

UNITED STATES DEPARTMENT OF AGRICULTURE

# KNOWYOUR FARMER KNOWYOUR FOOD





































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2 | KNOW YOUR FARMER, KNOW YOUR FOOD COMPASS

# KNOW YOUR FARMER, KNOW YOUR FOOD

# COMPASS VELCOMPASS



Zach Lester and Georgia O'Neal started Tree and Leaf Farm on leased land. Thanks to a loan from USDA's Farm Service Agency, they have moved to their own property. Deputy Secretary of Agriculture Kathleen Merrigan visited the farm in 2009 as part of the launch of the Know Your Farmer, Know Your Food initiative.



### SECRETARY VILSACK ANNOUNCES LAUNCH OF KNOW YOUR FARMER, KNOW YOUR FOOD

Click here to watch the video

Over the last four years, I've seen a shift. People who have never been on a farm are becoming interested in where their food comes from. Towns and neighborhoods that didn't have regular access to fresh fruits and vegetables are getting them. Farmers and ranchers are tapping into new markets and keeping more money in their pockets by selling locally. And all across the country, innovative local food businesses are starting up and staffing up. Local food systems work for America: when we create opportunities for farmers and ranchers, our entire nation reaps the benefit.

–President Barack Obama





### INTRODUCTION

### THE WHAT AND WHY OF LOCAL AND REGIONAL FOODS

In America's rural towns and urban centers, in remote farm fields and on the edge of cities, a sea change is underway. Farmers and ranchers selling their products nationally or internationally are finding a reason and a means to keep some sales closer to home. New farmers, small and midsized farmers, and those who want to personally brand their products are finding enthusiastic buyers right in their communities. Urban residents who may never have set foot on a farm are gaining a new appreciation for and connection to the men and women producing our food. And business owners are tapping into a market whose steady growth over two decadesgrowth that has become exponential in recent years-spells opportunity in the form of jobs, revenue, and economic development.

Interest in local and regional food has transcended many geographical and demographic barriers on its journey into the mainstream. By 2011, over 85 percent of customers polled by the National Grocers Association said that they chose a grocery store based in part on whether it stocked food from regional producers.<sup>1</sup> 1,500 chefs



- USDA's Economic Research Service finds that on the farm, local food systems are generating 13 farm operator jobs per 1 million in sales.
- In 2011, 54 out of 55 U.S. states and territories requested USDA funding for local food system projects through the Specialty Crop Block Grant program.

nationally ranked local foods as the year's top restaurant industry trend.<sup>2</sup> Over 2,000 schools across the country have developed farm to school initiatives to source from local farmers, ranchers and food businesses<sup>3</sup> and over 7,000 U.S. cities and towns host farmers' markets.<sup>4</sup>

The growing interest in local and regional food has also brought with it many questions. What exactly does "local" mean? Local and

Quality

regional foods still make up a small share of total U.S. agricultural sales—so why does this market matter? Who does it benefit? Is it worth the hype?

In 2008, then Senator Barack Obama pledged to promote local and regional food systems because they help farmers and ranchers "get full retail price for their food which means farm families can afford to stay on the farm, doing the important work which they love."<sup>5</sup> In 2010, Agriculture Secretary Tom Vilsack laid out a five-year strategic plan for the U.S. Department of Agriculture (USDA). One pillar of this plan was the development and support of regional food systems. He stated:

An increased emphasis on regional food systems will have direct and significant benefits to rural communities. Increased economic activity in food-related sectors of the economy helps communities build and maintain prosperity. Building on the foundation established [by Congress] in the 2008 Farm Bill, USDA will work closely with all its strategic partners... to develop and revitalize the critical infrastructure necessary for vibrant regional food systems.<sup>6</sup>

As Americans, we share a common desire to invest in our communities and reap the benefits that stem from that investment. And since we all eat, the money we spend on food is a powerful investment tool. The data, literature and on-the-ground evidence in this document show that regional food systems are helping to drive job growth in agriculture, increase entrepreneurship opportunities in rural communities, and expand consumer choice and food access. They are a critical complement to our strong national and international food systems. By taking advantage of each system's unique strengths, we ensure that American agriculture can provide a bounty long into the future.



#### WHAT AM I READING?

The Know Your Farmer, Know Your Food Compass is a digital guide to help stakeholders navigate USDA resources and efforts related to local and regional food systems. It explains USDA's recent work to create new market opportunities and to use consumer interest in where their food comes from to foster a national conversation that benefits all of American agriculture. The Know Your Farmer. Know Your Food initiative (KYF), a management and communications effort described in the **next section**, has facilitated these efforts since its inception in 2009. The KYF Compass organizes USDA's work on local and regional food systems into seven thematic areas; each section discusses resources related to the theme and provides case studies and examples of USDA-supported programs and projects in the field.

A large selection of these programs and projects is also visible on the KYF Map, which can be displayed by topic, program, or recipient type.

The KYF Compass and map describe only a portion of USDA resources available for local producers and food businesses. As part of the KYF initiative, USDA identified an initial list of 27 programs that are available to support local food efforts; the KYF Compass and map provide examples of these programs at work. Yet there are programs that play a significant role that are not included in this list. For example, USDA Rural Development's Rural Energy for America Program (REAP) is helping producers, including those selling locally, become more energy efficient. REAP is not mentioned on the map or in the KYF Compass, but it certainly plays a role in helping local producers enhance their profitability. Similarly, it may be tempting to add up the dollar amounts displayed on the map to estimate USDA's overall monetary support for local and regional food systems—but this total would be misleading. For example, to showcase support available for local producers through the Farm Service Agency's farm loans program, the map includes several case studies in a handful of states. The actual number of local producers that have benefited from FSA backing is much greater, but total monetary support for this sector is not displayed on the map.

The map and KYF Compass, like the KYF initiative itself, are more useful as an illustration of the value of agency coordination at a time of limited government resources. Many of the efforts described in the KYF Compass have been made possible because of inter-agency coordination facilitated through the initiative. For example, due to the coordinated efforts of USDA's Food and Nutrition Service, Agricultural Marketing Service, and Rural Development, the number of farmers' markets that accept electronic nutrition benefits grew by more than 50 percent between 2010 and 2011. Using limited resources, these agencies were able to coordinate to help over 2 million women, infants and children and nearly 1 million seniors access local food at farmers' markets nationwide in 2010.

The KYF Compass and map also make it clear that strategic investments can have a big impact, even if resources are limited. For example, through the Environmental Quality Incentives Program (EQIP), USDA's Natural Resources Conservation Service helped fund the construction of over 4,200 high tunnels—greenhouse-like structures—on farms around the country in 2010 and 2011 at a cost of \$13 million. For many producers, this support has been



transformational. Yet it is only a tiny portion of the total EQIP budget of \$1.4 billion for 2012. These kinds of investments do double or triple duty to meet other highpriority goals for the Department. High tunnels extend the growing season for producers selling locally, but they also help manage nutrient runoff and pest management, meeting important conservation goals as well. USDA's emphasis on local food systems has thus allowed the Department to achieve specific program goals and a wider set of cross-program benefits.

Both the **map** and **KYF website** will continue to be refreshed over the coming months to showcase additional resources and projects that build jobs, economic opportunity, and community across the country.

### WHAT IS A LOCAL AND REGIONAL FOOD SYSTEM?

**Defining local foods.** What are local and regional foods? Local and regional food systems typically centralize within a specific region all of the activities associated with producing, processing, distributing and marketing foods. But there's a lot more to it than simply geography. Local food systems convey information to consumers so that they can learn about and feel more connected to where their food comes from. In turn, the knowledge that they gain allows them to target their purchases to support their local economy.

How one defines "local" or "regional"—which are often used interchangeably, and will be for the purposes of this document—can depend on geographic, social, governmental, physical, or economic parameters; seasonality; or other factors. When a community comes together to plan and build a local food system, it generally must come to agreement on a definition for the purposes of making policy or developing marketing campaigns.

This portfolio contains case studies and examples from communities around the country engaged in building local food systems. These examples are perhaps the best illustration of the diversity of definitions at work. You can see where USDA has supported local food projects in your community by visiting the KYF Map.

The impact of this interest in local food stretches far beyond just the producers and businesses engaged in local markets. The system's emphasis on transparency and producer-consumer relationships has opened up new opportunities for farmers and ranchers of all sizes and in all regions, who are finding ways to tell their own stories—be it directly, through branding and packaging, on the Internet, or through certification—and respond to consumer demand. Entrepreneurs are developing new tools to connect producers' identities with the products they grow, raise, and process. You can get involved by joining the national conversation about where our food comes from.

Local supply chains involve many players. Most people think of a farmers' market or a farm stand—a direct farm to consumer sale—when they hear the phrase "local food." But many more players can be involved. For example, in Charlottesville, VA, the Local Food Hub buys produce from more than 50 family farms within a 100-mile radius. It sorts and stores the produce in its warehouse and then markets and distributes it to schools, hospitals, grocers and



restaurants in the region—including the USDA cafeteria in Washington, DC. Other systems may involve different local companies that store, process, and transport the food. As long as these processes happen in the region and convey information along the supply chain in a transparent way, it's still a regional food system.

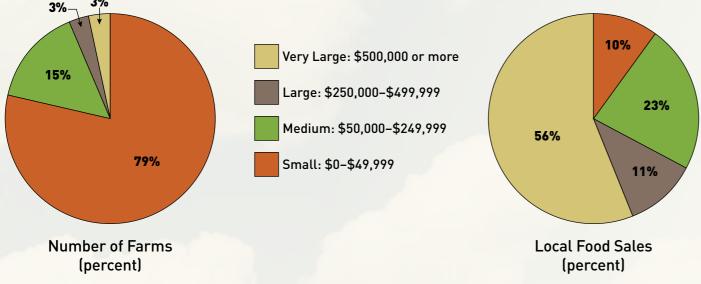
#### Local food comes from farms, ranches and

**businesses of all sizes.** Another common assumption is that the farms and ranches selling into local and regional markets are always small or organic. This is not the case, although as we'll see, these markets do offer opportunities for smaller producers and for those who want to differentiate their products based on special attributes. But **recent USDA data** show that large, midsized and small farms are all selling into local and regional markets. In fact, sales to local distributors, retailers and restaurants are more likely to come from large farms. Direct-to-consumer sales are evenly split among the three farm size categories.

#### Local markets demand a variety of products.

Finally, it is commonly assumed that only fresh fruit and vegetable growers sell into local and regional markets. Tell that to the farmers behind **Shepherd's Grain** brand wheat, produced by a farming cooperative in Washington and Oregon. Participating producers grow much of their wheat for export, but between 15 and 30 percent of their crop is highquality hard red spring wheat that is processed and sold regionally, offering the farmers a better return and local bakeries a popular product. With support from the **Sustainable Agriculture Research and** 

### FARMS ENGAGED IN AND THE VALUE OF LOCAL FOOD SALES BY FARM SALES CLASS, 2008-2009 AVERAGE



Source: USDA, ERS/NASS, 2008 & 2009 Agricultural Resources Management Survey (ARMS)



**Education program**, administered by USDA's National Institute of Food and Agriculture, the cooperative was able to train its producers in the use of no-till farming to preserve the soil and reduce fuel use—and then convey that information to its customers.

Now that we've discussed what local foods are, let's look at what they have to offer.

### LOCAL AND REGIONAL FOODS: AN IMPORTANT COMPONENT OF A DIVERSE INDUSTRY

After twenty years of steady and even exponential market growth, local and regional foods are more than a passing trend. Consumers are expressing an interest in knowing where their food comes from and in connecting with the men and women who put food on our tables. In response, producers are taking advantage of the opportunity to reach a new market; local food businesses are springing up; buyers in every sector of the food system have increased local food purchases; and conversations between farmers and consumers are taking place every dayx across the country.

In 2009, USDA responded to this wave of enthusiasm by launching the Know Your Farmer, Know Your Food initiative (KYF), which brings together employees from across USDA's 17 agencies and many staff offices to share information, collaborate on joint projects, communicate transparently with the public, and fulfill mandates related to local and regional food as effectively as possible. With no dedicated funding or fulltime staff, KYF has helped USDA better serve America's rural communities by encouraging consumers to learn more "We actually have a waiting list for communities that would like to start farmers markets, as well as area schools, restaurants and institutions who would like to purchase more foods from local sources."

