schools. Economic revitalization of the South Valley is a priority, with the project emphasizing training of low-income community members to be agricultural producers, helping to meet local food needs, and incorporating innovative marketing strategies that benefit both agricultural producers and low-income consumers.

For more information: CFP.¹²²

Contact: Jane Clary, National Program Leader, Nutrition/Extension: 202-720-3891 or jclary@nifa.usda.gov.

Sustainable Agriculture Research and Education (SARE)

Administered by NIFA through cooperative agreements with regional offices in Northeast, North Central, Southern, and Western regions.

Advances sustainable innovations in American agriculture. Supports research on topics such as on-farm renewable energy, pest and weed management, sustainable communities, agro-forestry, marketing, and more.

www.nifa.usda.gov

Authorized activities: Research and feasibility studies (but no business planning), training, and technical assistance.

Funding: Research and Education

Grants: \$10,000 to \$200,000 or more.

Professional Development Grants: from \$20,000 to \$120,000. Producer

Grants: between \$1,000 and \$15,000. Other grant types in some regions.

Eligible applicants: Nonprofit organizations, researchers, and individual producers.

Example project: Great Falls Food Hub, in the Central Connecticut River Valley bioregion of Vermont, received a \$15,000 Sustainable Community grant from Northeast SARE to research and assess new distribution models, increase access to value-added infrastructure, and develop programs to deliver local foods to low-income families. The facility includes dry, cold,

¹²¹ www.ams.usda.gov/scbgrp

¹²² www.nifa.usda.gov/funding/rfas/pdfs/11_community_foods.pdf

and frozen storage facilities; a licensed, commercial-sized food processing kitchen to do value-added, incubator, commercial, and educational activities; and a wholesale/retail distribution outlet for fresh, stored, and processed local food. It also conducts community workshops (on gardening, cooking, preserving, storing, and season extension) and holds community celebrations and cultural events.

For more information: You can find links to regional Web sites at SARE.¹²³

Contact: Rob Hedberg:
rhedberg@nifa.usda.gov

Beginning Farmer and Rancher Development Program (BFRDP)

Administered by National Institute of Food and Agriculture

For costs associated with education, training, outreach, and mentoring beginning farmers and ranchers, as long as the costs are normally allowable and reasonable. Funds can be used to pay beginning farmers to participate in the program; paid internships are allowed. May be used for acquisition of non-fixed equipment for use on the project, including high tunnels. It may not be used for the planning, repair, rehabilitation, acquisition, or construction of buildings or facilities or to buy land, match International Development Association funds, purchase equipment for starting farm or ranch businesses, or for research activities.

Authorized activities: Training and technical assistance, and equipment purchase (non-fixed).

Funding: No minimum; maximum award \$250,000 for up to 3 years (\$750,000 total).

Eligible applicants: Collaborative, State, tribal, local, or regionally based networks or partnerships of public or private entities, which may include the

State cooperative extension service, community-based and nongovernmental organizations, colleges or universities (including institutions awarding associate degrees), or any other appropriate partner. Others may be eligible to apply.

Example project: The Gorge Grown Food Network, a food hub in the rural Columbia River Gorge region of Oregon and Washington, received \$246,533 in 2010 to develop self-sustaining producer working groups for key production niches and communities that equip farmers with the knowledge, skills, and tools they need to be successful and increase farmer-to-farmer mentoring and resource sharing. See *Growing Gorge Farmers Through Producer Working Groups*.¹²⁴

For more information: BFRDP.¹²⁵

Contact: Siva Sureshwaran, National Program Leader, Division of Agricultural Systems: 202-720-7536 or ssureshwaran@nifa.usda.gov.

Agriculture and Food Research Initiative (AFRI): Global Food Security

Administered by National Institute of Food and Agriculture

AFRI has seven “challenge” areas; this challenge area focuses on global food security. The long-term outcomes for this program are to increase food availability through increased sustainable food production and to decrease the number of food-insecure individuals, families, and communities by addressing key constraints to food accessibility and implementing solutions that enhance sustainable food systems. One program area relevant to food hubs is “Sustainable Food Systems to Reduce Hunger and Food Insecurity.” This program supports integrated research, education, and extension projects that increase food security by having access to improved sustainable local and regional food systems. Projects could include components such as, sustainable food production, processing, distribution,

marketing, addressing policy and consumer issues, healthy food choices, farmer prosperity, and natural resource issues, such as increased biodiversity, clean water, and healthy soils.

Authorized activities: Research, education, and extension integrated projects, conference, and strengthening grants.

Funding: In FY 2010, approximately \$19 million, and \$15 million for FY 2012, was available to support the Global Food Security Challenge Area within AFRI. In 2010 for the Food Systems program, five projects up to \$1 million per year (\$5 million total) for up to 5 years were available.

Eligible applicants: Colleges and universities, 1994 Land-Grant Institutions, and Hispanic-serving agricultural colleges and universities.

Example project: AFRI provided funding for the “Making Good Food Work” Conference in Detroit (April 2011). This action-oriented conference brought together more than 200 participants with food systems and business expertise from across the United States to help catalyze 13 local and regional food distribution and marketing initiatives and to advance related research, policy, and community and economic development goals. Visit Making Good Food Work¹²⁶ for more information.

For more information: AFRI.¹²⁷

Contact: Diana Jerkins, National Program Leader, Institute of Bioenergy, Climate and the Environment: 202-401-6996 or djerkins@nifa.usda.gov.

123 www.sare.org

124 www.reeis.usda.gov/web/crisprojectpages/223598.html

125 www.nifa.usda.gov/fo/beginningfarmerandrancher.cfm

126 www.makinggoodfoodwork.com

127 www.nifa.usda.gov/funding/rfas/afri.html

USDA, Farm Service Agency

Farm Storage Facility Loan Program

Administered by Deputy Administrator for Farm Programs, Price Support Division

Provides low-interest financing for producers to build or upgrade on-farm storage and handling facilities.

Finances the purchase, construction, or refurbishment of farm storage facilities including on-site storage, cooling, cribs, bins, safety equipment, and cooling and monitoring devices, including off-farm labor and materials. Examples of funding include building grain, hay, and storage facilities; permanently affixed cooling, circulating, and monitoring equipment; new concrete foundations, aprons, pits, and pads, including site preparation, labor and material; and new conventional cribs or bins designed for whole grain storage. This is a loan program, not a grant program.

Authorized activities: Research and feasibility studies, business planning (attorney or archeological fees permitted), construction, and equipment purchase.

Funding: Up to \$500,000.

Eligible applicants: Awardees must produce an eligible facility loan commodity. The producer can be any person who is a landowner, landlord, leaseholder, or tenant. Must have a satisfactory credit rating and demonstrate the ability to repay the facility loan. The facility must be used solely by the borrower(s) and not for commercial purposes.

Example project: Growers who sell to food hubs could follow the example of one farmer awardee from Washington State, who grows blackberries,

www.fsa.usda.gov

strawberries, blueberries, raspberries, cucumbers, and potatoes. Prior to receiving a Farm Storage Facility Loan, he had to pay for off-site cold storage in order to meet supermarket requirements that product be cooled immediately after harvest. Now he owns a 90- by 160-foot refrigerated facility that lowers his transportation costs and improves his product quality.

For more information: FSA.¹²⁸

Contact: For more information on this or other FSA farm programs, contact your local FSA county office or Toni Williams, Program Manager: 202-720-2270 or Toni.Williams@wdc.usda.gov.

USDA, Natural Resources Conservation Service

Environmental Quality Incentives Program (EQIP)

Administered by Natural Resources Conservation Service

Provides financial and technical assistance for planning and implementing conservation practices that address threats to soil, water, air, and other natural resources on farm and ranch lands. Could be used to improve irrigation systems to conserve water, install an anaerobic digester or composting pad to manage animal waste, or install buffers to reduce erosion and protect wildlife. Conservation practices established through EQIP help producers comply with Federal, State, and local environmental regulations. The 2008 Farm Bill includes provisions to assist certified organic producers and those who are transitioning to organic to

comply with provisions of the National Organic Program. In 2010, EQIP began offering support for a new conservation practice, "Seasonal High Tunnels," to address soil quality resource concerns and to extend the growing season for fresh market vegetable producers.

Authorized activities: Technical help to develop conservation plans and financial assistance to help implement conservation practices. Under certain circumstances, payments may include training assistance and other services from Technical Service Providers.

Funding: Participants may not receive, directly or indirectly, payments that, in the aggregate, exceed \$300,000 for all EQIP contracts entered into during any 6-year period.

www.nrcs.usda.gov

Eligible applicants: Owners of land in agricultural or forest production or persons who are engaged in livestock, agricultural, or forest production on eligible land and who have a natural resource concern. Tribal lands are also eligible.

Example project: In 2010, Local Food Hub in Charlottesville, VA, received funding for a seasonal high tunnel to extend their growing season and to offer crops that are in high demand for a longer period of time. The seasonal high tunnel is also used as a teaching tool for producers to learn about conservation and organic production.

For more information: NRCS.¹²⁹

Contact: Contacts are available by State: NRCS State Offices Directory.¹³⁰

128 www.fsa.usda.gov

129 www.nrcs.usda.gov

130 www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states

Community Economic Development Grants (CED)

Administered by Administration for Children and Families, Office of Community Services

Provides technical and financial assistance for the creation of employment and business opportunities in low-income communities. Serves the dual purposes of facilitating access to healthy food options and creating job and business development opportunities in low-income communities. Includes projects addressing the elimination of food deserts and that finance grocery stores, farmers markets, and other retail sources that provide access to fresh nutritious food. Includes projects that collaborate in the Healthy Food Financing Initiative through New Market Tax Credits; Community Development Financial Institution Funds; or loans, grants, or promotions through the U.S. Department of Agriculture. Uses for funding include startup or expansion of businesses or commercial activities; capital expenditures such as the purchase of equipment or real property; allowable operating expenses; and loans or equity investments. Types of projects funded include business incubators, shopping centers, manufacturing businesses, and agriculture initiatives. Finances grocery stores, farmers markets, and other sources of fresh food.