Bahia Nightengale, local food coordinator
 with Southwest Iowa Food and Farm Initiative,
 whose initiative has received support
 from USDA's Rural Development agency.



about where their food comes from and by supporting local food producers and businesses. For more information on the Know Your Farmer, Know Your Food initiative and how it works, click here.

You may be wondering: Why is there so much enthusiasm for local foods? Why does Congress—and in turn USDA care about this relatively small market segment?

**Consumers want to understand more about where their food comes from.** We see this desire in the growing number of people seeking out products directly from farmers and ranchers at farmers' markets, farm stands and other direct sales outlets. Consumers are also purchasing local food at supermarkets, restaurants and other "indirect" outlets, including a growing number of large, mainstream supermarkets. Together, these local food sales were **estimated** to be close to \$5 billion in 2008. In 2011, every state but one requested federal funding for projects related to local food through the **Specialty Crop Block Grant program**. States are asking for this support because their residents are demanding it. So although the local food market segment is still fairly small, it is growing very quickly.

This demand is driven by consumers' desire to engage, discuss and build relationships around many aspects of their lives, including food. Thanks to the Internet, information about a product's origins and the people involved in getting it from the farm to the table is more accessible than ever. Consumers are able to choose foods based on specific attributes—how it was produced, where it was produced and by whom, how much it costs, or how revenues are distributed. Although a producer does not need to be selling locally in order to communicate these attributes to consumers, local and regional food systems play a lead role in building



Connecticut's AGvocate Program promotes local farmers by inviting the public to area events and demonstrations. One event allowed residents to ride a wagon through a dairy barn to learn how milk is produced and how they can support local dairy farmers. "We see ourselves, first and foremost, as agricultural ambassadors.... [Our branding as 'Kentucky Proud'] makes us who we are. We have so much support from our community that it is crazy to see how far we've come."

-Carl Chaney, Chaney's Dairy Barn, Bowling Green, KY; recipient of a **farm loan** from USDA's Farm Service Agency



awareness about agriculture and transmit knowledge to consumers. For example, in Farm to School programs, local farmers supply food to schools and often engage in educational activities with students. Does the fact that elementary school students know the name of the farmer growing their salad bar lettuce influence the choices they make in the cafeteria? Does it help them to appreciate the work that went into growing it? From the experience of schools around the country, the answers appear to be yes.

These relationships are critical for a generation with no living memory of a time when much of America was involved in agriculture. In the early 1900s, 40 percent of our population lived on farms; today, 1 percent does. Many Americans learn about farming for the first time when they meet a local farmer or read about their products and production methods in a store. In this way, local and regional food economies help non-farming Americans reconnect with all of agriculture.

Growing consumer demand for local food means **new jobs.** The opportunity presented by new consumer demand and the infrastructure required to meet that demand translates into new farm jobs managing, producing, processing and marketing food. A 2011 USDA study finds that produce growers selling into local and regional markets generate thirteen full time operator jobs per \$1 million in revenue earned, for a total of 61,000 jobs in 2008. Additional farm labor is not included in this figure. In contrast, farms that do not sell into these markets generate only three full time operator jobs per \$1 million in revenue. There may be many reasons for the difference beyond farm size; farms selling locally may grow a wider variety of crops or be packing or processing on the farm, requiring more management time. (Learn more here.)

In addition to creating new jobs in food production, a strong local food system drives growth in related businesses: equipment manufacturers, processors, cold



Click here to watch the video



storage facilities, food hubs, transportation networks and retailers. And community planning efforts to develop local food markets can pull together not just producers and food businesses, but also land use groups, economic development and food policy councils, food access advocates, local schools, and residents interested in improving quality of life in the community.

These opportunities come at a critical time for America's rural economy. Midsized farms, which can supply large volumes of food while maintaining a diverse product mix, are disappearing. Between 1992 and 2007, the number of midsized farms in the U.S. fell by over 100,000, or 21 percent. This shift has transformed the rural landscape and impacted related farm businesses. Demand from institutions, local distributors and local grocery stores provides an opportunity to keep midsized farmers on their land and rural communities thriving. For that reason, USDA supports local and regional markets as an important component of its broader agenda to boost job growth in agriculture and support rural economies.

With new markets come new farmers. Another challenge facing U.S. agriculture is the aging farm population. For every farm operator under the age of 35, the U.S. has six farm operators over 65, many of whom are on the verge of retirement. To meet our current and future needs, Agriculture Secretary Vilsack called on federal, state and local governments to support the development of 100,000 new farmers and ranchers by 2012.

Because of the capital required to start farming, many new farmers start small and begin by selling into local and regional markets. Some will want to stay there; others will use it as a jumping-off point to expand into national or even international sales.

### Local markets mean opportunities for

**disadvantaged farmers.** Farmers from sociallydisadvantaged groups—including minority, women and Native American farmers—may also lack the capital to access large markets because of a multitude of factors. For these producers and businesses, local food demand presents an opportunity to stay on the land and build capital and financial security. Local foods play other important roles as well. For many farmers in Indian Country, self-sufficiency through the utilization of local food resources is a longstanding cultural tradition. And for immigrants and refugees, farming can be an important way to make a new home in this country, contributing to their new community and maintaining cultural ties to the places they have come from by producing and consuming their traditional foods.

Local food systems strengthen rural economies.

Some research suggests that communities benefit economically when production, jobs and sales are retained locally. A 2010 study by USDA's Economic Research Service looks at producers selling several products locally: spring salad mix, blueberries, milk, beef and apples. It then compares the performance of these marketing efforts to that of mainstream supply chains, where producers sell to wholesalers whose products are not necessarily then sold locally. The study finds that compared to their mainstream counterparts, revenue per unit for producers selling locally ranges from 50 percent greater for apples to 649 percent greater for salad mix. The study also finds that "[i]n all five cases, nearly all of the wage and proprietor income earned in the [local] market chains is retained in the local economy."

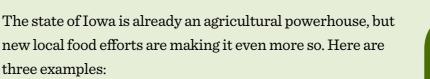
Agriculture Secretary Tom Vilsack chopping peppers at DC Central Kitchen in Washington, DC



In Northeast Iowa, Farmer Vince Spain shows students the seeds he uses to grow produce for their cafeteria. Farm-to-school programs can increase healthy food access while teaching young people about agriculture.

# CASE STUDY

### In Iowa, Local Food Systems Mean Economic Development



In northeast Iowa, local farmers, agri-business owners, community development specialists and consumers first gathered in 2007 to discuss how they could build a healthier and more economically vibrant community. They established the Northeast Iowa Food and Fitness Initiative, which quickly expanded to six counties with more than 100 producer members and 50 others working together.

Thanks to their efforts, sales of local food by farmers in northeast Iowa rose from less than \$10,000 in 2006 to over \$2 million by 2010. The groups estimate that the increase has brought 26 new jobs to the region as workers are hired to farm, process products, manage farm marketing, and do other tasks. By 2010, 21 farms were selling to local schools and 11 new farms had begun selling into the regional market. The group applied for and received a **Rural Business Enterprise Grant** from USDA Rural Development in 2011, providing resources to expand this work.

Statewide, the Iowa Department of Agriculture and Land Stewardship (IDALS) reported 228 farmers' markets across the state in 2010, an increase of more than 40 from two years earlier. An estimated 99,000 Iowa consumers and 1,500 producers participate in the markets. IDALS research shows that an estimated \$59.4 million in direct and indirect sales, an additional \$12.2 million in personal income, 374 direct jobs and more than 200



 Sales of local food by farmers in Northeast lowa rose from less than \$10,000 in 2006 to over \$2 million by 2010.

indirect jobs had been created as a result of the activities of farmers' markets in Iowa.

3 Demand for local food in Iowa still outpaces production. "We actually have a waiting list for communities that would like to start farmers' markets, as well as area schools, restaurants and institutions that would like to purchase more foods from local sources," says Bahia Nightengale, local food coordinator for the Southwest Iowa Food and Farm Initiative. A recent study from Iowa State University showed that 10 southwest Iowa counties could generate \$2.67 million in wages, an equivalent to 45 additional jobs, by increasing fruit and vegetable production to meet local demand during the Iowa growing season.

"USDA Rural Development is very interested in supporting the exciting local foods initiatives that are surfacing across Iowa using our loan and grant programs," says Bill Menner, Rural Development's State Director in Iowa. "People want to know where their food is coming from and are requesting locally grown foods. They also recognize the importance of supporting local producers and local economies." "We were working hard to protect the region's farmland but realized that without a new generation of farmers and stronger local food systems, there would be no one to work the land, protected or not."

> —Noelle Ferdon, Director of Local Food Systems, Northern California Regional Land Trust

A mobile market delivers fresh produce to residents of Spartanburg County, South Carolina

Although additional research on the economic benefits of local foods is needed, several studies conducted by universities or private entities flesh out the findings of the ERS study. A recent Georgia study finds that the state could generate \$2 million in sales revenue if each resident put just \$10 of their weekly food budget toward meat and milk from Georgia producers. A 2010 study in **16 counties in Northeastern Ohio** models what would happen if Ohio farmers met 25 percent of local demand with local production. It finds that 27,664 new jobs would be created, providing work to about one in eight unemployed residents, and annual regional sales would rise by \$4.2 billion.

**Local food systems help preserve farmland and open space.** Sprawl has swallowed up some of America's best farmland. Approximately 40% of producers are now located in "metro" counties. Their proximity to urban markets brings development pressure, but it also creates opportunities to sell to the nearby population center. Business planning, infrastructure investment and farmland protection programs can all help producers connect to local markets—and a strong connection to the local market is key to ensuring that farms on the urban fringe stay economically viable and the land stays in farming.

Local food systems help boost healthy food access. 50 million Americans—most of them children or the elderly—are food insecure. Nearly 25 million live more than one mile from a supermarket, a distance that is particularly hard for the elderly or residents without cars to travel carrying groceries. In some rural areas, the nearest market can be an hour's drive "We asked people how far they were driving for fresh produce. In some cases the answer was 45 minutes each way. Our goal became clear: grow fresh produce locally and get it to the people..."

-Rev. Stephanie Ahlschwede, United Methodist Ministries, Omaha, Nebraska

or longer. **Farmers' markets**, mobile grocers and other unconventional retail outlets stocked with local food can help address food access challenges in areas not being reached by the traditional system.

And for schoolchildren, university students, hospital workers and patients, farm to institution initiatives can help build a foundation for healthy eating in the future by increasing access to healthy foods and providing opportunities for nutrition or agricultural education.

A complement to international and national

food systems. Any smart investor knows that there is security in a diversified portfolio. The strength of America's agricultural industry is in its diversity—in the range of products, supply chains and markets that our producers serve. The local, regional, national and international systems each have unique strengths and thrive under different conditions. Producing food for local and regional markets will not be successful everywhere, just as there are places where it's impractical to produce agricultural products in bulk for sale on the global market.

But in many places, market demand and good conditions create a ripe opportunity to expand local and regional food production. USDA is committed to helping our farmers and ranchers take advantage of these important market opportunities. The face of that commitment is the Know Your Farmer, Know Your Food initiative.



Student at Chicago's Mark Sheridan Math & Science Academy and Chef Lovely Jackson.

### USDA's KNOW YOUR FARMER, KNOW YOUR FOOD INITIATIVE

### WHAT IS IT AND HOW DOES IT WORK?

America has the most innovative farmers, ranchers and food businesses in the world. Many of them see an opportunity to diversify their incomes and connect with their communities through local and regional food. Congress has responded to this growing interest by authorizing USDA to administer a variety of programs that support the producers and businesses involved in regional food networks.

To meet these goals as effectively as possible, USDA launched the Know Your Farmer, Know Your Food initiative (KYF) in 2009. KYF strengthens the connection between farmers and consumers to better meet critical goals, including reinvigorating rural economies, promoting job growth, and increasing healthy food access in America. KYF is not a new program; it has no fulltime staff, no office, and no dedicated funding. Rather, the initiative seeks to leverage existing USDA resources, promote greater collaboration between the Department's 17 agencies and multiple staff offices, and identify ways to improve the administration and implementation of programs. KYF marked the start of a new way of doing things at USDA. At least one employee from each agency and many staff offices joined the KYF task force, which coordinates the initiative through regular meetings that provide an opportunity for information sharing, education and identification of program synergies. Some task force members are political appointees; many more of them are career employees. They range from entry-level staff to senior executives. Over three years, individual members of the task force have come and gone, but the structure has remained. The task force serves as a space to bring different perspectives and tools to bear in the service of common goals.