Authorized activities: Construction, marketing and promotion, working capital, training, technical assistance, equipment purchase, and land lease or purchase.

Funding: Up to \$20 million for the program; 20 to 25 grants are awarded. The maximum grant award is \$800,000. Funds may cover project costs for business start-up or expansion and the development of new products and services that focus on the elimination of food deserts or that provide communities with access to healthy foods.

Eligible applicants: Private, nonprofit community development corporations (CDCs) having a 501 (c)(3) status and experienced in developing and managing economic development projects. For purposes of this grant program, the CDCs must be governed by a board of directors consisting of residents of the community and business and civic leaders. The principal purpose of the CDCs must be planning, developing, or managing low-income housing or community development activities. Faith-based and community organizations are also eligible to apply.

Example projects: Grocery stores, farmers markets, business incubators, and healthy food access initiatives. Encourages grantees to focus on environmental industries, such as green products, recycling, renewable or alternative energy, or urban agriculture and horticulture.

For more information: CED.¹³³

Contact: Thom Campbell, Office of Community Services, Administration for Children and Families: 370 L'Enfant Promenade SW, Washington, DC, 20447 or 202-401-5483 or thom.campbell@acf.hhs.gov.

Communities Putting Prevention To Work

Administered by Centers for Disease Control and Prevention

Funds 50 communities through 2-year cooperative agreements to implement obesity, nutrition, physical activity, and tobacco-control strategies. Funds are for policy, environmental, and systems change initiatives. Recipients may only expend funds for reasonable program purposes, including personnel, travel, supplies, and contractual services to reduce members' risk. Funds must be used to prevent and delay chronic disease, promote wellness, or better manage chronic conditions in the following areas: to increase

levels of physical activity, to improve nutrition (such as increasing fruit and vegetable consumption or reducing salt and trans fats), to decreasing smoking prevalence and teen smoking initiation, and to decrease exposure to secondhand smoke. Funds cannot be used for research, clinical care, or to purchase furniture or equipment.

Authorized activities: Training and technical assistance.

Funding: Feb 2010: \$119 million to States and territories. March 2010: \$372.8 million in American Recovery and Reinvestment Act funding. September 2010: \$30.1 million in Affordable Care Act funding to 50 communities as part of one-time infusion. Most awards are \$1 million to \$16 million for obesity and tobacco prevention.

Eligible applicants: Programs in State and territorial health departments (including the District of Columbia, Puerto Rico, and the Virgin Islands) and their bona fide agents. Funding is specifically directed to State and local health departments for evidenced-based clinical and community-based prevention and wellness activities.

Example project: The County of San Diego Health and Human Services Agency in California received \$16.1 million to promote improved nutrition. The County of San Diego will address regional food systems and the establishment of a San Diego-based food distribution center, link local food demand to supply, and increase access to healthy foods, especially in high-need areas. To increase physical activity, interventions will improve the environment through integrating public health in transportation and land-use planning policies. To promote healthy school environments, the county will enhance and implement school wellness

and before- and after-school physical activity policies to create environments that promote nutrition, physical activity, and overall student wellness. For more information, see Communities Putting Prevention to Work.¹³⁴

For more information: Communities Putting Prevention to Work Grant Information¹³⁵ and Affordable Care Act.¹³⁶

Contact: Technical Information Management Section, Department of Health and Human Services, CDC Procurement and Grants Office, 2920 Brandywine Road, MS E-14, Atlanta, GA 30341 or 770-488-2700.

Community Transformation Grants

Administered by Centers for Disease Control and Prevention

Creates healthier communities by building capacity to implement policy, environmental, programmatic, and infrastructure changes. Supports implementation of interventions in five strategic areas:

- Changes in weight
- Changes in proper nutrition
- Changes in physical activity
- Changes in tobacco use prevalence
- Changes in emotional well-being and overall mental health.

Capacity-building awards help build coalitions, train staff, conduct needs assessment, and develop action plans. For example, they might create social and physical environments that support healthy living and ensure that healthy choices are the easy choice by increasing the availability of and access to healthy and affordable food options such as fresh fruits and vegetables. They might increase consumer choice and eliminate food deserts.

Implementation awards help communities operate programs that improve health and wellness. Note that these grants do not permit research, but recipients may carry out evaluation activities to document the impact of their funded programs.

Authorized activities: Training, technical assistance, and evaluation studies.

Funding: In 2011, Capacity-building awards were between \$50,000 and \$500,000. Implementation awards were between \$500,000 and \$10 million for States, local governments, and nonprofit organizations; between \$50,000 and \$150,000 for territories; and between \$100,000 and \$500,000 for tribal and American Indian/Alaska Native consortia.

Eligible applicants: State and local jurisdictions, national networks of community based organizations, State or local nonprofits, and Native American tribes

Example project: Sixty-one awards were made on September 30, 2011. Recipients will be finalizing their work plans by the end of 2011.

For more information: CDC Awards Community Transformation Grants¹³⁷ and Community Transformation Grants.¹³⁸

Contact: John R. Lehnerr: ctg@cdc.gov or jrl5@cdc.gov.

U.S. Department of the Treasury

Community Development Financial Institutions (CDFI) Program

Administered by Community Development Financial Institutions Fund

The CDFI Program has two distinct components: financial assistance (FA) and technical assistance (TA). In both cases, funding goes to financial intermediaries (CDFIs) who provide finance to third parties. This program does not provide direct funding to specific projects, but CDFIs can choose to fund almost any aspect of a project. FA awards can be used for financing capital, loan loss reserves, capital reserves, and operations. TA awards can be used for personnel (salary and fringe benefits), training, travel, professional services,

materials and supplies, equipment and other capital expenditures, and other service delivery-related costs.

Authorized activities: Must be funded through a CDFI: Research, feasibility studies, business planning, construction, land lease or purchase, marketing and promotion, working capital, equipment purchase, training, and technical assistance.

Funding: FA awards are up to \$2 million. TA awards are usually awarded up to \$100,000.

Eligible applicants: Certified CDFIs (financial institutions: banks, thrifts, credit unions, loan funds, and venture

Each of the programs offered by the U.S. Department of Treasury is intended for financial institutions or Community Development Entities. Food hubs may apply for funding from entities awarded by these programs, but they cannot apply directly to these programs for funds.

www.treasury.gov

capital funds) with a principal mission of serving underserved populations or distressed communities. Food hubs should contact a local CDFI to learn about funding opportunities.

134 www.sdcounty.ca.gov/hhsa/programs/phs/chronic_disease_health_disparities/CPW.html

135 www.hhs.gov/recovery/programs/cppw/grantees.html

136 www.cfda.gov/?s=programandmode=formandtab=step1andid=d67e9bb88f5750a983f448646d4df647

137 www.cdc.gov/Features/CommunityGrants/

138 www.cdc.gov/communitytransformation/index.htm

Example project: In 2011, Coastal Enterprises Inc. (CEI), a certified CDFI in Maine, was awarded a \$3 million Healthy Food Financing Initiative CDFI award to support its Rural Healthy Food Access initiative, a program designed to increase the availability and affordability of fresh, healthy, local foods for residents of low-income communities. CEI works with a variety of agricultural enterprises along the supply chain—farms, slaughterhouses, grist mills, food processing firms, seed companies, custom processing facilities, farmers markets, restaurants, community markets, and co-ops—that serve as centralized outlets for agricultural products and facilitate access to wider markets.

For more information: CDFI Programs.¹³⁹ The 2011 Healthy Food Financing Initiative CDFI awardees are listed at List of Award Recipients.¹⁴⁰

Contact: Ruth Jaure, CDFI Program Manager: 202-622-9156 or jaurer@cdfi.treas.gov.

New Market Tax Credit (NMTC)

Administered by Community Development Financial Institutions (CDFI) Fund

Similar to the CDFI Program, the New Markets Tax Credit program makes allocations to financial entities called Community Development Entities (CDEs). CDEs use the tax credits to raise capital, which is then invested in projects as debt or equity. Individuals trying to fund specific projects should work with CDEs that received allocations, rather than apply directly to the CDFI Fund.

Authorized activities: Working capital.

Funding: \$250 million in authority for the NMTC and \$25 million for financial assistance to CDFIs devoted to helping finance healthy food options. The NMTC credit is taken over a 7-year period and equals 39 percent of the amount of original investment. The credit rate is 5 percent of the original investment amount in each of the first 3 years and 6 percent of the original investment amount in each of the final 4 years.

Eligible applicants: Certified community development entities (CDEs), or entities that have CDE certification applications pending with the CDFI Fund. Food hubs are advised to contact a local CDE to learn more about funding opportunities.

Example project: Carver Community Development Corporation in New York was allocated \$25 million in 2010 to provide capital for the development, renovation, or acquisition of commercial real estate that will create or maintain jobs and increase wages for low-income persons or residents of low-income communities. Carver finances businesses that provide child care, community facilities, fresh food, health care, education, or other benefits to low-income persons or residents of low-income communities.

For more information: NMTC Programs.¹⁴¹

Contact: Robert Ibanez, NMTC Program Manager: 202-927-6232 or cdfihelp@cdfi.treas.gov.

U.S. Department of Housing and Urban Development

Rural Housing and Economic Development Program (RHED)

Administered by Office of Community Planning and Development

Provides for capacity building at the State and local level for rural housing and economic development and to support innovative housing and economic development activities in rural areas. Possible activities include: preparation of plans, architectural drawings, acquisition of land and buildings, demolition, provision of infrastructure, purchase of materials and construction costs, use of local labor markets, job training and counseling for beneficiaries, and financial services. Other possible activities include financial counseling; application of innovative construction methods;

provision of financial assistance to businesses and developers; and the establishment of CDFIs, lines of credit, revolving loan funds, microenterprises, and small business incubators.

Authorized activities: Construction, land lease or purchase, equipment purchase, working capital, and training and technical assistance.

Funding: No fiscal year 2012 appropriation is requested for the Rural Housing and Economic Development (RHED) program. Instead, the fiscal year 2012 budget, like 2010, proposes a \$25 million Rural Innovation Fund initiative in the Community Development Fund account.

www.hud.gov

Eligible applicants: Eligible applicants are local rural nonprofits, community development corporations, federally recognized Indian tribes, State housing finance agencies, and State community and economic development agencies.

For more information: RHED.¹⁴²

Contact: Thann Young, Community Planning and Development Specialist, 451 7th Street, SW, Washington, DC, 20410 or 877-787-2526 or 202-708-2290.

¹³⁹ www.cdfifund.gov/what_we_do/programs_id.asp?programID=7

¹⁴⁰ www.cdfifund.gov/docs/2011/hffi/2011%20HFFI%20Award%20List.pdf

¹⁴¹ www.cdfifund.gov/what_we_do/programs_id.asp?programID=5

¹⁴² www.hud.gov/offices/cpd/economicdevelopment/programs/rhed

Community Development Block Grant Program (CDBG)

Administered by Office of Community Planning and Development

Works to ensure decent affordable housing, to provide services to the most vulnerable in our communities, and to create jobs through the expansion and retention of businesses. The CDBG program contains many program areas: Entitlement Communities, State Administered CDBG, Section 108 Loan Guarantee Program, Insular Areas, Disaster Recovery Assistance, and the Neighborhood Stabilization Program. Activities must be CDBG-eligible and meet one of the following three national objectives of the CDBG program: benefit low- or moderate-income persons, prevent or eliminate slums or blighted areas, or address an urgent community development need.

Authorized activities: Land lease or purchase, construction, equipment purchase, working capital, and training and technical assistance.

Funding: Approximately \$4.5 billion was available in 2011. Provides annual grants on a formula basis to local government and States.

Eligible applicants: Metropolitan cities and urban counties and non-entitlement communities.

Example project: In 2009, the State of Louisiana approved \$7 million for the Fresh Food Retailers Initiative program, allowing the City of New Orleans to access Federal Disaster Community Development Block Grant funds needed to implement the project. The Fresh Food Retail Initiative is a 3-year program of forgivable and low-interest loans made to supermarkets, grocery stores, and other fresh food retailers that provide healthy food at affordable prices in underserved neighborhoods in New Orleans.

For more information: CDBG.¹⁴³

Contact: Stan Gimont, Director, Office of Block Grant Assistance: 202-708-3587

Sustainable Communities Regional Planning Grants

Administered by Office of Sustainable Housing and Communities

Supports planning efforts that integrate housing, land use, economic and workforce development, transportation, and infrastructure investments. Places a priority on partnerships, including nontraditional partnerships such as arts and culture, recreation, public health, food systems, regional planning agencies, and public education entities. There are two funding categories:

Group 1 Funds can be used to support the preparation of regional plans for sustainable development. Funds will support stakeholder-driven visioning- and scenario-planning exercises that address and harmonize critical land use and investment decisions, support cost-effective and sustainable transportation and water infrastructure investments, designate lands for conservation and ongoing agricultural use, proactively consider risks from disasters and climate change, and develop sophisticated mapping resources that communities can access to address these and other regional planning issues.

Group 2 Funds can be used to support efforts to modify existing regional plans. Eligible activities include tasks necessary to develop a regional plan for sustainable development and align investments with this plan; to improve management capability to implement the plan; and to develop relevant policy, planning, and evaluation capacity.

Authorized activities: Research and feasibility studies, business planning, land lease or purchase, training and technical assistance.

Funding: In FY 2011, \$67 million was available, including \$17.5 million committed to regions with a population of less than 500,000. Grants range from \$400,000 to \$5 million.

Eligible applicants: Multi-jurisdictional and multi-sector partnership consisting of a consortium of government entities and nonprofit partners.

Example project: The Capital Area Regional Planning Commission won a \$2 million Sustainable Community Regional Planning Grant. One project identified in the grant is preparing a business plan for "an aggregation, storage, and distribution facility that connects growers in the Capitol Region with wholesale buyers in southern Wisconsin and northern Illinois for the purpose of preserving, strengthening and promoting local Wisconsin agriculture and improving food access in underserved communities."

For more information: Sustainable Communities¹⁴⁴ and Notice of Funding Availability.¹⁴⁵

Contact: Dwayne S. Marsh: 202-402-6316 or SustainableCommunities@hud.gov.

Community Challenge Grants

Administered by Office of Sustainable Housing and Communities

Fosters reform and reduces barriers to achieving affordable, economically vital, and sustainable communities. Can be used for efforts such as amending or replacing local master plans, zoning and building codes to promote mixed-use development, and the rehabilitation of older buildings and structures with the goal of promoting sustainability at the local and neighborhood levels. Eligible activities include: development and implementation of local, corridor, or district plans and strategies that promote livability and sustainability while avoiding residential and small business

143 portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs

144 www.sustainablecommunities.gov

145 portal.hud.gov/hudportal/documents/huddoc?id=2011scrgpreappnofa.pdf

displacement; comprehensive reviews to develop and prioritize revisions to zoning codes, ordinances, building standards, administrative regulations or actions, or other laws to remove barriers and promote sustainable and mixed-use development; develop building codes that balance energy-efficient rehabilitation of older structures and the creation affordable and healthy housing; and development of community-scale energy strategies and implementation plans and climate adaptation plans.

Authorized activities: Research and feasibility studies, business planning, land lease or purchase, training and technical assistance.

Funding: In FY 2011, \$28,000,000 was available, including \$3 million set aside for jurisdictions with populations under 50,000. The minimum award size is \$100,000 and the maximum award is \$3 million.

Eligible applicants: State and local governments, including U.S. territories, tribal governments, political subdivisions of State or local governments, and multi-State or multi-jurisdictional groupings.

Example project: In October 2010, HUD awarded a \$2.25 million grant to the Community Redevelopment Agency of the City of Los Angeles (CRA/LA). The Northeast Los Angeles (NELA) Collaborative will involve CRA/LA, the Department of City Planning and the

City's Department of Transportation, plus planning consultants and the community. With technical assistance from the Urban and Environmental Policy Institute at Occidental College, the NELA Collaborative will work to create a Los Angeles regional food hub (RFH). An RFH works with farmers to gather, store, process, distribute, and market locally or regionally produced food, providing green jobs and access to fresh foods for the community and institutions.

For more information: Sustainable Communities¹⁴⁶ and Notice of Funding Availability.¹⁴⁷

Contact: Sunaree K. Marshall: 202-402-6011 or SustainableCommunities@hud.gov.

U.S. Department of Commerce

Public Works and Economic Development Program

Administered by Economic Development Administration (EDA)

Supports the construction or rehabilitation of essential public infrastructure and facilities to help communities and regions leverage their resources and strengths to create new and better jobs, drive innovation, become centers of competition in the global economy, and ensure resilient economies. Projects include investments in water and sewer systems, broadband, industrial access roads, industrial and business parks, port facilities, rail spurs, skill-training facilities, business incubator facilities, and brownfield redevelopment.

Authorized activities: Construction and equipment purchase.

Funding: In 2010, the average investment was \$1.7 million; investments ranged from \$500,000 to \$2 million. This average is informational only and is not intended to restrict the size of future awards.

Eligible applicants: District organizations; Indian tribes or a consortium of Indian tribes; State, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, and consortiums of political subdivisions; institutions of higher education or consortiums of institutions of higher education; and public or private nonprofit organizations or associations acting in cooperation with officials of a political subdivision of a State. See section 3 of PWEDA (42 U.S.C. § 3122) and 13 C.F.R. § 300.3.¹⁴⁸

Example project: In FY 2009, EDA invested \$4 million (a portion of which was public works funding) to fund the construction of the Central Wisconsin Agricultural Innovation Center, a multi-purpose building to promote collaboration between governmental, institutional, and private-sector agribusiness stakeholders and to provide space for incubator tenants to test agricultural product innovations.

The Economic Development Administration (EDA) administers seven economic development programs¹⁴⁹ and awards funds on a competitive basis. Of these programs, the Public Works and Economic Development and Economic Adjustment Assistance may be most relevant to support food hubs.

www.commerce.gov

For more information: EDA Programs.¹⁵⁰

Contact: Phil Saputo: 202-482-6331 or psaputo@eda.dopc.gov.

Economic Adjustment Assistance Program (EAA)

Administered by Economic Development Administration

Provides a wide range of construction and non-construction assistance, including public works, technical assistance, strategies, and revolving loan fund projects, in regions experiencing severe economic dislocations that may

146 www.sustainablecommunities.gov

147 portal.hud.gov/hudportal/documents/huddoc?id=2011scccpnofa.pdf

148 www.csrrdc.org/docs/econdev/Draft_CEDS_08-18-2011.pdf

149 www.eda.gov

150 www.eda.gov/contact.htm

occur suddenly or over time. EAA is designed to respond flexibly to pressing economic-recovery issues and is well suited to help address challenges faced by U.S. communities and regions.

Authorized activities: Feasibility studies, planning, technical assistance, construction, equipment purchase, and working capital (revolving loan funds).

Funding: In 2010, the average size of an investment was \$550,000; investments ranged from \$100,000 to \$1,250,000. However, this average is informational only and is not intended to restrict the size of future awards.

Eligible applicants: District organization; Indian Tribes or consortia of Indian tribes; State, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities or consortia of political subdivisions; institutions of higher education or consortia of institutions of higher education; and public or private nonprofit organizations or associations acting in cooperation with officials of a political subdivision of a State. See section 3 of PWEDA (42 U.S.C. § 3122) and 13 C.F.R. § 300.3 (PDF).