**Compiling resources.** The task force began by identifying a group of grant, loan and loan guarantee programs that can support local and regional food producers and businesses. This list, which is by no means comprehensive, includes at least 27 programs run by nine different agencies that support local food efforts in some way. These resources and others are now publicized in one place through the



KYF website and blog. The KYF Map allows users to search for USDA-supported local food projects in their community or learn what others are doing across the country. It is a visual depiction of the breadth of USDA support for local food efforts.

#### Fostering collaboration, efficiency and

**responsiveness.** Task force members also convene subcommittee meetings when issues arise that cross multiple agencies, using these meetings to coordinate efforts. For example, a KYF data subcommittee was formed to allow staff from 6 agencies and offices that gather and analyze data to share information about resources and data gaps. They then devised ways to fill some of those gaps while avoiding the duplication of efforts. Staff from participating agencies have since developed two bibliographies on farm to school **programs** and food hubs; a new question on the 2012 Census of Agriculture to gauge producer participation in local markets; and many other efforts detailed in the Local Knowledge section.

In another example, through KYF, USDA's Agricultural Marketing Service and Food and Nutrition Service joined together to form a Farm to School Team, which provides guidance to farmers and school districts on implementing farm to school initiatives. These agencies are also administering a pilot project to test new ways for school districts to source local produce using federal funding.

**Encouraging the national conversation about where our food comes from.** For USDA, consumers' growing desire for "food with a story" is an opportunity for all of our nation's producers to tap into new market opportunities. Farmers and ranchers across the country are finding ways to tell their own stories—directly to a consumer, on their website or packaging, through "Know Your Farmer, Know Your Food is helping to strengthen local and regional food systems. It's a great tool to help to increase the availability of healthy food, get kids involved in learning more about what they eat, and meet the needs of underserved communities."

> –Kevin Concannon, USDA Under Secretary for Food, Nutrition and Consumer Services

organic certification, or by other means—and respond to consumer demand. They are developing new, innovative tools to create more transparency in the supply chain so that their identities can be associated with the products they grow, raise, and process—whether they are selling locally or across the country.

For example, in New Mexico, pride in locally-grown chiles runs deep. With the help of **Specialty Crop Block Grant** funding administered by USDA's Agricultural Marketing Service, chile producers near the town of Hatch leveraged this local support into a regional 5-state marketing campaign touting the unique quality of Hatch chiles. The campaign has spread to supermarkets across the country, bringing new revenue to Hatch producers and new producers to the Hatch area. These producers



are tapping into the same demand for identity-preserved products that brings many consumers to their local farmers' markets.

As consumers seek out this knowledge, USDA sees an opportunity to help more Americans understand and appreciate the role of agriculture more broadly for our nation's security and prosperity. Through KYF, USDA has stepped up its role in fostering a national conversation about where our food comes from, encouraging consumers to learn more about the people behind the products and the role of agriculture in our economy and communities. Producers and food businesses—regardless of whether they sell locally or into larger national markets—are joining in and benefiting from this conversation.

In that way, KYF is a critical part of USDA's broader vision to expand economic opportunity in rural America; to promote sustainability; to nourish all Americans; and to conserve our nation's shared natural resources.

You can investigate KYF's accomplishments in much greater depth in the rest of the KYF Compass and see the landscape of USDA support for local food efforts on the KYF Map. Learn about USDA support for local meat and poultry; farm to institution programs; local food infrastructure; local food knowledge; healthy food access; local stewardship; and careers in agriculture by clicking on the links.





### LOCAL FOOD INFRASTRUCTURE

Farmers' markets, farm stands, and other outlets for farmers to sell products—usually unprocessed produce—directly to consumers have seen sensational growth and attention in recent years. But as important as these outlets are, they are by no means the sum total of local food sales. USDA's Economic Research Service **recently illustrated** that sales to restaurants, retailers, and regional distributors are three times larger.

Selling to retailers and other "indirect" (sometimes called "intermediated") markets requires infrastructure. Infrastructure can include things like a warehouse or cold storage facility to sort, grade and store food and keep it fresh; processing plants to cut broccoli into florets, turn strawberries into jam, or mill grain into flour for local bakeries; refrigerated trucks to transport local food; or kitchen equipment to prepare it. This infrastructure must also be scaled appropriately. Much of America's existing food infrastructure doesn't work for local and regional producers. It is often too large to accept smaller amounts of product, too far away for smaller transportation networks to reach, or unable to preserve the local identity of the food.



- The number of farmers' markets nationwide increased by 54 percent between 2008 and 2011, providing over 7,000 venues for farmers to interact directly with consumers.
- The Food Hub Web Portal, a virtual technical assistance network run by USDA's Agricultural Marketing Service, received over 5,000 site visits in its first three months.

Access to infrastructure can open up tremendous opportunities for the local economy. Value-added products such as jam or flour can bring a better price to producers than can a raw product. Commercial kitchens can launch new food businesses; processing plants or transportation networks employ workers; and cafeteria equipment helps schools utilize more local food. Access to refrigerated storage space means that a farmer can wait

### SEE HOW WILD HARVEST CREAMERY IN WASHINGTON DEVELOPED AN ON-FARM PROCESSING FACILITY FOR CHEESE.

Click here to watch the video



### NEBRASKA DAIRY PROCESSING PLANT DEVELOPED WITH A B&I LOAN Click here to watch the video



for a competitive price for his or her product rather than having to sell immediately after harvest. Buyers can more easily source from many small farms without the burden of additional paperwork if the farmers have a warehouse in which to aggregate and cooperatively market their products. And production infrastructure can help producers plant crops earlier and harvest later, extending the season and their revenues. The road to new, profitable markets and to expansion beyond directto-consumer sales is paved with infrastructure.

### ON THE GROUND: KYF AND LOCAL FOOD INFRASTRUCTURE

When the Know Your Farmer, Know Your Food initiative was launched in 2009, the KYF task force compiled tools to help producers and food business owners identify infrastructure near them. (Two examples are the meat and poultry slaughter map and the working list of food hubs, discussed in detail below.) The task force also identified a slate of USDA programs available to develop additional infrastructure and looked for opportunities to share best practices between and across communities. To date, KYF has publicized and catalyzed activities around several different kinds of infrastructure to improve local and regional food system capacity across the supply chain, from on-farm season extension technology to retail facility upgrades:

#### **PRODUCTION INFRASTRUCTURE**

Local and regional producers expressed a need for technical assistance to help extend the growing season so that they could provide local consumers with food beyond the warm weather months. In response, USDA launched the seasonal high tunnel pilot, run by the Natural Resources Conservation Service. Read more about high tunnels in the Local Stewardship section of the KYF Compass; then see how many high tunnels USDA has supported in your state on the KYF map.

Local food production infrastructure can mean more than farms, too. For an aquaponics business, a warehouse counts. In the central New York community of Sherrill, USDA Rural Development is helping Aqua Vita Farms expand into a 13,000 square foot warehouse space and convert it into a greenhouse and fish farm. A 2011 **Business and Industry Guaranteed Loan** helped Oneida Savings Bank assist Aqua Vita Farms. Fish and produce will be shipped to central New York wholesalers and then to local restaurants and retailers. "Rural Development is proud to support the production of locally-produced food in Central New York and we look forward to seeing Aqua Vita's products in our local markets," says Rural Development State Director Jill Harvey.

#### **PROCESSORS**

Processing whole products can help producers add value to their offerings; canning or freezing perishables helps consumers maintain access to local food between growing seasons. But in recent decades, the number of processing facilities for certain agricultural products has declined by a third, leaving many local food producers without access to these opportunities. As discussed in the Local Meat and Poultry section of the KYF Compass, many of the remaining processing facilities have prohibitive or inflexible volume requirements, are too far away, and/or source only from producers with whom the processors have signed contracts. To help address the shortage of local processing opportunities, USDA is promoting programs that support the development of new facilities. Communities are using these resources to



build innovative, job-generating processing operations. For example, in Okmulgee, Oklahoma, the Muscogee (Creek) Nation's Mvskoke Food Sovereignty Initiative is helping Tribal members and their neighbors develop strong, economically vibrant local food systems with a processing component. With a 2010 grant through the Agricultural Marketing Service's Farmers' Market Promotion Program, MFSI is developing a value-added processing facility for produce and training community members in food safety and food processing techniques. The group is also working on a regional marketing plan for local value-added products. By processing and

marketing their own products, Tribal producers will capture a greater share of the retail dollar and keep jobs and revenues in the community.

Rural Development's Value-Added Producer Grants can be used to plan and start a majority producer-owned business that adds value—usually through processing and packaging—to an agricultural commodity. In 2008, Congress directed USDA to make changes to the Value-Added Producer Grant program so that it would better serve small and limited-resource producers. in El Paso, TX, USDA **issued new rules** in 2011 that implement provisions of the 2008 Farm Bill. The changes make Local Food Hub in Charlottesville, Virginia unloads produce in its warehouse. The food hub sources products from more than 50 farms within 100 miles of the city.



specific funds available through this grant program to beginning, socially-disadvantaged and small and midsized family farmers and ranchers. The program was also broadened to better support producers selling into local and regional markets. In Powhattan, Kansas, Johannes Farm secured a Value-Added Producer Grant in 2012 to de-hull, process, package and locally market their oats, which are grown without the use of pesticides, herbicides or synthetic fertilizers.

**Processing has added benefits.** The development of processing infrastructure is also an opportunity to address other critical issues in the food system. The Natural Resources Conservation Service is using infrastructure development as an opportunity to strengthen conservation practices on farms; for example, in Hadley, Massachusetts, NRCS helped John Kokoski, a fifth-generation family dairy farmer, engineer a solution to manage both cow manure and wastewater when he built an on-farm plant to bottle milk for local sale. The revenues from local sales are now helping Kokoski keep his farm viable and stave off pressure from developers.

#### **DISTRIBUTION INFRASTRUCTURE**

If you live in a farming region but the only trucks in your area take food across the country, you and your neighbors may be losing out on access to local products. Several USDA programs can help develop strong regional transportation networks. For example, Rural Development's **Rural Business Enterprise Grant program** helped Nevada's Mineral County Economic Development Authority (MCEDA) purchase two NRCS helped John Kokoski, a fifthgeneration family dairy farmer in Massachusetts, engineer a solution to manage both cow manure and wastewater when he built an on-farm plant to bottle milk for local sale.

refrigerated trailers to transport farmers' products to local markets in 2011. This project is a regional effort: MCEDA applied for the funding, Pershing County's Double Tree Ranch will lease the trailers, and Churchill County's Great Basin Basket, LLC will provide maintenance and cover operator costs and mileage. The trailers will enable rural Nevada farmers to expand the selection of food, both local produce as well as value-added products, offered at farmers'



markets and CSAs in rural Nevada and in more distant metropolitan areas.

#### **RETAIL INFRASTRUCTURE**

**Farmers' markets.** Connecting farmers and consumers requires a place for them to come together. Farmers' markets are one example of new infrastructure that meets this need. The number of farmers' markets increased by 54 percent between 2008 and 2011, providing over 7,000 opportunities nationwide for farmers to interact directly with consumers. (**Read more** about farms in Illinois and Oregon that have expanded their business significantly thanks to access to farmers' markets.)

Where farmers' markets are developed, their impact on local communities can be significant. In Newport, Arkansas, a 2010 Community Facilities grant from Rural Development helped the community replace a With a 2011 Hunger Free Communities grant from USDA's Food and Nutrition Service, Centro del Obrero Fronterizo has transformed an empty warehouse into a market for local producers and consumers.





small farmers market under temporary canopies with a large pavilion structure in a high-traffic area. The number of vendors at the market increased from 8 to 20, and some vendors have seen sales increases of as much as 50 percent. A 2011 **Rural Business Enterprise Grant** from Rural Development helped the City of Marianna, Florida relocate a regional market that was in jeopardy of closing. The new market is the centerpiece of a performing arts park and provides the Jackson County Growers Association with a high-traffic venue in which to sell local products.

Winter farmers' markets are also on the rise, even in northern states. Over 1,200 markets operate through the winter nationwide, an increase of nearly 40 percent since 2010. In 2011, through the Agricultural Marketing Service's Farmers' Market Promotion Program, USDA partnered with Chicago-based Faith in Place to expand 15 winter farmers' markets in the city, helping reduce A temporary structure at the current site of the Burrillville, RI Farmers Market will be replaced by a 100' x 30' covered pavilion and parking area thanks to a grant from USDA's Rural Development agency.





# CASE STUDY

### Infrastructure expands markets in Idaho



only expanded their delivery capacity and service area, but also created a job through the immediate filling of a delivery driver position. The growth of Idaho's Bounty has created an additional distribution channel for several previous producer-recipients of Value-Added Producer Grants while helping restaurants and other food businesses meet consumer demand for locally produced products. Idaho's Bounty increased its revenues 30% in 2010 and another 25% in 2011 as it continues to build out its infrastructure and marketing efforts.

<complex-block>

 At Idaho's Bounty Food Co-op in

 Ketchum, a young customer learns

 about local apple varieties.

"This new [delivery] truck has been really helpful to our program. Because we're now able to make deliveries to people's homes, we've seen an increase in participation. We have also partnered with local farmers in Hoopa who provide us with a variety of produce like tomatoes, *lettuce, squash and cucumbers,* so we're able to get fresh vegetables out to our people. A lot of the knowledge about growing gardens, canning food and smoking fish has been forgotten, so our other goal is to provide classes and resources for people to gain this knowledge again."

> Keith Hostler, Executive Director, Food Distribution Program, Hoopa Valley Tribe, Hoopa, CA



5 KNOW YOUR FARMER, KNOW YOUR FOOD COMPASS

some of the volatility in farmers' seasonal incomes while improving consumer access to fresh, local food year-round. The Agricultural Marketing Service tracks winter markets and administers several other programs, including the Specialty Crop Block Grant program, that support them.

**Mobile markets.** In areas where consumers aren't able to access a farmers' market, markets are coming to them—another example of how infrastructure development can improve healthy food access. In far Northern California, the Hoopa Valley Tribe secured a Community Facilities grant from Rural Development in 2009 to purchase a truck that delivers healthy food, including that grown by local producers, to over 1,200 Native American and low-income people in 13 rural counties. A second grant from USDA's Food and Nutrition Service allowed the tribe to purchase an additional refrigerated truck.

**Brick-and-mortar retail.** For grocers and other traditional retailers, local food offerings are pulling in





(Above) Manager Mark Regni and Architect Bruce Becker celebrate the ribbon-cutting ceremony for Elm City Market, the first full-service grocery store in downtown New Haven. The store created 100 new jobs and was supported by a guaranteed loan from USDA.

(Below) Alex Gyori, manager of the Brattleboro Food Co-op in Vermont, smiles as he envisions an expanded store made possible with a guaranteed loan from USDA. Since its opening in 1979, the coop has grown from a tiny warehouse to a \$17 million operation supporting 109 jobs and 146 farmers.



more customers, boosting revenues and creating jobs. In New Haven, CT, a city where one in four people live in poverty, a Business and Industry Guaranteed Loan helped construct the first full-service grocery store in the inner city in 2011. Elm City Market created 100 new jobs for local residents with salaries starting at twice the minimum wage. But the community didn't stop there: the store is sourcing over half of its products from producers within 200 miles of the city. The store reports brisk business, serving community members that previously lacked access to the products grown just miles away from them. Vermont's Brattleboro Food Coop has grown from a tiny warehouse storefront in 1979 into a \$17 million operation supporting 109 high-quality jobs; the coop secured a 2010 Business and Industry Guaranteed Loan from USDA Rural Development to expand into a larger space and offer additional retail capacity for the 146 local farmers and 46 local food producers who sell there.

#### **KITCHEN FACILITIES**

The final step in the farm to consumer infrastructure chain is food preparation, where infrastructure can bring opportunities for food entrepreneurs and greater access to local food for schools and other institutions.

**Commercial kitchens.** A publicly accessible commercial kitchen provides opportunities for aspiring entrepreneurs without high startup costs. The town of York, **Pennsylvania** secured a 2010 **Rural Business Enterprise Grant** from Rural Development to open a commercial kitchen within its 100-year-old Central Market in 2011; the Progress Center in Norway, **Maine** is using a **Community Facilities grant** to renovate its kitchen, allowing it to serve 200 meals a day to residents in need using locally grown food; and in **Tennessee**, the Cumberland Culinary Center used an RBEG to develop

#### VALUE ADDED PRODUCER GRANT PROGRAM WITH USDA DEPUTY SECRETARY MERRIGAN

Click here to watch the video



a commercial kitchen and small business incubator. Six small businesses that use the kitchen are marketing their products and seven are in development, paying a rental fee for services that would otherwise cost them thousands of dollars.

Local Roots Market and Café in Wooster, Ohio is also developing a commercial kitchen with 2011 financial support from Rural Development. When the kitchen comes on line, Local Roots expects 25 businesses to benefit from increased revenues and 10 new businesses to start up as a result of kitchen access. Local Roots began in 2009 as a year-round farmers' market and has expanded rapidly since then, incorporating as a cooperative in 2010. Today, it has some 800 members and sells food from 150 local producers, who take home 90 percent of their gross sales.

Putting kitchens back in cafeterias. Many schools are limited by a lack of kitchen equipment and must rely on pre-prepared foods rather than fresh, local food that requires some preparation. USDA is helping schools transcend that barrier. In Maryland, the Harford County Board of Education received a Community Facilities grant from Rural Development in 2010 to expand its refrigeration and freezer equipment at the Food Services central warehouse facility. The expanded space will allow for the purchase of additional locally grown produce for the 39,000 public school students in the district—a benefit to both students and Maryland



(Above) Deputy Secretary of Agriculture Kathleen Merrigan visits YorKitchen, a commercial kitchen in York, Pennsylvania supported by a 2010 Rural Business Enterprise Grant from Rural Development.

(Below) Deputy Secretary Kathleen Merrigan and Ron Reed of Ron Reed's Signature Barbeque Sauce Company in the Cumberland Community Center, a commercial kitchen in Tennessee supported by an RBEG from USDA Rural Development.









Workers at the Oklahoma Food Coop pack eggs. The coop operates as a food hub with 200 participating producers generating \$70k in monthly sales. Sales increased 20-fold between 2004 and 2010. producers. Learn more about how schools can utilize Community Facility loan and grant funds here.

### PULLING IT ALL TOGETHER: REGIONAL FOOD HUBS, COOPERATIVES AND TERMINAL MARKETS

With so many links in the chain connecting farmers and consumers, some entrepreneurs are combining multiple links into one business. **"Food hubs"** are a case in point. A food hub is a business or organization that actively coordinates the aggregation, storage, distribution, and/or marketing of locally or regionally produced food. By aggregating the products of many individual farmers and providing economies of scale for insurance, packaging, and other services, food hubs are able to help local producers reach a larger range of markets than they could otherwise, including selling to large regional buyers.

Food hubs have a track record of contributing to the local economy and working well for smaller farmers. For example, in Oklahoma, a regional cooperative-turnedfood hub provides 200 Oklahoma producers with a place to aggregate, store, label and cooperatively market their products. The hub distributes the products to 50 sites around the state, generating about \$70,000 in monthly sales. Sales increased 20-fold between 2004 and 2010 and the number of producers participating increased 10-fold. The food hub received a Farmers' Market Promotion Program grant from USDA's Agricultural Marketing Service to support the expansion.

In some instances, the aggregation of farmers' and ranchers' products takes place virtually rather than in a physical location. In creating FoodHub, a first-ofits-kind online tool to connect wholesale food buyers



La Montanita: USDA's Rural Cooperative Development Grant Program



La Montanita, a retail cooperative in New Mexico, established a regional food hub in 2007 to expand the amount of local food available to the co-op's four stores and to assist regional producers in accessing other wholesale market channels for their products. The coop and hub market more than 1,500 products from 900 producers within a 300-mile radius of Albuquerque, employ more than 200 full and part-time staff, and serve 17,000 coop members. The food hub offers producers 1,500 square feet of refrigerated storage, 500 square feet of refrigerated space and over 4,000 square feet of dry storage; refrigerated trucks for pick-up and delivery; and marketing services. By 2010, the food hub had sales of \$2.7 million. Says former General Manager C.E. Pugh of the co-op's decision to gain a competitive edge through local sourcing: "We began to look out and say... how are we going to maintain our position in the marketplace 10 years from now, 15 years from now, 20 years from now? It just seemed clear that the support of local products made a lot of sense." He continues, "As a result of this work... we've seen sustained double-digit growth when the industry as a whole has dropped to single digits." In 2010, La Montanita received support through USDA's **Rural Cooperative Development Grant program** to expand the co-op's work.







and sellers, Oregon-based Ecotrust built just such an aggregation tool using Rural Business Opportunity Grant funding from USDA Rural Development.

To respond to the burgeoning interest in food hubs across the country, a KYF subcommittee was established at USDA in 2009 with the Agricultural Marketing Service as the lead agency. The subcommittee has identified USDA resources used to study or develop food hubs; compiled case studies into a regional food distribution report; developed an **inventory of food hubs** currently operating or in development; and, in coordination with the National Good Food Network, offers **webinars and other training opportunities** for existing and aspiring food hub developers. A recent webinar had nearly 500 participants on the line and has been viewed by hundreds more since then.

Additionally, AMS staff responded to more than 200 food hub-related inquiries from producers and others in 2010 and 2011. The information the agency has gathered is also available through the AMS food hub web portal, a virtual technical assistance network launched in July 2011. By September 2011, the site had already received over 5,000 visits.

**Cooperatives.** Food hubs can be organized under a variety of business models, including small businesses, nonprofit organizations, buying clubs, or producer or retail cooperatives. Producer cooperatives, which are locally or regionally owned by their members, are a natural fit to participate in or create a food hub in order to aggregate, store and market members' products to a variety of buyers. Retail cooperatives, which are owned by consumer members, are also a model that has been used to develop food hubs that aggregate farmers'



# CASE STUDY

Eastern Market in Detroit, Michigan Transforming from Traditional Market to Food Hub



A public market for over a hundred years, Eastern Market in Detroit, Michigan is transforming from a traditional market to a food hub—and more. The market consists of four individual markets: retail (for consumers), wholesale (for grocery stores, distributors and restaurants), flowers, and special events. More than 250 vendors from Michigan, Ohio, and Ontario process, wholesale, and retail their food at the market, which also coordinates aggregation, distribution, processing, and commercial sales for many of the region's small and mid-size farmers. In 2010, the market ramped up its research and planning, entering into a cooperative research agreement with USDA's Agricultural Marketing Service to expand the availability of healthy, local food throughout Detroit. The market also plans to redevelop an economic development district to bring in additional business incubators, restaurants, retailers, wholesale services and a distribution center. The market is currently partnering with the Detroit Public Schools to help them work toward meeting their internal goal of converting 30 percent of their \$16 million annual food purchases to Michigangrown and minimally processed foods. And 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 (food stamp) benefits each month.





products and offer them for sale to consumers. Read more about these models here.

A major supporter of cooperatives in the field is USDA Rural Development, which provides **Rural Cooperative Development Grants**. One of these grants helped the Rocky Mountain Farmers Union assist the High Plains Food Cooperative in Colorado, a network of High Plains and Rocky Mountain Front Range producers and consumers, launch an online farmers' market where consumers can order products for delivery from coop member-producers.

**Terminal markets.** Wholesale produce markets, sometimes known as terminal markets, are storage and transportation facilities used to trade



agricultural products in or near major metropolitan areas. Historically, they have served as places where wholesale buyers can purchase products coming in from all corners of the country or the globe. Since the inception of KYF, USDA has begun to investigate whether wholesale market facilities could provide appropriate space and infrastructure to help small and mid-sized local and regional producers better meet the surge in demand for local and regional products. As part of a cooperative research agreement with the Wallace Center of Winrock International, and in consultation with the North American Produce Market Managers Association and United Fresh Produce Association, USDA's Agricultural Marketing Service is surveying the existing produce terminal network to assess the availability of underutilized capacity and infrastructure.