Example project: In FY 2010, EDA provided \$2 million in EAA assistance to the Vernon Economic Development Association and the City of Viroqua, WI, to fund the acquisition and renovation of a vacant manufacturing plant for use as an agribusiness education and enterprise center. The project also funded the purchase of equipment for the facility and hired a consultant to provide technical assistance and develop a marketing strategy to enhance the region's competitive strength in the organic farming industry.

For more information: EDA Programs¹⁵¹ and EDA.¹⁵²

Contact: Phil Saputo: 202-482-6331 or psaputo@eda.dopc.gov.



151 www.eda.gov
152 www.eda.gov/contact.htm

Sources of Funding From Foundations and Nonprofits

These foundations and nonprofits have funded activities in the areas of food systems, health, food access, economic development, and environmental sustainability. This does not mean these foundations or nonprofits will fund food hubs, only that they have funded food systems or at least have

an interest in some of the economic, social, or environmental impacts that food hubs can offer. The list is not intended to be exhaustive. More information about these foundations and others can be found at Sustainable Agriculture and Food Systems Funders.¹⁵³

Table 3. Funding sources from foundations and grants

Organization	Ben and Jerry's Foundation
Program name	National Grassroots Grant Program
Funding interests	Broad interests in social justice, environmental protection, and sustainable food systemsprotection, and sustainable food systems
Grant size	Up to \$15,000 for a 1-year period
Geographic focus	National
Website	www.benandjerrysfoundation.org/what-we-do
Eligibility	Nonprofits, generally organizations with budgets of \$500,000 or less, specifically grassroots, constituent-led organizations that are using community-organizing strategies to accomplish their goals and organizations that provide technical support and/or capacity-building resources to such groups.
Submission Info	The process starts with the Letter of Interest (LOI). LOIs are considered on a rolling basis and are reviewed within 30 days of submission.

Organization	Ben and Jerry's Foundation
Program name	Vermont Capacity Building Grant Program
Funding interests	Broad interests in social justice, environmental protection, and sustainable food systems
Grant size	Multi-year grant of up to \$25,000 per year
Geographic focus	Vermont
Website	www.benandjerrysfoundation.org/what-we-do
Eligibility	Vermont statewide organizations
Submission Info	Filing deadline is April 30

153 www.safsf.org/who/directory.asp

Organization	Cedar Tree Foundation
Program name	Sustainable Agriculture; Environmental Education; Environmental Health
Funding interests	Focus on environmental justice, and conservation, with a particular interest in urban agriculture
Grant size	Generally \$10,000–\$100,000
Geographic focus	
Website	www.cedartreefound.org
Eligibility	
Submission Info	Process begins with a Letter of inquiry. The fund managers will request full proposals for those projects whose letters indicate a good fit with the philanthropy.

Organization	Claneil
Program name	Community Grants
Funding interests	Hunger and nutrition, food systems; health and human services; education; environment
Grant size	\$5,000–\$15,000 (per year)
Geographic focus	Emphasis is placed on organizations located and serving communities in Chester, Delaware, Montgomery and Philadelphia counties
Website	www.claneilfoundation.org
Eligibility	
Submission Info	

Organization	Claneil
Program name	Special Project Fund
Funding interests	Hunger and nutrition, food systems; health and human services; education; environment. Particularly interested in cutting-edge approaches that are timely, demonstrate potential for significant impact, and can serve as a model for others.
Grant size	\$30,000–\$100,000
Geographic focus	National
Website	www.claneilfoundation.org
Eligibility	Emerging nonprofits, or new projects of established organizations that have the potential for transformative change
Submission Info	

Organization	Clarence E. Heller Charitable Foundation
Program name	Environment and Health
Funding interests	To promote the long-term good health and viability of communities and regions by supporting programs to prevent harm to human health from toxic substances and other environmental hazards; by encouraging planning and development at the regional level, aimed at integrating economic and social goals with sound environmental policies; and by supporting initiatives for sustainability in agriculture and food systems.
Grant size	\$5,000– \$600,000
Geographic focus	Priority is given to proposals from California organizations
Website	www.cehcf.org/env_health.html
Eligibility	Nonprofit organizations
Submission Info	Begin the process with a short letter of inquiry

Organization	First Nations Development Institute
Program name	Native Agriculture and Food Systems Initiative (NAFSI)
Funding interests	Addresses issues confronting tribes and Native communities as they seek to strengthen the food system in their communities, improve health and nutrition, and build food security. Through an integrated program approach, this initiative seeks to increase the control over Native agriculture and food systems.
Grant size	
Geographic focus	
Website	www.firstnations.org
Eligibility	Tribes and Native nonprofit organizations
Submission Info	

Organization	Geraldine R. Dodge Foundation
Program name	Ecosystem resilience and sustainable community solutions
Funding interests	Watersheds and wetlands, land preservation and acquisition, stewardship, and integrative land and resource management strategies that address the effects of urbanization, suburban expansion, and unsustainable agricultural practices; urban greening and regional food systems, particularly through community design, land use innovations, and working land strategies.
Grant size	\$5,000–\$350,000 (most 2011 grants were less than \$100,000)
Geographic focus	Focus on Morristown and Newark, NJ
Website	www.grdodge.org
Eligibility	501(c)3 organizations
Submission Info	Letter of inquiry to request an invitation for a full proposal

Organization	GRACE Communications Foundation
Program name	
Funding interests	The development of sustainable, community-based food production and regional food distribution networks; Public awareness of how sustainable agriculture contributes to social, environmental, economic and personal health; Policies that promote sustainable use of water resources for energy and food production; Policies that protect and promote clean drinking water; The development of small-scale distributed renewable energy systems; Increased public awareness of how individuals can improve their physical and emotional health.
Grant size	
Geographic focus	
Website	gracelinks.com
Eligibility	
Submission Info	

Organization	John Merck Fund
Program name	Rural New England
Funding interests	Creating more jobs, job training, and higher education opportunities for older youth (ages 16–25); expanding employment and career development options, including entrepreneurial ventures, for low-income women; and preserving and nurturing small-scale, economically viable and environmentally sustainable agricultural operations.
Grant size	\$20,000–\$200,000 (2011 grants)
Geographic focus	Focus on Maine, New Hampshire and Vermont
Website	www.jmfund.org/ruralnewengland.php
Eligibility	501(c)(3) and tax classification under Section 509(a), confirming that the organization is publicly supported
Submission Info	

Organization	Kresge
Program name	Community Development
Funding interests	Replicable, innovative models and exemplary financial vehicles for equitable reinvestment.
Grant size	Highlighted grants are \$700,000–\$3 million
Geographic focus	Detroit, and National
Website	www.kresge.org/programs/community-development
Eligibility	Nonprofits and government entities
Submission Info	Proposals by invitation only

Organization	Kresge
Program name	Environment: Fostering the development of place-based adaptation strategies
Funding interests	Place-based initiatives to develop innovative approaches to preparing for an uncertain climatic future.
Grant size	Previous grants are between \$60,000 and \$1.2 million
Geographic focus	National
Website	www.kresge.org/programs/environment/adaptation-climate-change/fostering-development-place-based-adaptation-strategi
Eligibility	Nonprofits and government entities
Submission Info	Proposals by invitation only, though there is a preliminary application form to let the funder know about your initiative

Organization	Kresge
Program name	Health
Funding interests	Reducing health disparities among children and adults living in the United States
Grant size	Previous grants between \$250,000 and \$750,000
Geographic focus	National
Website	www.kresge.org/programs/health
Eligibility	Nonprofits and government entities at the local, State and national levels
Submission Info	Varies, depending on the program – visit website for more information

Organization	Leopold Center for Sustainable Agriculture
Program name	Marketing and Food Systems
Funding interests	Marketing strategies and business structures that allow Iowa's farmers and communities to retain more of the value for energy, food, or fiber produced; education, research, and partnerships to increase investment and support of local and regional food, fiber, and energy enterprises; and strategies to address challenges that impede farmers and farmer networks from being equal partners in energy, food, or fiber-based value chains.
Grant size	About \$5,000–\$60,000
Geographic focus	Iowa
Website	www.leopold.iastate.edu
Eligibility	Iowa colleges and universities and private nonprofit agencies and foundations
Submission Info	A request for pre-proposals is the first step in applying for a competitive grant

Organization	Organic Valley's Farmers Advocating for Organics (FAFO) fund
Program name	
Funding interests	Programs dedicated to furthering organic education, organic farming or product research, and organic advocacy.
Grant size	\$5,000–\$50,000 per year, plus small grants less than \$5,000
Geographic focus	National
Website	www.organicvalley.coop/about-us/donations/fafo-fund
Eligibility	Individuals, universities, public/private schools, NGOs, farmers, and consumers
Submission Info	Proposal should be 2–8 pages, due twice a year, in February and September (Small grants are accepted any time)

Organization	RSF Social Finance
Program name	Shared Gifting Funds (Food and Agriculture Focus Area)
Funding interests	An unusual program where the grantees have a say in fund allocation.
Grant size	6–8 grants from a pool of \$50,000
Geographic focus	San Francisco Bay Area
Website	rsfsocialfinance.org
Eligibility	
Submission Info	No unsolicited proposals

Organization	Schmidt Family Foundation
Program name	Environment; sustainable development; 11th hour project
Funding interests	The Schmidt Family Foundation supports efforts, using best expert information, to help transform the world's environmental and energy practices in the 21st century.
Grant size	\$15,000–\$1.25 million (in 2008)
Geographic focus	National
Website	theschmidt.org
Eligibility	
Submission Info	No unsolicited proposals

Organization	Surdna Foundation
Program name	Sustainable Environments Strong Local Economies
Funding interests	Reducing greenhouse gasses, creating green businesses that are pathways out of poverty for underserved communities. Creating jobs and job training in sustainable businesses.
Grant size	
Geographic focus	
Website	www.surdna.org
Eligibility	
Submission Info	