USDA has already seen some wholesale markets make the shift toward serving local producers. Detroit's Eastern Market, a public market for over 100 years, is a hybrid market with wholesale and retail functions. Learn more about its efforts to connect local producers and consumers while expanding food access in Detroit.

USDA is supporting infrastructure development all along the supply chain. For examples of funded infrastructure projects in your region, see the **KYF Map**.



### STEWARDSHIP AND LOCAL FOODS

All farms and ranches, regardless of their size or the market they sell to, play a role in protecting our natural resources. For producers of local foods, that role has some special features. Many of the farms best positioned to sell locally are situated near metropolitan areas, where they share natural resources with large populations and serve as the front line in protecting open space from development. Local food production also encompasses forests and rangelands that families, Tribes, communities and businesses are actively using to gather food, maintain cultural traditions and earn revenue.

Equally important is the educational role that these local food producers play in teaching their customers about resource stewardship. Farmers and ranchers who sell at farmers' markets, farm stands and other directmarketing outlets are often the only food producers a consumer will meet in person. These producers are crucial as "agricultural ambassadors" who can illustrate the stewardship efforts of the sector.

The Know Your Farmer, Know Your Food initiative has publicized USDA efforts to help local food producers better protect our shared natural resources. Here are just a few examples of USDA efforts in this vein:

### FAST FACTS

- In 2010 and 2011, USDA's Natural Resources Conservation Service helped finance the construction of nearly 4,500 high tunnels greenhouse-like structures that extend the growing season around the country.
- Since 2009, when Secretary Tom Vilsack launched the People's Garden Initiative, over 700 local and national groups have established community and school gardens around the country.

**Developing locally-adapted seed varieties:** Successful farming starts with a seed. By utilizing seed varieties that are resistant to common diseases and that stand up well to pests, farmers can reduce the need for chemical applications. But since pests and diseases vary widely depending on the climate, soil type and other factors, the development of resistant seed varieties benefits from a local approach. USDA supports research into locally-adapted seed Rex Gardner, NRCS Soil Conservation Technician, works with Frank and Liz Abruzzino of Hawthore Valley Farms in Rockford, West Virginia, to improve their pasture for locally-sold grassfed beef.

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varieties as part of its commitment to stewardship on agricultural lands. For example, in 2011, Nevada farmer Rick Lattin secured a grant from the Sustainable Agriculture Research and Education program of USDA's National Institute of Food and Agriculture to conduct a research trial to select organic fresh market tomato seeds resistant to Beet Curly Top Virus. Seeds susceptible to the virus will be planted next to a locallydeveloped variety thought to be resistant to the virus. Lattin and a partner farm will also compare plantings in open fields to plantings grown under high tunnels, a practice supported by USDA's Natural Resources Conservation Service that is thought to reduce the incidence of certain diseases (see below).

Helping local producers implement sustainable practices on their farms and ranches. USDA's Natural Resources Conservation Service offers costshare assistance to farmers and ranchers interested in implementing conservation practices on their land. The Environmental Quality Incentives Program (EQIP),



shares the cost of implementing dozens of specific practices, including installing more efficient irrigation systems, building a composting pad, installing vegetated buffers to reduce soil erosion and protect wildlife, and much more. Conferences such as this one in Oklahoma help local food producers learn more about EQIP and other programs to support conservation efforts on working farms.

Local and regional food producers are using EQIP to help them steward natural resources. For example, in southern New Mexico, chile producers near town of Hatch have used EQIP funding to replace flood irrigation with subsurface drip irrigation on their farms. Collectively, the producers have seen 25 percent higher yields on average and have increased water use efficiency by at least one-third. Hatch chiles are a source of local pride for New Mexicans and many are sold and consumed locally, but they are also being marketed regionally and nationally as an identity-preserved product. Read about local food producers in Mississippi, Texas, Washington and other states who are using EQIP here.



Real Food Farm, an urban farm in Baltimore's Clifton Park, built a high tunnel with support from NRCS and can now grow and market produce year-round from a mobile market that serves the city's low-income neighborhoods.

EQIP also helps farmers and ranchers with transitioning to organic agriculture. Not all local food producers are certified organic. However, organic production can help add value to many local products by providing transparent evidence of adherence to rigorous standards and educating consumers on farming practices. In turn, organic system requirements for conservation of natural resources and biodiversity create added value for the EQIP program.

Supporting infrastructure to protect resources and extend the growing season. Under the Know Your Farmer, Know Your Food initiative, USDA's Natural Resources Conservation Service launched an EQIP pilot practice in 2010 that they expected to be popular with producers growing for local markets—but they had no idea just how popular it would become. Under the seasonal high tunnel pilot, USDA shares producers' costs to build simple greenhouse-like structures that protect crops from extreme weather and pests. High tunnels (also known as hoop houses) reduce water use and the incidence of disease, diminish the need for costly inputs, protect soil, and extend the growing season—a critical element for producers selling to local markets. While NRCS initially planned to offer the pilot in 32 States, the response was so overwhelming that availability was expanded to 47 States. In 2010 and 2011, the pilot's



USDA HOOP HOUSES AT THE WHITE HOUSE Click here to watch the video



first two years, EQIP helped finance the construction of over 4,500 high tunnels around the country. In late 2011, NRCS announced that the pilot would become a permanent practice under EQIP, available to producers in all 50 states. See examples of high tunnels in Alabama, Virginia, Utah, and even at the White House in this video; then learn how many high tunnels in your state were supported through NRCS by visiting the KYF Map.

Bringing gardens to the people. When President Lincoln established the USDA 150 years ago, he referred to it as the "People's Department." In this spirit, Agriculture Secretary Tom Vilsack launched the People's Garden initiative in 2009 as an effort to challenge USDA employees to create gardens at USDA facilities. It has since grown into a collaborative effort of over 700 local and national groups establishing community and school gardens across the country. To see where People's Gardens are located, see this map. In 2010, Secretary Vilsack established a People's Garden School Pilot, coordinated by the Food and Nutrition Service, to develop gardens at high-poverty schools. And in 2011, grants were announced to support the development of People's Gardens in additional communities, including this food desert neighborhood in Baltimore. The Forest Service contributed to this pilot in 2011 to support the planting of fruit, nut and shade trees that enhance community gardens and urban agriculture activities. Part of a broad USDA and Obama Administration effort to provide children with access to a nutritious and safe diet, People's Gardens are a strong complement to First Lady Michelle Obama's Let's Move! Initiative.

**Protecting farmland from development.** Across the country, farmland is disappearing. The problem is particularly severe near cities, where development pressure and high land values make it hard to secure

Barb Landgraf, rangeland management specialist with NRCS, works with a rancher on grazing management in Beaverhead County, Montana access to farmland. But these areas are some of the best for local food production due to their proximity to large population centers. NRCS's **Farm and Ranch Lands Protection Program** works with States, local groups, and volunteer landowners to purchase conservation easements and make sure that farms threatened by development pressure can afford to keep farming. Learn about how a family farm in the Connecticut suburbs protected its land for local food production with the help of this program here.

Harnessing the food-producing power of our trees and forests. Agroforestry is nature's diversity at work: it blends forestry and crop production to improve yields while protecting soil and water. Trees might serve as a windbreak that shelters row crops; the trees themselves may provide fruits or nuts; or trees can be managed to create optimal conditions for growing food. The National Agroforestry Center, jointly sponsored by USDA's Forest Service and Natural Resources Conservation Service, helps landowners and professionals use agroforestry principles to manage their forests and crops. For example, in Illinois, staff of the National Agroforestry Center advised a family that they could harvest ramps, a type of wild onions, from their forest. Harvesting the herb made room for other native woodland plants, but it also became an important source of revenue. Ramps now provide 70% of their farm income and the harvest employs local workers as well. Agroforestry got a boost at USDA with the release in 2011 of the Agroforestry Strategic Framework, developed by an interagency working group, which will guide the Department's efforts through 2016.

Two men smoke fish at the Stikine River in Southeast Alaska, near Wrangell.

SEE HOW THE FUSILIERS OF MANCHESTER, MICHIGAN BUILT AND UTILIZED A HOOP HOUSE TO DEVELOP A LOCAL MARKET FOR THEIR PRODUCTS.

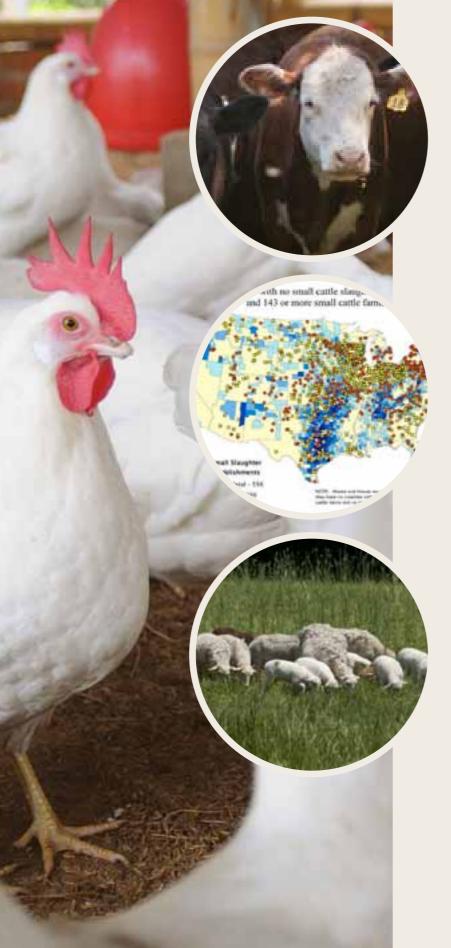
Click here to watch the video

# Hoophouses in Michigan

Helping Native and rural communities retain their cultural tradition of agriculture. Harvesting wild plants, animals and fish is a way of life for many Native American tribes and other rural residents. Local harvesting for household or community use, termed subsistence, is a particularly strong tradition in Alaska. Through the Federal Subsistence Management Board, USDA's Forest Service and other Federal agencies share responsibility for managing subsistence fishing and hunting on Federal lands and waters throughout Alaska, helping to protect these resources for Alaska Natives and other rural populations.

In a related project, the Center for Alaska Native Health Research and the University of Alaska Fairbanks are designing and evaluating a program to locally and sustainably harvest fish in remote Alaskan communities. This project, which will further a tradition of local self-sufficiency by developing a local fisheries-to-schools program, is supported by a 2010 grant from the National Institute of Food and Agriculture's Agriculture and Food Research Initiative.

All of America's farmers and ranchers are stewards of the land. Local food producers play a unique role as agricultural ambassadors through their direct interactions with consumers, and by helping nonfarming Americans understand and appreciate the role that all farmers and ranchers play in protecting natural resources. Even non-local producers are finding ways to educate consumers about their stewardship efforts through identity-preserved branding, organic certification, and other efforts to increase transparency through the supply chain.



# LOCAL MEAT AND POULTRY

From high-end restaurants to quick-service chains, from small local grocers and farmers' markets to large retail stores, hospitals, and corporate cafeterias, businesses are responding to consumer demand for meat, poultry and eggs produced by farmers and ranchers in their region. Even schools—from Colorado to coastal Maine—are finding ways to get local meat onto school lunch menus.

The support for local animal products should not be surprising given the value that animal agriculture can bring to communities. Animals can provide nutrients for cropland or make productive use of land where crops don't grow well. Grazing pasture provides open space and vistas. Farmers and ranchers can see higher revenues when they process their animals locally. A study of beef cattle producers in six New England states found that those selling locally had more control over their marketing decisions and received a higher price for their product than those selling to buyers outside their region. The local producers also reported that customer demand outpaced supply, suggesting a market opportunity for additional producers.