Organization	The 1772 Foundation
Program name	Revolving funds and land trusts in the Northeast
Funding interests	Revolving funds for endangered properties; African-American history; historic preservation in New Jersey, Connecticut, and Rhode Island; agriculture and sustainable food systems.
Grant size	\$6,400–\$125,000 (In 2010)
Geographic focus	Many grants go to the Northeast
Website	www.1772foundation.org
Eligibility	501(c)3 for revolving fund; land trusts in the Boston or New York City area with certain restrictions
Submission Info	Letter of Inquiry to begin

Organization	The Columbia Foundation
Program name	All three programs are potential candidates
Funding interests	The Columbia Foundation supports organizations that contribute to the quality of life in Howard County in the areas of human services, arts, culture, education, environment and community affairs. Proposals should demonstrate practical solutions and efforts at prevention, collaboration and volunteer support.
Grant size	Up to \$15,000
Geographic focus	Howard County, MD
Website	www.columbiafoundation.org/receive/grants
Eligibility	501(c)3 or Internal Revenue Service charitable organizations
Submission Info	Each type of grant has different deadlines

Organization	W.K. Kellogg Foundation
Program name	Healthy Kids
Funding interests	Improve food systems by engaging local leaders in communities and schools (parents and other stakeholders) to deliver healthier foods to all children and achieve related policy changes. Transform food deserts into food oases by increasing engagement of local communities in all aspects of food production and delivery, including related research and policy changes.
Grant size	\$5,000–\$3 million
Geographic focus	National
Website	www.wkkf.org/what-we-support/healthy-kids.aspx
Eligibility	No individuals
Submission Info	Rolling submission

Organization	Wholesome Wave Foundation
Program name	Healthy Food Commerce Initiative (HFCI)
Funding interests	Using a combination of grassroots food systems experience and elite business strategy training, the HFCI business team will begin by helping 15 food hub enterprises become investment-ready.
Grant size	
Geographic focus	
Website	wholesomewave.org/hfci
Eligibility	Food hubs
Submission Info	

Organization	William Penn Foundation
Program name	Environment and Communities
Funding interests	Regional landscapes; water resources; regional prosperity and competitiveness; revitalization of greater Philadelphia's urban core.
Grant size	Previous grants are \$30,000–\$10 million
Geographic focus	Greater Philadelphia region
Website	www.william penn foundation.org
Eligibility	501(c) (3) or 509(a) organizations nonprofit agencies and foundations
Submission Info	Letter of Inquiry to begin

1. Map of Regional Food Hubs

This map includes 168 regional food hubs identified by the Collaboration at the time of writing this document. A current list of food hubs can be found at www.ams.usda.gov/foodhubs.



2. Regional Breakdown of Food Hubs

Regional food hubs are most heavily concentrated in the Northeast and North Central regions of the United States; a quarter of all food hubs identified to date are located in the Northeast. The Southeast, Far West, and Mid-Atlantic regions have roughly an equal number of food hubs. The Rocky Mountain and Southwest regions have the fewest.

Region	Number	Percentage
Northeast	41	24%
North Central	40	24%
Southeast	26	16%
Mid-Atlantic	24	14%
Far West	22	13%
Rocky Mountain	10	6%
Southwest	5	3%

Far West: Alaska, California, Hawaii, Nevada, Oregon, and Washington

Rocky Mountain: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, and Wyoming

Southwest: Arkansas, Louisiana, Oklahoma, and Texas

North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin

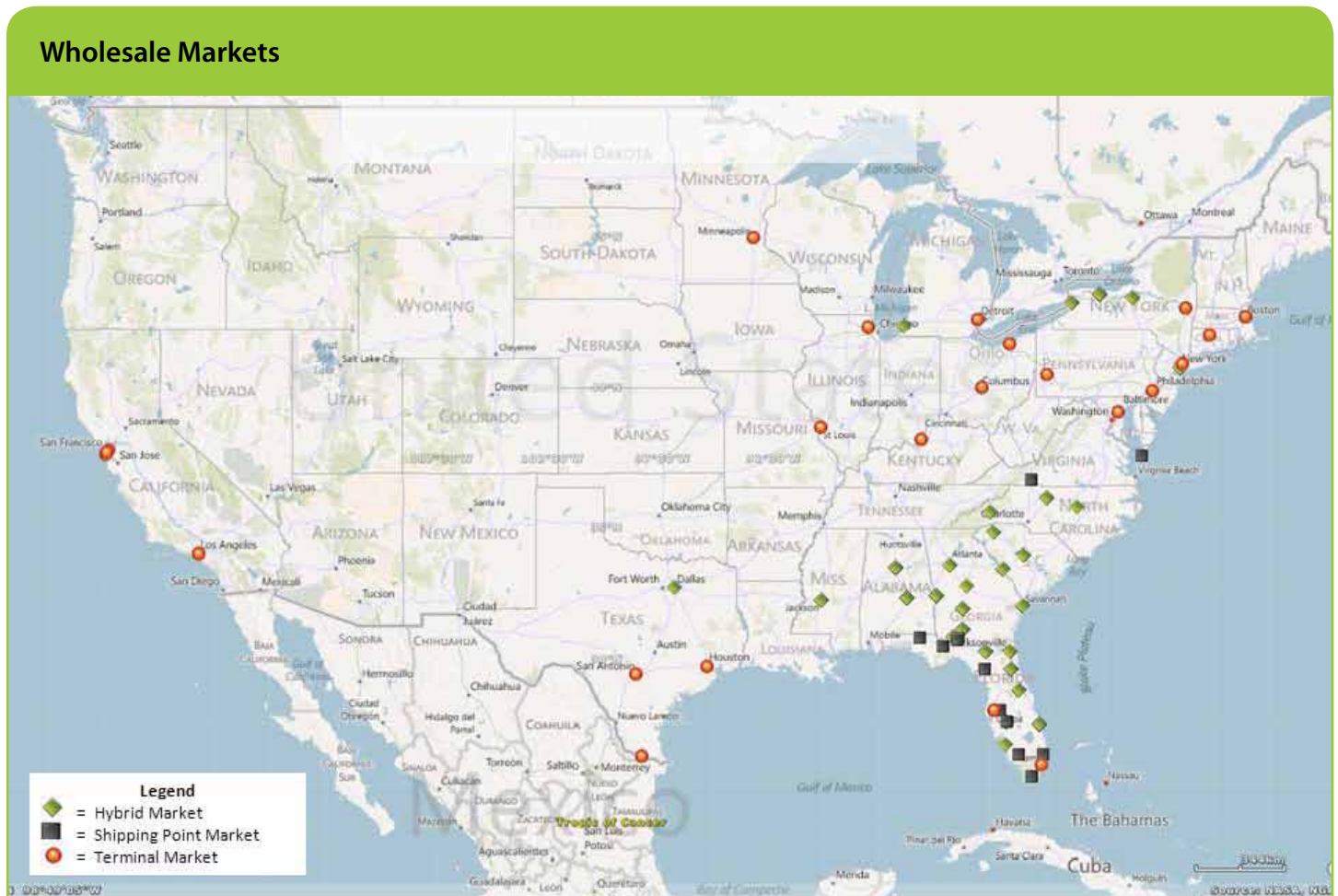
Southeast: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee

Mid-Atlantic: Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia, and West Virginia

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont

3. Map of Wholesale Markets

This map includes the majority of wholesale markets in the United States. Wholesale markets can be divided into three major categories: traditional wholesale markets and terminal markets; shipping point or collection markets; and hybrid markets, which are markets that have both wholesale and retail components. There is strong potential for regional food hubs to take advantage of the distribution infrastructure found at these market facilities.



4. Background on the National Food Hub Collaboration’s Research and Results to Date

The National Food Hub Collaboration—a partnership between USDA, Wallace Center at Winrock International, National Good Food Network, National Association of Produce Market Managers, and Project for Public Spaces—has worked to identify and profile regional food hubs across the country and collect and analyze data on the scope and scale of food hub operations. Key research activities, methods used, and results to date include:

Stakeholder Focus Group With Wholesale Market Industry Leaders

Members of the Food Hub Collaboration team conducted a stakeholder focus group with approximately 30 members of the National Association of Produce Market Managers (NAPMM) on November 3, 2010, in Philadelphia, PA. The objective was to understand what food hub-related activities these markets are engaged in and the opportunities and challenges they see for operating as food hubs. Several opportunities and related challenges were identified for wholesale markets’ emerging role as food hubs. The most prominent opportunities included:

- Utilizing public markets for aggregation and distribution of regional and local product
- Raising the visibility of, and rehabilitating the image of, public markets as key players in a robust regional food system

- Using public markets to increase healthy food access in neighborhoods of need

For further findings from the NAPMM focus group, see *Preliminary Findings from Public Market Survey*.¹⁵⁴

National Survey of Regional Food Hubs

In January 2011, the National Food Hub Collaboration conducted an online survey of food hub operations and public markets to assess the scope and scale of food hub operations. The survey was sent to 72 food hubs (all the food hubs the Collaboration had identified at that time) and 36 public markets. The public markets that were sent surveys included a cross section of traditional wholesale markets, hybrid wholesale-retail markets, and retail vendor markets, which included several-year round farmers markets. The public market portion of the survey was used to assess whether or not these markets could be classified as food hubs. As such, preliminary survey results reported in this guide only reflect the responses from the food hubs. For findings from the public market portion of the survey, see *Preliminary Findings from Public Market Survey*.¹⁵⁵

Surveys completed by February 7, 2011, were included in the analysis. Forty-five food hubs completed the survey—a response rate of 63 percent. Table 4 provides a regional breakdown of surveys sent and responses. Based on the location

of food hubs and survey responses, there was fairly good geographic representation of food hub operations, with slight under-representation in the South and a slight over-representation in the East and North.

Here are some of the key findings from the online survey of food hubs:

- Entrepreneurs took the organizing lead in establishing 40 percent of the food hubs.
- It is a nascent industry: 60 percent of the food hubs have been in operation for 5 years or less.
- Average food hub sales are nearly \$1 million annually.
- Food hubs employ, on average, seven full-time and five part-time employees, with an average of five regular volunteers.
- The median number of suppliers to a food hub is 40, many of whom are small and mid-sized farmers and ranchers.
- Food hubs offer a wide range of food products—fresh produce is their primary product category—and sell through many market channels; restaurants are an important entry market.

Table 4: Regional Breakdown of Regional Food Hub Locations and Survey Responses

	West	Southwest	Midwest	South	Northeast	TOTAL
Sent Survey	11 (15%)	5 (7%)	22 (31%)	15 (21%)	19 (26%)	72
Completed Survey	7 (16%)	2 (4%)	13 (30%)	8 (17%)	15 (33%)	45

¹⁵⁴ www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5091432

¹⁵⁵ www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5091432

- Food hubs are socially driven business enterprises with a strong emphasis on “good prices” for producers and “good food” for consumers.
- Food hubs are actively involved in their communities, offering a wide range of services to both producers and consumers.
- Over 40 percent of food hubs are working in food deserts to increase access to fresh, healthy, local food products in communities underserved by full-service food retail outlets.

For further findings on the national survey of regional food hubs, see *Preliminary Findings from Food Hub Survey*.¹⁵⁶

Indepth Interviews With Food Hub Operators

As part of the National Food Hub Collaboration’s baseline assessment of food hubs, some of the food hubs that participated in the online survey were selected for follow-up telephone interviews. Twenty food hub operators were interviewed in January and February 2011 and were asked questions concerning the economic viability of their businesses, the challenges they faced, and the opportunities they saw for business growth and market expansion.

Food hubs for phone interviews were selected for their geographic diversity (food hubs in different regions of the United States) and diversity in legal structure (such as nonprofit, for-profit, and cooperatives). The research team purposely selected more established food hubs to capture a long-term perspective of food hub business trajectories. Therefore, this sample should not be treated as representative of all food hubs. Information from these interviews gives an understanding of established food hubs and some of the challenges and opportunities they have encountered.

Of the 20 food hub operators that participated in follow-up telephone interviews, 10 identified themselves as economically viable businesses (the revenue generated from sales covers the core costs of aggregating, distributing, and marketing) at the time of the interview, 5 estimated that they would break even financially within 1 to 3 years, and 2 others stated more generally that they were “very close” to break-even status or on track to get there soon. Table 5 compares food hubs

that are economically viable to those that have yet to achieve this, across a number of different variables, including their location, legal structure, age of operation, and annual gross sales.

Further findings from the interviews with food hub operators, including challenges faced and emerging opportunities, are described in *Economic Viability of Regional Food Hubs, Barriers to Growth, and Strategies To Address Them*.

Table 5: Characteristics of regional food hubs based on economic viability

	Currenty viable	Not yet viable
Region	<ul style="list-style-type: none"> ● 4 hubs in the Midwest ● 2 hubs in the South ● 2 hubs in the Northwest ● 2 hubs in the West 	<ul style="list-style-type: none"> ● 5 hubs in the Northeast ● 3 hubs in the Midwest ● 1 hub in the Southwest ● 1 hub in the West
Legal structure	<ul style="list-style-type: none"> ● 4 hubs are LLCs* ● 3 hubs are nonprofit ● 2 hubs are cooperatives ● 1 hub is a C corporation 	<ul style="list-style-type: none"> ● 4 hubs are nonprofit ● 3 hubs are LLCs ● 2 hubs are cooperatives ● 1 hub is S corporation
Age of hub	<ul style="list-style-type: none"> ● Median: 9.5 years ● Mean: 13.4 years ● Range: 34 ● 8 of 10 hubs are at least 5 years old 	<ul style="list-style-type: none"> ● Median: 5 years ● Mean: 7.1 years ● Range: 23 ● 6 of 10 hubs are at least 5 years old
Annual gross sales	<ul style="list-style-type: none"> ● Median: \$6 million ● Mean: \$12.6 million ● Range: \$1 million to \$40 million 	<ul style="list-style-type: none"> ● Median: \$500,000 ● Mean: \$950,000 ● Range: \$102,000 to \$5.5 million

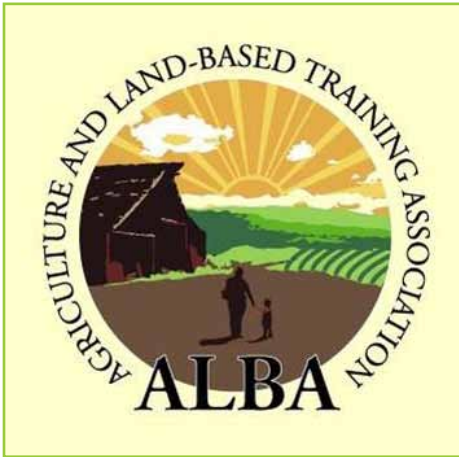
* Limited liability company

156 www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5091431

6. Featured Regional Food Hubs

The regional food hubs described here were used as examples in the body of the guide. For a complete list of regional food hubs, see the next section.

Agriculture and Land-Based Training Association (ALBA)



ALBA is a nonprofit that owns and operates ALBA Organics, a licensed produce distributor established in 2002 in Salinas, CA. ALBA Organics sells fresh organic produce from 50 limited-resource, primarily Latino, farmers; it offers storage and cooler space, delivery infrastructure, sales support, and sales training to its producers. ALBA Organics products are sold to more than 80 customers, including wholesale distributors, corporate food services, restaurants, hospitals, universities, and retail stores in the San Francisco Bay Area and Monterey Bay Area. ALBA seeks to generate opportunities for farm workers and limited-resource, aspiring farmers through its Farmer Education and Small Farm Incubator Programs, which provide graduates with land leases and access to equipment to establish their own farm business. ALBA offers its producers training opportunities in areas such as production and post-harvest handling, business management, crop planning, and food safety. In 2010, ALBA Organics' annual sales were more than \$2 million. See ALBA.¹⁶⁷

Appalachian Sustainable Development (ASD)



ASD is a nonprofit in Abingdon, VA. In 1999, ASD established Appalachian Harvest (AH), a network of approximately 50 certified-organic family farmers producing organic vegetables and free-range eggs in Southwest Virginia and Northeast Tennessee. Appalachian Harvest grades, washes, labels, and packages products in its packaging and grading facility and distributes them to 30 food brokers and supermarkets, representing more than 900 individual supermarkets throughout Virginia, Tennessee, North Carolina, South Carolina, Georgia, Maryland, and Washington, DC. ASD also offers training and technical assistance by organizing hands-on trainings for producers and by coordinating a peer network for producers to learn from one another. Annual sales are approximately \$500,000. See ASD.¹⁶⁸

Beneficial Farm CSA



Beneficial Farm was founded in 1994 as a traditional one-farm biodynamic CSA. In 2009, it became organized as an LLC and operates as year-round multi-farm CSA from its home base at Kitchen Angels, a nonprofit organization that delivers hot, healthy meals to home-bound clients in Santa Fe, NM. The CSA offers a variety

of shares for fresh produce, meat, eggs, and cheese; other products such as grains, meat, poultry, and value-added products are also available through an online "marketplace." Beneficial Farm CSA aggregates from more than 40 small and mid-size farms located within 250 miles of the central distribution area, and delivers shares and preordered items to CSA members at several pick-up sites in Santa Fe and Albuquerque. Annual sales for the CSA are about \$150,000. It also provides marketing and promotional services for producers, as well as production and post-harvest handling training. See Beneficial Farms CSA.¹⁶⁹

Central New York Regional Market



Managed by the State of New York as a not-for-profit public benefit corporation, this public market in Syracuse, NY, has operated continuously on its 60-acre site since the 1930s. The market is a hybrid food hub with both a wholesale market (for businesses) and a farmers market (for the public). More than 300 vendors sell at indoor and outdoor booths. They include small and large farms, food distributors, prepared food vendors, and artisans. Public market days attract up to 26,000 people, and annual sales are \$15.6 million in retail and \$600 million in wholesale. The market enjoys strong communal support, in part because it offers amenities such as EBT¹⁷⁰ service; cooking demonstrations; and participation in the New York State Farmers' Market Nutrition Program, which provides financial support to low-income families enrolled in Special Supplemental Nutrition Programs for Women, Infants and Children (WIC) and Senior Nutrition Programs. The market also operates the "Farm Fresh" Mobile Market, an effective delivery mechanism to increase access of healthy foods in underserved communities. See CNY Regional Market.¹⁷¹

167 www.albafarmers.org

168 www.asdevelop.org/

169 www.beneficialfarm.com

170 Electronic benefits transfer

171 cnyrma.com

Common Market



A nonprofit wholesale consolidator and distributor of local food in Philadelphia, PA, Common Market began operations in 2008. It has 75 producers, located mostly within a 90-mile radius of Philadelphia, who supply fresh produce in addition to meat, poultry, and eggs. A farm-to-institution model, Common Market distributes to 60 to 75 customers, including schools, colleges, universities, hospitals, food cooperatives, and restaurants. Their aim is to support local agriculture and make food affordable and accessible on the wholesale level by working with institutions and retailers that serve low-income populations and with nonprofits that offer low-cost buying clubs. Common Market had \$580,000 in sales in 2010. See Common Market.¹⁷²