But even when demand is high, getting into the market is not always easy. There are many **FAST FACTS** 

- In 2010, USDA's Food Safety and Inspection Service launched the Small Plant Help Desk to connect small and very small meat, poultry and egg processors with USDA specialists. In its first two years, the Desk responded to over 4,500 inquiries.
- Since mid-2011, USDA rules allow state-inspected slaughter plants to apply to ship their meat across state lines, helping producers access lucrative markets in neighboring states.

steps between the rancher and the dinner table, including facilities that slaughter, butcher, package, and distribute meat as well as render or otherwise dispose of waste. Over the years, the number of facilities offering these services has shrunk and the size of the remaining operations has grown, a phenomenon known as consolidation. For example, the total number of Federally-inspected livestock



slaughterhouses experienced a net decrease between 1990 and 2010, falling nationwide from over 1,200 in the early 1990s to approximately 800 in 2010.<sup>7</sup> Large plants now slaughter the vast majority of our meat and are highly mechanized—requiring animals to be a uniform size and shape—or take animals only from producers with whom they have signed contracts. Smaller independent producers may not be able to access these facilities, while small processors struggle to compete with them.

Public misunderstanding about livestock processing can make it hard to site local processing facilities, while seasonal fluctuations in supply can impact the facilities' cash flow. Financing may be difficult, as is compliance with food safety and environmental regulations. The result is that in some areas, despite



consumer demand and producer interest in selling livestock locally, the market does not develop because supply-chain challenges are too great. Yet successful small slaughterhouses have strong economic potential: in addition to providing producers with marketing options, an **Iowa State University study** found that small slaughterhouses in Iowa created over 7 jobs per 1,000 cattle processed.

#### ON THE GROUND: KYF AND LOCAL MEAT AND POULTRY

USDA has heard from stakeholders that a lack of processing options is a major barrier for farmers and ranchers looking to serve their regional market. To respond, USDA needed to improve its understanding of the problem, find ways to increase outreach and technical assistance to small processors, and support diverse approaches to improving slaughter capacity. In 2009, staff from seven USDA agencies involved in meat and poultry issues came together under the auspices of the Know Your Farmer, Know Your Food initiative to coordinate this work. The results include:

#### Gaining a better understanding of the industry.

Through KYF, USDA's Food Safety and Inspection Service (FSIS) gathered data and developed a series of maps to illustrate possible problem areas and guide producers, businesses and governments as they make policy and investment decisions. The maps and accompanying report can be used to identify areas with high concentrations of small producers and few slaughter facilities.

Helping more producers access processors. Producers can find USDA-inspected processing

#### A Cooperative Effort Of:

Sustainable Far

# CASE STUDY

#### Local Meat Processing on the Move



When the New Entry Sustainable Farming Project in Lowell, Massachusetts wanted to help beginning farmers earn a steady, reliable source of income and improve the quality of their soil, chickens were the logical choice.

Chickens take only six to eight weeks to grow from chicks to full-sized birds, so producers can earn income quickly and with reduced risk.

Unfortunately, Massachusetts has no USDA-inspected processing facilities, leaving producers with few ways to get their birds to consumers. A poultry producer herself, New Entry's director Jennifer Hashley knew the challenges of the poultry market. So New Entry partnered with the New England Small Farm Institute to propose a mobile poultry processing unit, which travels from farm to farm to process birds.

With funding from the Sustainable Agriculture Research and Education program, administered by USDA's National Institute of Food and Agriculture, the groups brought together state and local officials to develop a process for licensing and regulating the mobile units. Shortly thereafter, USDA's Food Safety Inspection Service released guidance documents on mobile meat and poultry processing to assist other states in drafting these kinds of regulations.

Hashley's group first built an open-air unit that was used by 8 different producers during the first three years of the pilot. With the help of an RBEG from USDA Rural Development, a larger, enclosed unit was built for use in all kinds of weather. Now dozens of producers are using the mobile unit and at least 8 others have developed their own on-farm facilities under the state licensing process.

To ensure that producers using the mobile unit are properly trained, New Entry secured a second grant from USDA's **SARE** program to develop trainings that cover food safety and business model development. The group also built an **economic calculator** to help producers estimate costs and revenues.

The results of the project have been significant for farmers, consumers and the community:

- Increased revenues. Producers accessing the mobile units generally produce between 400 and 2,000 birds per season and can charge between \$4 and \$7/lb for fresh, local, pasture-raised, and/or organic poultry. They can gross up to \$30,000 per year through direct marketing.
- **Consumer access.** Processed local birds have become more widely available in the state.
- Jobs. Processing poultry requires 5 to 10 workers during the season. With dozens of producers now using the mobile plant, job opportunities in processing have increased.

of New Entry Sustainable Farming Project in Lowell, Massachusetts and a colleague celebrate a mobile poultry processing facility built with support from USDA.

Sam Anderson and Jennifer Hashley



facilities near them using the Meat, Poultry and Egg Product Inspection Directory, which is updated monthly by FSIS. In response to user feedback, the Excel version of the directory can now be sorted by state, city and zip code. It is the most downloaded item on the FSIS website, with over a million downloads between October 2010 and September 2011.

Mobile Slaughter Units, self-contained slaughter facilities that can travel from farm to farm, can serve multiple small producers in areas where large plants might be unaffordable. (See this example from Washington State.) USDA received feedback that the rules governing mobile units were vague, hampering their development. FSIS clarified these requirements and issued guidance documents for mobile meat and poultry operations. Together with USDA Rural Development, FSIS also held webinars on mobile meat and poultry processing (available here and here) and reached hundreds of interested producers and processors at conferences, including in Fort Collins, CO and Carson City, NV. A webpage from the Small Meat Processing Center, a project of eXtension, shows the currently operating mobile slaughter facilities.

Loan and loan guarantee programs, such as Rural Development's Business and Industry Guaranteed Loan Program, help entrepreneurs secure financing for new processing facilities. (Learn more about B&I and small meat processing here). Grants are also available; for example, in 2011, the Sustainable Farming Association of Minnesota received a Farmers' Market Promotion Program grant from the Department's Agricultural Marketing Service to train farmers in meat inspection rules and educate consumers about local meat. A tenth-generation farm, the Carolina Nature Conservancy, run by the Pegues family, uses NRCS support to implement conservation practices on their local grassfed beef operation in South Carolina.

#### SEE THE ISLAND GROWN FARMERS COOPERATIVE'S MOBILE MEAT PROCESSING UNIT.

Click here to watch the video



Helping meat producers succeed. Some local producers struggle to access processing facilities because of the small volume of animals they raise. USDA supports cooperative production as one way to address this barrier. For example, research by the University of Idaho funded by an Agriculture and Food Research Initiative grant from USDA's National Institute of Food and Agriculture is examining the best ways to advance production, processing and marketing of livestock from small farms, including through producer cooperatives.

Producers may also choose to raise and market their livestock as "Grass-Fed or "Certified Organic." USDA's Natural Resources Conservation Service has resources to support these producers, including assistance in transitioning to organic production and cost-share agreements to help producers implement sustainable grazing management, nutrient management, and other practices. (See how a tenth-generation South Carolina ranching family is using these resources for a local grass-fed beef operation here.) The Agricultural Marketing Service also provides support for operations transitioning to organic through the Organic Cost-Share Program.

Few people today understand how livestock are raised, perpetuating myths that can be debunked when they visit a farmer or rancher or hear about their practices. Many agricultural groups are developing programs to increase consumer understanding of livestock production. KYF has advanced this goal as well through its blog and other outreach efforts.

Finally, for Native American communities, harvesting and consuming traditional animals such as buffalo has important cultural significance. Field-harvesting Today's pastured-poultry farmers are building mobile pens using innovative designs to fit a farm's terrain and needs. This one is being used at Dickinson College Farm in Pennsylvania, USDA's Sustainable Agriculture Research and Education (SARE) program.



of animals is part of that tradition, but getting those animals to inspected slaughter facilities can be difficult. In South Dakota, there are only two USDA-inspected slaughter facilities that process buffalo, which creates a barrier to marketing the meat in stores or selling into the school lunch program. The InterTribal Buffalo Council, which represents 57 tribes in 19 states, is using a Small Socially Disadvantaged Producer Grant from USDA Rural Development to train member tribes on maintaining cultural respect in harvesting buffalo



Pigs at Keenbell Farm are raised by 3rd generation farmer CJ Isbell in Rockville, VA.

while also delivering the meat to market in a safe and reliable way.

**Helping meat processors succeed.** Small slaughter plants struggle with very different issues than do large plants. For example, they may have trouble meeting food safety requirements without technical assistance. To help address some of these needs, USDA's Food Safety and Inspection Service launched the Small Plant Help Desk to connect small and very small meat, poultry and egg processors with knowledgeable USDA specialists. Demand is great: In 2010 and 2011, its first two years, the Desk responded to over 4,500 inquiries. Additional resources are available at the **FSIS small plants page**.

Research can help both existing and new slaughter facilities adopt best practices to overcome challenges. The Sustainable Agriculture Research and Education program, run by USDA's National Institute of Food and Agriculture, is supporting community-based research into the feasibility of developing additional small meat and poultry processing facilities. And several recent awards from NIFA's National Integrated Food Safety Initiative support research into new food safety technologies that can be used by small meat and poultry producers and processors.

Finally, many smaller slaughter facilities are inspected by state food safety personnel rather than by federal personnel. Until recently, state-inspected plants were restricted from shipping their products across state lines, even though the inspection checklists were similar for state and federal facilities. This restriction kept some producers from accessing slaughter plants that would allow them to ship into lucrative markets across a border-for example, Wisconsin producers could not ship to Chicago. The 2008 Farm Bill required USDA to develop a program on interstate shipment of meat from state-inspected facilities because of this restriction. FSIS began working with three states to pilot cooperative interstate shipment programs. And since mid-2011, USDA rules allow all state-inspected plants to apply to be part of the interstate meat program.

For detailed information on USDA support for local meat and poultry projects, see the **KYF Map**.



# FARM TO INSTITUTION INITIATIVES

Nationwide, tens of millions of people each day eat their meals outside of home at schools, colleges, hospitals, corporate cafeterias and government agencies. Each one of these institutions represents an opportunity for U.S. farmers, ranchers and food businesses to gain market share, earn a livelihood, forge ties with local residents, and improve community health and well-being through farm to institution efforts, in which local producers sell to institutions nearby.

Connecting with local producers benefits the institutions, too. K–12 schools are finding that when children are taught about where food comes from, their attitudes toward and consumption of vegetables improve.<sup>8</sup> Teachers are incorporating agriculture into their curricula to meet academic goals. The number of schools known to be participating in farm to school programs jumped from 400 in 2004 to over 2,300 in 2011.

Hospitals are finding that farm to institution programs can increase access to healthy, fresh food for patients and staff; some, like this one in Maine, are prescribing fruits and vegetables to patients and helping them utilize nearby



- The number of schools known to be participating in farm to school programs jumped from 400 in 2004 to over 2,300 in 2011.
- USDA's Risk Management Agency is funding the development of innovative, accessible food safety tools to help local producers meet institutional food safety requirements.

farmers' markets. And a slate of state and local governments are setting goals and developing strategies to use food purchasing policies to support their farmers and local economy.

As institutional buyers purchase more local food, they create business opportunities for farmers and ranchers and keep a greater share of food dollars in the local economy. (See this 2010 report from the Economic Research Service, which shows that farmers selling directly to consumers, local retail outlets, and/ or institutions retain a greater share of the retail price than those selling to wholesalers.) Institutional markets are particularly good for midsized farms because they provide a better return than wholesale markets but take a larger volume of product than can be sold at farmers' markets or farm stands.

But selling to local institutions is not always easy. Small-scale farms may find it challenging to meet large orders or product and packing specifications. Some institutions require food safety audits, certifications and liability insurance, which may be costly for farms. Infrastructure gaps are also a challenge: small and midsized farms are not always equipped to transport food directly to institutions, while institutions may lack refrigeration capacity or the ability to prepare the food they receive. (For more information on infrastructure gaps, see the Infrastructure section of the KYF Compass.)

#### ON THE GROUND: KYF AND FARM TO INSTITUTION

Producers and institutions are more interested than ever in finding ways to connect. Congress has responded to the increased demand, charging USDA with breaking down some of the barriers associated with farm to institution. KYF has helped identify opportunities to meet these goals. Since 2009, the agencies involved in KYF's farm to institution efforts have:

Joined forces to better serve farmers and institutions. In 2009, KYF launched the Farm to School Team to coordinate USDA support across agencies and help K–12 schools link with local producers. The team developed an online Farm to School toolkit with guidance, resources, archived



Local farmer and County Commissioner Billy Joe Kepley volunteers his time to teach Thomasville, NC Primary School students the art of farming in their school's garden. The school is a HealthierUS School Challenge Gold Award winner and also has a Let's Move program inspired by First Lady Michelle Obama.





Onekama, Michigan is using a 2010 Rural Business Enterprise Grant from USDA Rural Development to the county's economic development corporation to develop an innovative farm to school initiative serving produce, milk, beef and pork from local producers. The results are already impressive: lunch participation is up over 40 percent among students, 80 percent of school administrators and teachers are now eating the school lunch, and 40 local farmers and food processors are participating in the initiative. The list of producers is growing as the program expands to more schools. webinars, and evaluation tools for schools and producers alike. In 2010, the team visited 15 schools and developed a summary report documenting aspects of farm to school in K–12 schools.

In 2011, the Agricultural Marketing Service and Food and Nutrition Service joined together to launch **Produce Safety University**, a week-long training for foodservice professionals addressing food safety practices for handling fresh produce received from any supplier, including local producers. Five courses were scheduled for 2011 and 2012.

Increased knowledge and understanding of challenges and opportunities in farm to institution. In the last Farm Bill, Congress included a provision to allow schools to apply a geographic preference for locally-grown or raised unprocessed



Deputy Under Secretary Janey Thornton (center right) and American Culinary Federation Chef David S. Bearl (center left) pose with first graders from RB Hunt Elementary School in St. Augustine, FL. The squash were harvested from the University of Florida's Institute of Food and Agricultural farm, Hastings, Fla., and were also used in the school's lunch for the day.

agricultural products. In 2011, USDA developed several resources to help schools exercise this authority, including policy memoranda, procurement and geographic preference guidance, frequently asked questions, a free online procurement training, and in-person trainings from USDA staff. These resources are all available in the **policy section** of the Farm to School website.

By reaching out to communities and utilizing expert researchers, the KYF task force has compiled information on promising practices related to farm to institution and is making the findings available to the public. For example, the National Agricultural Library has published an extensive farm to institution annotated bibliography for researchers and others interested in learning from the literature. USDA Rural Development is helping share knowledge as well; for example, this two-day conference in South Dakota brought together producers, school food professionals, grocers, USDA staff and other experts to discuss farm to institution and other marketing opportunities on the

Richard Schartner of Schartner Farms sells local product to Jamestown Public School District (RI)



Joe Flieschman, Executive Chef for the Washington County, MD Health System, taking a delivery of local tomatoes. The farmer pictured now sells 4,000-5,000 pounds of vegetables a month to Washington County Hospital. Farmto-hospital programs in Maryland are supported by a FSMIP grant through USDA's Agricultural Marketing Service.

HEAR FROM PRODUCERS IN SOUTH DAKOTA WHO ARE SELLING INTO LOCAL AND REGIONAL MARKETS. THEY CAME TOGETHER AT A LOCAL FOODS CONFERENCE SPONSORED BY USDA'S RURAL DEVELOPMENT AGENCY.

Click here to watch the video



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first day and offered a food safety training for producers on day two.

**Targeted support to meet demand.** In December 2010, President Obama signed the Healthy, Hunger-Free Kids Act, which helps communities establish farm to school networks with technical assistance and grants. These funds will become available to USDA in October 2012.

In the meantime, there are programs across several USDA agencies to support farm to **institution efforts.** For example, USDA's Risk Management Agency funded the development of food safety tools for local producers, including the On-Farm Food Safety Project and Food Safety Plan 4U (FSP4U), to help farms meet institutional food safety requirements. USDA's Agricultural Marketing Service oversees Specialty Crop Block Grants, which are administered by the states; many of these grants support farm to institution efforts. For example, Oklahoma is funding the development of a guide for local farmers to grow salad bar crops for local schools; Ohio is funding a detailed survey of institutional foodservice providers in colleges and universities to develop new opportunities for Ohio specialty crop growers; and Rhode Island is funding the development of a statewide Farm to Hospital initiative to increase local, healthy fruits and vegetables in healthcare settings.

School districts and others are applying for loans and grants from Rural Development's **Community Facilities** program to develop infrastructure to store, process and serve local food. For example, in South Carolina, the



The Appalachian Sustainable Agriculture Project is developing farm to school initiatives in North and South Carolina and Georgia using funds from the Sustainable Agriculture Research and Education program from USDA.

# CASE STUDY

In Southern Appalachia, Farm to School Training Builds Connections, Economies and Health



With the great excitement over farm to institution efforts comes questions about how to make these efforts successful and a desire to share best practices far and wide. In 2009, North Carolina's Appalachian Sustainable Agriculture Project (ASAP) secured funding from the **Sustainable Agriculture Research and Education program** for a two-year regional project to build the capacity of agricultural professionals, communities and Cooperative Extension agents engaged in farm to school activities. (Extension agents staff land-grant universities throughout the country and provide technical assistance, education and financial planning resources to the public.)

The first step for the *Building Capacity: Farm to School* project was a "train the trainers" conference in 2011. State teams from North Carolina, South Carolina and Georgia designed and implemented a farm to school training. More than 100 Extension professionals gathered to learn how to integrate farm to school into their work. This training can also be taken on the road, reaching far more schools and producers than could be reached by one conference. ASAP estimates that local food sales contributed \$62 million to the local economy in 2010.



Local farmer Gary Pahl of Pahl's Market in Apple Valley, MN explains to elementary students how the corn on their lunch plate is grown on a farm and harvested for consumption.

SECRETARY TOM VILSACK PLANTS A GARDEN AT A LOCAL SCHOOL TO ENCOURAGE STUDENTS TO LEARN MORE ABOUT AGRICULTURE AND EAT MORE HEALTHY FOOD.

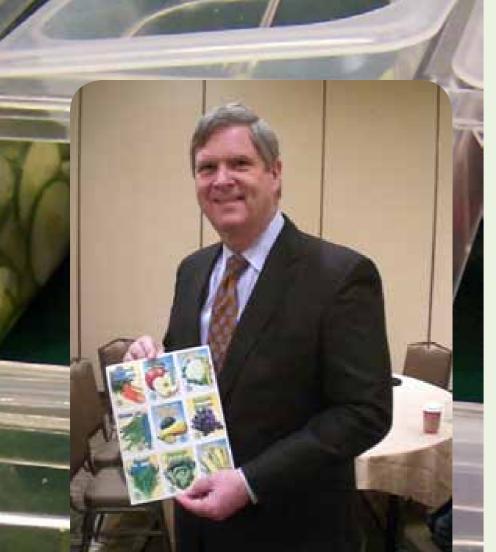
Click here to watch the video



Dorchester School District received a grant in 2010 to purchase a high-efficiency steamer to prepare locallygrown produce. (Learn more about how schools can utilize Community Facilities loans and grants here.) These efforts align with broader Obama Administration efforts—most notably First Lady Michelle Obama's *Let's Move!* initiative—to increase healthy food options in schools.

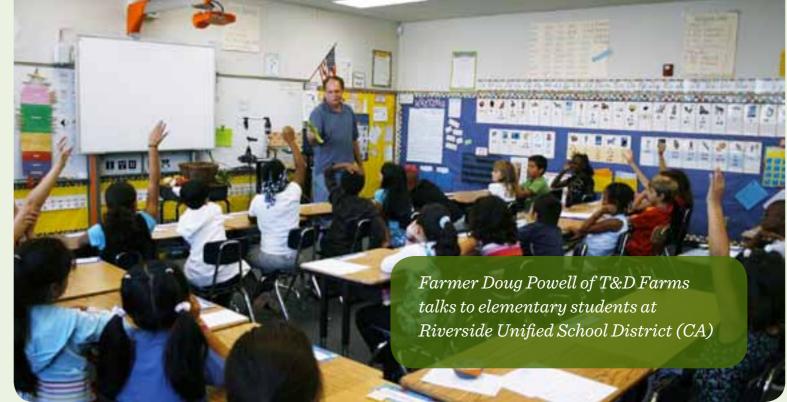
USDA's Food and Nutrition Service administers **Team Nutrition** training grants to help K–12 schools promote children's health. Schools have identified farm to school as a way to increase fruit and vegetable consumption; institutions in a number of states, including **Idaho**, **Montana, South Dakota, West Virginia**, and **Wisconsin**, received Team Nutrition grants to implement farm to school activities in 2011.

**Expanded educational opportunities for students** through garden initiatives. K-12 schools report that gardening projects help students learn about agriculture first-hand and begin to appreciate the work that goes into producing food. USDA is helping confirm these anecdotal findings with the help of 4,000 youth in 57 schools in Iowa, Arkansas, New York, and Washington through Healthy Gardens, Healthy Youth, a project of the People's Garden School Pilot developed by USDA's Food and Nutrition Service. Master gardeners help participating students learn gardening skills; experts provide nutrition, food safety and food preparation classes; and the program facilitates farm to school connections with producers to stimulate the local economy. University researchers will study how fruit and vegetable consumption changes for the youth participating in the program.



USDA Secretary Tom Vilsack holds trading cards from the New York State farm to school program. The trading cards are one of the several tools offered to schools and cafeterias to encourage healthy eating habits by linking students with farm fresh foods.





### **KYF IN ACTION**

How can USDA help schools source more fresh produce from local farms? As part of the Know Your Farmer, Know Your Food initiative, USDA's Food and Nutrition Service and Agricultural Marketing Service announced a pilot to test ways for schools to use federal dollars to source fresh fruits and vegetables, including from local farmers (see FAQs here). A number of other agencies within USDA are involved in supporting pilot as well. It's an example of why initiatives like KYF, which facilitates inter-agency collaboration, are so important. Collaborators will include:

• The Agricultural Marketing Service, which provides food safety guidance and certain certification for producers selling to institutions. This agency also purchases a portion of the food that school cafeterias use through the National School Lunch Program.

- The Food and Nutrition Service, which administers the school meal programs, including the National School Lunch Program, and provides guidance to schools interested in expressing a geographic preference when they purchase certain foods.
- The Risk Management Agency, which funds the development of tools to help producers meet food safety, liability and other requirements so they can sell directly to institutions.
- The Office of Small and Disadvantaged Business Utilization, which helps small businesses and those run by members of socially-disadvantaged groups participate in and benefit from USDA programs. In the case of this pilot, the Office is working with the Agricultural Marketing Service to provide workshops for small producers and distributors in an effort to increase their participation.

Children at Dayton Elementary in Dayton, NV harvest potatoes from the Healthy Communities Garden at their school. The local Healthy Communities Coalition received an FMPP grant from USDA to expand healthy food access in the county.



USDA staff also work directly with students in the community. USDA's Farm Service Agency is supporting an agricultural curriculum in a **Texas high school**. In addition, through its **Ag in the Classroom** program, USDA's National Institute of Food and Agriculture is connecting kids from kindergarten through high school to agriculture. (Read about how Ag in the Classroom and a vibrant farm to school program are helping **Tulsa**, **OK** students get to know their farmers and their food.)

KYF has helped bring the many agencies with a hand in these activities together to better track and coordinate efforts. To see farm to institution projects in your community supported by USDA, visit the KYF Map.



strawberries that are part of the school meal programs at Boston Public Schools (MA)

# CASE STUDY

The New England Governors' Association Sees Regional Farm to Institution Opportunities



Interest in local agricultural products is strong in the six New England states, but regional pressure for commercial and residential development can place farmland at risk. The New England Governors' Association sees regional farm to institution opportunities as a critical component of efforts to protect farmland. Major regional institutions like hospitals, prisons, and schools that source food products from local farmers can help develop a sustainable regional food system. In 2010, the Association entered into a cooperative agreement with USDA Rural Development to advance farm to institution programs and strengthen this regional food system. Rural Development provided a \$250,000 challenge grant, asking regional partners to contribute additional funds to the effort. At this writing, the challenge grant has leveraged more than \$450,000 in funding, including \$73,000 from the Kendall Foundation. In late 2011, the John Merck Fund announced its plans to invest tens of millions of additional dollars in the New England region's food system infrastructure over the next decade.