Co-op Partners Warehouse



Co-op Partners was started in 1999 by the Wedge Cooperative, a consumer co-op with 14,000 member households in Saint Paul, MN. Using its own fleet of trucks as well as contract trucking companies, it sells primarily organic produce from about 30 farmers in Minnesota and Wisconsin during the growing season—and from West Coast sources the rest of the year—to 200 consumer cooperatives, health food stores, buying clubs, and restaurants in the Upper Midwest. Annual sales for Co-op Partners are \$16.8 million, with about one-quarter of its sales accounted for by the Wedge. This organization is unique in its focus on selling primarily to retail cooperatives and in its commitment to being a full-service organic produce distributor with a regional focus. See Co-op Partners Warehouse.¹⁷³

CROPP Cooperative (Cooperative Regions of Organic Producer Pools)



Founded in 1988, this producer co-op markets products nationwide under the Organic Valley[®] and Organic Prairie[®] labels; its mission is to promote regional farm diversity and economic stability by organic agricultural methods and the sale of certified organic products. CROPP has 1,650 producer members in more than 35 States. It offers fresh produce, meat, dairy products, eggs, orange juice, soy products, and grains, which are sold in more than 10,000 retail outlets. Despite its national presence, CROPP's business model has a strong emphasis on linking regional supply to regional markets. For example, CROPP works with producer pools from specific geographic regions to produce and distribute Organic Valley

Brand milk regionally as much as possible, and identifies the region in which the milk was produced on milk cartons. Annual sales in 2010 were \$618 million. See CROPP Cooperative.¹⁷⁴

Eastern Carolina Organics (ECO)



This privately held company, established in 2004 in Pittsboro, NC, markets and distributes organic farm produce to retailers, restaurants, and buying clubs. Eastern Carolina Organics has more than 40 producers selling to more than 150 customers throughout the Southeast. It sells primarily to grocery stores, food cooperatives, buying clubs, and distributors, but also to restaurants, caterers, school foodservice providers, colleges, and universities. It offers producer services such as production planning, post-harvest handling training, food safety training, and liability insurance. See ECO.¹⁷⁵

Eastern Market



Established in 1891 in Detroit, MI, Eastern Market is one of the Nation's oldest publicly owned wholesale-retail markets. The market consists

172 www.commonmarketphila.org

173 www.cooppartners.coop/index.php

174 www.farmers.coop/

175 www.easterncarolinaorganics.com/

of four individual markets: retail (for consumers), wholesale (for grocery stores, distributors, restaurants, farm stands), flowers, and special events. As many as 40,000 people visit the market's hundreds of open-air stalls, which feature fresh produce, meat, poultry, fish, flowers and plants, and many other local products. More than 250 vendors and merchants from Michigan, Ohio, and Ontario process wholesale and retail food. Eastern Market coordinates aggregation, distribution, processing, and commercial market outlets for many of the region's small and mid-size farmers. The market plans to redevelop an economic development district to bring in additional business incubators, restaurants, retailers, wholesale services, and a distribution center. See Eastern Market.¹⁷⁶

Farm Fresh Rhode Island



A nonprofit located in Pawtucket, RI, Farm Fresh Rhode Island aims to grow a local food system through many initiatives, including distributing products to wholesale customers through its Market Mobile Program, retail farmers markets, and culinary and nutrition education. Market Mobile, started in 2009, consists of 42 small farmers and processors that supply products to more than 100 customers,

including retail outlets, a multi-farm CSA, buying clubs, restaurants, caterers, and college and universities throughout Rhode Island and Massachusetts. Products include produce, meat, dairy, eggs, grains, and prepared foods, as well as some frozen and canned produce and value-added products. Sales for Market Mobile were \$684,000 in 2010. Farm Fresh Rhode Island also provides services to food processors, such as knowledge and training, connecting food processors to certified kitchens and farmers markets, and offering matching programs and nutrition education. See Market Mobile.¹⁷⁷

Farm to Family Naturally, LLC



Established in 2007, this privately held company aggregates and sells produce from more than 200 family farms within 250 miles of St. Louis, MO. The company offers a wide range of products through its own retail outlet, the Sappington Farmers Market, which has more than 5,000 customers a week and delivers products to daycare centers, buying clubs, schools, and a food-processing center. Farm to Family Naturally offers a variety of producer and consumer services, including accepting SNAP benefits and offering nutrition education. It plans to establish a 60,000-square-foot Farm Fresh Food Hub, expanding its reach into the St. Louis area, especially in areas with limited access to healthy fresh food. Plans include distribution to corner stores, human service networks, and institutional foodservice operations, as well as selling directly to consumers. See Sappington Farmers Market.¹⁷⁸

Gorge Grown Food Network



Established in 2008 in Hood River, OR, this nonprofit directly serves consumers in the Columbia River Gorge regions in Oregon and Washington through its Mobile Farmers' Market. Sixteen small farmers and producers in rural Gorge communities provide fresh produce, coffee, bread, and other products, all of which are loaded into a 14-foot box truck outfitted with coolers, shelves, and a stand-up freezer and are sold in four rural communities that have limited access to fresh produce. The Mobile Market has helped two communities develop additional markets for fresh produce: in Stevenson, WA, the weekly Mobile visit evolved into a small farmer's market, and in Mosier, OR, the Mobile Market's success inspired a grower to start a produce stand. The nonprofit also runs a farmers market and works with institutions in the region to help them source fresh, local produce for their kitchens. Gorge Grown Food Network has annual revenue of about \$62,000. See Gorge Grown Food Network.¹⁷⁹

Green B.E.A.N. Delivery



176 www.detroiteasternmarket.com
 177 www.farmfresh.org/hub
 178 www.sappingtonfarmersmkt.com
 179 www.gorgegrown.com

This for-profit company operates as a hybrid food hub, delivering fresh produce, local eggs, dairy, meat, breads, and other artisan foods from 56 regional producers directly to consumers at home or at work. It also delivers to retailers through its wholesale arm, Tiny Footprint Distribution. Green B.E.A.N. Delivery (an acronym for its core initiatives: Biodynamic, Education, Agriculture, and Nutrition) has more than 400 products online and serves the markets of Indianapolis, Cincinnati, Columbus, and Louisville. Each market has its own warehouse that serves as a drop-off point for local farmers. It also manages a 60-acre certified organic farm near Indianapolis, which grows crops for its “delivery bins.” One of the company’s newest programs, Cool School Lunch, provides schools with an online ordering platform for wholesale produce that will soon be able to deliver school lunches. Since its founding in 2007, Green B.E.A.N. Delivery has invested more than \$2 million in local food economies and has created more than 100 jobs throughout the Midwest. See Green B.E.A.N. Delivery.¹⁸⁰

Intervale Center



This nonprofit in Burlington, VT, began the Intervale Food Hub in 2007 to aggregate, distribute, and market products from farmers—mainly in Chittenden County—to the greater Burlington area. The Intervale Food Hub works with 22 farmers who produce primarily fruits, vegetables, meat, and eggs, as well as some dairy, grains, plants, baked goods, prepared foods, and canned and frozen produce. These products are sold year-round to CSA

members. The food hub also supplies products to restaurants, schools, and a hospital. Through its CSA program it is able to accept SNAP benefits, and it has partnered with the Northeast Organic Farming Association of Vermont to offer subsidized shares to low-income residents. The Intervale Center also operates a Farm Program that leases land, equipment, greenhouses, irrigation, and storage facilities to small independent farmers. In 2010, gross sales for the Intervale Food Hub were \$300,000. See Intervale Food Hub.¹⁸¹

La Montanita Co-op



This community-owned consumer cooperative with four retail stores is located in in New Mexico. In 2007, La Montanita launched the Regional Foodshed Initiative to expand purchasing of sustainably grown regional products from small and mid-size producers. Through this initiative, La Montanita’s cooperative distribution center (CDC) provides business development, distribution, and marketing services for producers located within a regional foodshed that encompasses the Rio Grande River Valley Rift—about a 300-mile radius from Albuquerque. The CDC is operated and funded largely from co-op revenues. It stocks and sells more than 1,500 products purchased from nearly 900 growers and producers within the regional foodshed. See La Montanita Co-op.¹⁸²

Local Food Hub



Established in 2009 by two women in Charlottesville, VA, this nonprofit distributes local fruit, vegetables, frozen meat, and value-added food products from family farms in Central Virginia to more than 120 businesses and institutions, including schools, colleges, restaurants, hospitals, senior centers, retailers, distributors, and processors. After its first 28 months of operation, Local Food Hub has purchased more than \$850,000 worth of product from 70 small farms within 100 miles of Charlottesville. Growers are offered technical, business, and production planning support; marketing and promotion services; liability and traceability coverage; and networking resources. In addition to operating a 3,500-square-foot warehouse, the nonprofit also runs a 60-acre organic educational farm that offers farmer apprenticeships, internships, farmer training in organic and sustainable growing methods, volunteer programs, and events. The hub further serves the community by donating to area food banks, soup kitchens and homeless shelters. See Local Food Hub.¹⁸³

Oklahoma Food Cooperative



This Oklahoma City, OK, online buying club has been in operation since 2003. The co-op is owned by both producers and consumers. More than

180 www.greenbeandelivery.com

181 www.intervalefoodhub.com/home

182 www.lamontanita.coop

183 www.localfoodhub.org

200 producer members sell more than 4,000 Oklahoma-made products to 3,800 co-op members using an online ordering portal. Products are shipped through 48 member-operated distribution routes that reach cities, towns, and hamlets across Oklahoma each month. Members always know which farmer produced their food and have the opportunity to meet farmers on delivery day. Farmers bring their products to a central drop-off location where they are assembled into member orders and then routed by a crew of volunteers, who are compensated for their time with work credits redeemable for goods sold through the cooperative. See Oklahoma Food Cooperative.¹⁸⁴

Red Tomato



A nonprofit based in Canton, MA, Red Tomato was founded in 1996. It arranges for the aggregation, transportation, and sale of a wide variety of produce supplied by nearly 40 farmers to grocery stores and distributors, primarily in the Northeast. Relying on farmers and contract trucking firms to provide aggregation and transportation services, Red Tomato never physically handles the product sold under its name. Its signature Eco Apple™ line of apples is grown using advanced integrated pest management methods subject to third party verification, and it accounts for more than half of Red Tomato's sales volume. During the growing season, each tote of Eco Apples contains fruit grown by one farm, which is named and described on every package. See Red Tomato.¹⁸⁵

Santa Monica Farmers Markets



This hub is a group of four publicly operated farmers markets which opened in Santa Monica, CA, between 1981 and 1995. The four markets combined feature 185 producers selling items directly to consumers, including fresh produce, meat, eggs, poultry, fish, dairy, baked goods, prepared food, and other value-added products. An estimated 900,000 shoppers visit the markets every year. In addition, the markets provide fresh produce to the local Santa Monica Malibu Unified school district for a year-round "farmers' market salad bar." Fresh produce is ordered in advance from farmer vendors, and produce is packed and ready to be picked up by the schools before the markets open. The markets further engage with the community by offering education and outreach programs and distributing coupons to children during school tours. See Santa Monica Farmers Markets.¹⁸⁶

Tuscarora Organic Growers Cooperative (TOG)



TOG is a producer-owned co-op that started in 1988 in Hustontown, PA, to aggregate, market, and distribute products to the Baltimore and Washington DC metro areas. Forty

member farms provide fresh produce to restaurants, retail outlets, farmers markets, and CSAs. The co-op offers coordinated production planning for its members and provides them with reliable markets. By doing so, members cooperate instead of compete against one another to provide buyers a sufficient and diverse supply of products. TOG sold more than 115,000 cases of produce during the 2010-2011 season. See TOC.¹⁸⁷

Walsma and Lyons



Founded in 1949 by John Walsma and incorporated as Walsma and Lyons in 1979, this privately held fresh-produce distribution company is based near Grand Rapids. Walsma and Lyons aggregates products for foodservice distributors like Sysco and other major retailers in the Great Lakes region. The company has long-established relationships with more than 15 small and mid-size growers in Michigan and Northern Indiana, buying a variety of fresh produce during the region's short growing season, and supplementing from growers in Texas, Florida, Arizona, Georgia, and California the rest of the year. Walsma and Lyons connects growers with food safety information and ensures they meet buyers' GAP requirements, repacks to make orders smaller and more manageable for foodservice customers, preserves the regional identity of products so growers can potentially earn a higher premium, provides liability insurance, coordinates logistics, and ships to end customers. The company remains in close communication with growers to resolve problems that arise day-to-day in the fresh produce industry. Annual sales are roughly \$20 million. See Walsma and Lyons.¹⁸⁸

184 www.oklahomafood.coop/welcome.php

185 www.redtomato.org

186 www.smgov.net/portals/farmersmarket

187 www.tog.coop

188 www.walsmalyons.com

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Common Market

DISTRIBUTORS

Food distributors are a key component of the food system in the United States. Restaurants, caterers, convention centers, school and college food services and other types of food services all rely on distributors to supply the food and food-related products needed to serve their customers. Often, all needed food and food-related products can be ordered from one or two distributors.

Opportunities for farmers to sell their food products to local or regional food services are limited by time, staffing and money constraints for farmers and food services, alike.

Distributors meet the needs of food services for specific quantities of specific products at a specific time. Distributors can also meet the needs of farmers by handling marketing, ordering, billing and delivery tasks, thus allowing the farmers to concentrate on production. If you would like to tap into the food service market, consider working with a distributor.

If farmers choose to sell to both distributors and their potential retail customers, they may be asked to sign a non-compete agreement that the farmers will charge their retail outlets the same base price the distributor does.



Photo courtesy of Harmony Valley
Marketing through distributors allows you to sell a large of quantity of product to one location.

We went to the stores ourselves and didn't use distributors. But distributors can save you a considerable amount of cost and you can't deliver it for what they can. It's going to cost you well over 30% to deliver to outlying areas.

Troy DeRosier, Crystal Ball Farms

Selling to Distributors

Benefits

- Sell large quantities of product to one location
- Can concentrate on production skills rather than marketing
- Fewer contacts needed to sell products
- The distributor can smooth out the problem of seasonal availability by buying from local farmers in season and sourcing products elsewhere when the local products are unavailable

Challenges

- Less farmer-to-consumer connection
- Less brand identification
- Price for product will be competitive

We will give our wholesale markets a one- to two-week notice of what will be available. If you can't supply it, let them know ahead of time. They don't want empty shelves and if they're expecting something from you and you don't provide it without letting them know ahead of time, they won't buy from you again. They're very unforgiving if you don't communicate your situation with them, and you need to understand that.

Richard de Wilde, Harmony Valley Farm



PROFILE

Crystal Ball Farms

Troy & Barbara DeRosier
 Troy@crystalballfarms.com



Crystal Ball Farms delivers directly to stores in a 90-mile radius and provides home delivery in a 50-mile range.

We felt bottling our own milk and marketing it ourselves was the best option to maintain a decent price and control our destiny.

Troy DeRosier, Crystal Ball Farms

Glass-bottled milk and home delivery are making a resurgence in Wisconsin. Dairy farm families bottle their own milk, while adding value to their farms and communities. Troy and Barbara DeRosier have found new markets for their milk bottling business.

The DeRosiers decided they needed a better income from their 100-cow dairy herd near Osceola. They wanted something more substantial where they had more control over the end product. Their search led them in the direction of home bottling and seeking new markets.

“We felt bottling our own milk and marketing it ourselves was the best option to maintain a decent price and control our destiny,” Troy DeRosier explains. “We made the transition in the fall of 2003 and it’s worked very well for us.”

Adding a bottling facility to an existing farmstead took extensive planning. It requires three full-time and six part-time employees. “We started our organic farm at a time when there wasn’t a good market for organic milk. That’s certainly changed, as the organic market has expanded greatly since then,” Troy says.

Making Plans

To get ideas he could apply to his farm, DeRosier spent time visiting East Coast farms that were bottling and marketing their milk. “There was no software or business plan anywhere for what I wanted to do,” he relates. “It was a couple-year process and we hired an outside source to do a business plan and the financials, and it took about nine months to get up and running.”

Getting out and viewing other successful operations helped give them a concept of what goes on in a bottling plant. They needed to know where the labor was required and DeRosier says it also gave them some ideas about marketing. “I’m pretty good at marketing anyway so it was helpful in many little things,” he notes.

Although the DeRosiers couldn’t find resources to help them, there are now several programs available. He remarks, “DATCP has a value-added focus in their programs. They’re very good at helping direct people as far as whom to talk with and where to go.”

Recovering production and distribution costs was always at the front of their decision. “We used our cost of production and the margin we felt we needed for it to be worthwhile,” DeRosier explains.

Before one bottle was filled, DeRosier commissioned a survey at stores to determine what customers were looking for and how they liked it packaged. “We worked with a few key stores before we built our plant,” he notes. “Then, because we worked with those stores, they were willing to stock our product after they saw the results and knew we were serious about what we were working on.”

Creating Their Market

Crystal Ball dairy provides some of its products for sampling at stores. “That gives us a close touch with the consumer,” he says. “The stores set up a special day for us to give demonstrations and samples of our products. We get a chance to talk about our farm and how we handle our cows. We get to tell them our story and that’s what really sells.”

Crystal Ball Farms literally created its market. Taking its milk, processing and bottling it on the farm, and delivering it to stores changed their financial position and may fuel a further expansion now that they’re able to market all the milk they produce.

“We deliver directly to stores in a 90-mile radius and home delivery in a 50-mile range,” DeRosier explains. “About one-third of our business is deliveries, and we have two trucks on the road most days. We’ve made changes to more efficient vehicles, but we have to pass along the increase in fuel prices. I hate to do that because I’m still farmer-oriented, but I don’t have any choice.”

Decision to Use Glass Bottles

“The survey we did determined that we were going to use glass bottles for our milk,” he says. “Glass fits very well with the organic and high-end markets. We market half-gallons because if we went to gallons we would have to go to plastic. The way we set up the plant and process the milk all fits together. If we were going to use plastic containers we’d have to set the plant up differently and we’d have a different price point. You can get more for a half gallon because the smaller container has a higher value.”

Crystal Ball customers pay a deposit on the glass which DeRosier hopes they will return because the price of each glass bottle has risen above the cost of the return. “We have our label on all our bottles so we don’t do much advertising anymore,” he adds. “Any expansion of our market is mostly by word of mouth.

“We’re working with the state [of Wisconsin] now to put in a receiving bay to bring milk in to add to our supply,” DeRosier says. “We’re not sure we want to expand our herd because it’s easier to get help in the creamery than for the farm.”

Working with Distributors, Schools, Hospitals

DeRosier suggests that anyone looking to enter this market consider using distributors instead of doing deliveries themselves. “We went to the stores ourselves and didn’t use distributors. But distributors can save you a considerable amount of cost and you can’t deliver it for what they can. It’s going to cost you well over 30% to deliver to outlying areas.

“I think there’s room for other bottling dairies in Wisconsin,” he notes. “But I would look at other markets. I think the glass bottle market is pretty well saturated. There’s some room but only so much market because it’s a high-end product. With high fuel prices we’re working with hospitals now because they’re trying to buy more local products because it costs so much to haul it in.”

There’s a federal mandate requiring schools to improve their nutrition and they’re emphasizing doing it locally. “We are doing a pilot program with one school,” he says. “We’re not sure where it’s going yet because of the nine-month market with three months down. But it is a possibility for further expansion.”



Milk from DeRosiers’ 100-cow dairy is packaged in glass bottles and is also made into butter, ice cream and cheese products.

The stores set up a special day for us to give demonstrations and samples of our products. We get a chance to talk about our farm and how we handle our cows. We get to tell them our story and that’s what really sells.

Troy DeRosier, Crystal Ball Farms



The dairy has an on-farm processing facility and retail store.