Deputy Secretary Kathleen Merrigan helps cut peppers at the Franklin County Community Development Corporation's Western Mass Food Processing Center. The fresh peppers will be frozen and provided to local schools. The New England Governors' Association is partnering with USDA and private funders to develop stronger regional food systems.





Chef JuJu Harris, Capital Area Food Bank, chops cabbage for an Apple, Bulgar and Cabbage Salad recipe during a "Healthy Garden" workshop at the U.S. Department of Agriculture's The People's Garden.

### **HEALTHY FOOD ACCESS**

A lack of access to fresh, healthy foods can contribute to poor diets and higher levels of obesity and other diet-related diseases. A growing number of children in the United States—one in three between the ages of 2 and 19, according to peer-reviewed studies collected by the White House's Task Force on Childhood Obesity—are overweight or obese. Overweight children may experience higher rates of heart disease, diabetes and other chronic conditions as adults and must bear the costs of treating them. First Lady Michelle Obama's *Let's Move!* initiative was launched in part in response to these troubling findings.

Food access is about more than just whether there are grocery stores in a community. It also has to do with whether households can afford to purchase food—and affordability is closely related to rates of employment and job quality.

Increasing food access nationwide can help address the problems of unemployment and lack of access to healthy food simultaneously. When underserved communities connect with regional producers and food businesses, the connection expands marketing opportunities, drives the growth of new local businesses



- In 2010, USDA helped nearly 900,000 seniors and 2.15 million WIC recipients access fresh fruits and vegetables directly from local farmers at farmers' markets.
- Between 2010 and 2011, the number of farmers' markets and farm stands authorized to accept EBT grew by 51 percent, to over 2,400.

and jobs, and increases food access. Farmers' markets, mobile produce vendors, farm to school initiatives, food hubs and other community-based methods for selling local food are already gaining an impressive track record on these fronts.

But even in communities with sufficient food access, families are not eating as many fruits and vegetables as recommended in the 2010 Dietary Guidelines for Americans. The new USDA food icon, called *MyPlate*, illustrates the Guidelines' recommendation that we all fill half of our plate with fruits and vegetables. As families improve the health of their meals, demand for produce will undoubtedly increase. American farmers and food businesses have an opportunity to meet this demand with expanded local production and processing—or else they may lose out to other parts of the country or to other countries. A 2010 study in **16 counties in Northeastern Ohio** models what would happen if 25 percent of local demand was met with local production and finds that 27,664 new jobs would be created, providing work to about one in eight unemployed residents. Annual regional sales would rise by \$4.2 billion.

#### ON THE GROUND: KYF AND HEALTHY FOOD ACCESS

Because so many different factors impact a family or community's access to healthy food, many USDA agencies have a hand in supporting efforts on the ground. With the launch of the Know Your Farmer, Know Your Food initiative, USDA gained a forum to examine how stronger local and regional food systems relate to and influence healthy food access. Some of the efforts supported by KYF include:

#### Assessing the state of food access in America.

USDA's Economic Research Service (ERS) **reported** in 2009 that 23.5 million Americans, including 6.5 million children, live in low-income areas more than one mile from a supermarket. ERS developed the **Food Desert Locator**, an online mapping tool designed to give communities a snapshot of food access in their region and a place to start their own investigations, which had over 320,000 page views between its launch in April 2011 and the end of the year. The **Food Environment Atlas**, another tool developed by ERS in a cooperative agreement with the Agricultural Marketing Service and Food and Nutrition Service, maps food stores and provides data on food insecurity, food assistance, local food availability and other socioeconomic metrics, often at a county level. The role of the KYF initiative in these efforts has been to provide a forum to discuss analysis and presentation of data and to publicize these resources in a centralized website.

KYF has also helped bring visibility to relevant USDA resources of which the food access community may not be aware. For example, in 2011, the Agriculture and Food Research Initiative of USDA's National Institute of Food and Agriculture was heavily involved in supporting research on local foods and food access. Among other projects, it helped North Dakota State University establish a program to increase food security for Native people on the Standing Rock Sioux reservation; provided Penn State with funds to evaluate regional food systems in the Northeast and enhance food access in underserved populations; supported a Virginia Tech initiative to improve food security and local food economies in the Appalachian region; and helped the University of Wyoming identify community organizing strategies to increase food access through local food systems. These efforts will provide models and evidence for other communities around the country.

Helping farmers connect directly with underserved communities: Electronic Benefit Transfer (EBT) at farmers' markets. When farmers' markets and farm stands can accept electronic benefits such as SNAP (food stamps) and coupons from participants in the Women, Infants and



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Know Your Farmer in Action: Retail outlets that redeem SNAP benefits must be certified as SNAP retailers. Farmers' markets have long participated in SNAP, but with the conversion from food stamp coupons to EBT, farmers' markets faced unique challenges. For example, the infrastructure (electricity and telephone lines) necessary for accepting EBT debit does not exist at most open air farmers' markets. In 2009, USDA's Food and Nutrition Service streamlined requirements for SNAP certification to allow farmers' markets and farmers and non-profit entities operating Community Supported Agriculture programs to more readily participate in EBT. At the same time, the Agricultural Marketing Service began making grants through the Farmers' Market Promotion Program to fund the installation of wireless point-of-sale devices so that outdoor markets could participate. And in 2010, AMS and FNS collaborated on a handbook for farmers' market operators interested in participating in SNAP, helping them navigate the process and take advantage of available resources.

Children (WIC) program, beneficiaries gain access to healthy, local food while farmers and ranchers increase their customer base. USDA is helping to connect lowincome consumers with local producers through the expansion of EBT at farmers' markets and farm stands. That work has accelerated in the past three years due in part to the emphasis that the Know Your Farmer, Know Your Food initiative placed on expanding access to local foods.



In 2008, Congress targeted 10% of funds in the Farmers' Market Promotion Program (FMPP) to increase EBT access at farmers' markets. USDA has awarded approximately \$5 million in FMPP grants to EBT projects in 18 states since then, well over the 10% requirement. In 2011, Congress doubled funding for FMPP and priority funding was given to projects associated with increasing healthy food access. As a result, over 40 percent of the projects funded by FMPP in 2011 will serve one or more food deserts. Leveraging Congress' investment even more, USDA has partnered with private philanthropies and other groups that match each dollar that SNAP recipients spend at farmers' markets, effectively doubling their benefits.

Two related programs to increase healthy local food access are the WIC Farmers' Market Nutrition Program and Senior Farmers' Market Nutrition **Program**, both administered by USDA's Food and Nutrition Service. In 2010, these programs served nearly 900,000 seniors and 2.15 million WIC recipients, helping them purchase fresh fruits and vegetables directly from local farmers.

Using Specialty Crop Block Grants from USDA's Agricultural Marketing Service, states are expanding the availability of locally grown specialty crops to low-income buyers by supporting EBT in farmers' markets and pilot-testing incentives. In 2011, 41 Specialty Crop Block Grant projects across the country targeted healthy food access in underserved communities, up from 30 projects nationwide in 2010. The grants are requested by states.

The results of these combined efforts have been significant. Between 2010 and 2011, the number of farmers' markets and farm stands authorized to accept EBT grew by 51 percent, to over 2,400. This increase doesn't just translate into increased food access; it also means increased revenues for farmers selling at the markets.

Supporting brick-and-mortar retail infrastructure to boost healthy food access. Food and Nutrition Service's Hunger-Free Communities grants are one source of support for infrastructure to expand local food access. In El Paso, Texas, one of the poorest communities in the nation, dozens of warehouses were left empty after the garment industry moved south. Centro del Obrera Fronterizo received a Hunger-Free Communities grant in 2011 to establish a community market in one of the empty warehouses, providing local producers with a place to sell fresh produce, grains, meat and tortillas. Community members, many of them with roots in Mexico, can now access healthy, culturally-appropriate food and take nutrition and cooking classes. This grant is helping producers tap into a market that was not being served, benefiting all involved. The challenge of increasing food access is also an opportunity to create jobs, putting our communities back to work and opening up new markets for farmers and ranchers.

Expanding other supply chain infrastructure. USDA Rural Development's Community Facilities Grant and Loan Program has been used to construct new local food

IN RURAL CALAVERAS COUNTY, CA, A DIRECT LOAN FROM RURAL DEVELOPMENT'S COMMUNITY FACILITIES PROGRAM HELPED THE RESOURCE CONNECTION BUILD COLD STORAGE TO TAKE IN FRESH PRODUCE FROM LOCAL FARMS AND DISTRIBUTE IT TO NEEDY FAMILIES

Click here to watch the video



infrastructure in underserved areas, including kitchens to help schools prepare more local foods, cold storage to help food banks store local produce, and refrigerated trucks to distribute fresh, local food to needy families.

For other USDA resources that support urban agriculture, see this memo from Agriculture Deputy Secretary Kathleen Merrigan.



In Pennsylvania's Lehigh Valley, the town of Easton is using EBT to expand food access and support local jobs in agriculture. An FMPP grant is supporting this work. A town with limited supermarket access, Easton's market is one of only 15 in Pennsylvania that accepts EBT. The market has seen concrete impacts from its investment: between 2010 and 2011, use of EBT cards at the market increased by 32 percent; vendor sales increased by 20 percent; and use of benefits through the WIC Farmers' Market Nutrition Program grew three-fold. The result has been more money in farmers' pockets and more healthy food on the plates of low-income consumers.



# CASE STUDY

#### **Beginning Farmers in Cleveland, Ohio**



In 2011, The Ohio State University (OSU) received a grant through the Beginning Farmer and Rancher Development Program, run by USDA's National Institute of Food and Agriculture, to address these related issues. The BEAN Project (Beginning Entrepreneurs in Agricultural Networks) offers training opportunities and workshops to women, minorities, refugees and limited-resource adults with developmental disabilities and will utilize vacant land in the City of Cleveland to develop small farm enterprises. This project is a unique partnership of the university Extension system, government agencies, local and state legislators, and several civic groups.

Since receiving the grant, OSU Extension has conducted classes, workshops and field trips to develop a more vibrant local food system. The 12-week Market Gardener Training Program helped launch 7 new local farm enterprises involving 11 new farmers. A 6-acre farm business incubator, the Kinsman Farm, makes land, fencing, water, storage and soil amendments available to participants. Additional farm sites are giving twenty recent refugees and immigrants an opportunity to start farming in the city of Cleveland, while farm business classes help them market their produce locally. An agricultural training program with the Cuyahoga County Board of Developmental Disabilities has already led to new jobs on urban farms for 26 socially disadvantaged individuals.



Participants in The Ohio State's BEAN project learn about developing small farm enterprises, including growing crops in a hoop house.

**Bringing food to where it's needed.** Finally, the Healthy Urban Food Enterprise Development Center, a project of the Wallace Center at Winrock International supported by USDA's National Institute of Food and Agriculture, has funded many projects to connect low food access populations with local foods. In Minnesota, the nonprofit group Peta Wakan Tipi ("Sacred Fire Lodge" in the Lakota language) used this grant in 2009 to purchase and develop a mobile farmers' market, improving healthy food distribution to American Indian communities. The truck will deliver food from an American Indian-owned organic farm to four distribution sites in the St. Paul area, increasing sales revenue for the farm while expanding food access.

Linking food access, agricultural education, and communities. In the 2008 Farm Bill, Congress explicitly identified community gardens as one solution to hunger. In Nebraska, United Methodist Ministries took that connection to heart and secured a three-year Community Food Project grant administered by USDA's National Institute of Food and Agriculture in 2008 for its Big Rural Garden Project. It is developing a network of community gardens in 11 rural, underserved counties. Nearly 600 Nebraskans now volunteer in one of 15 gardens, growing food for their own consumption, for sale at farmers' markets, and to donate to local food pantries. Participants also receive nutrition and health education classes. "When we began this project," says Project Director Rev. Stephanie Ahlschwede, "we asked people how far they were driving for fresh produce. In some cases the answer was 45 minutes each way. Our goal became clear: grow fresh produce locally and get it to the people... The net outcome has been a tremendous increase in the amount of produce grown and consumed locally." This project is a follow-on to urban Big Garden,



a project that has developed 32 gardens in low-income areas of Omaha.

USDA's Forest Service is another partner in efforts to increase healthy food access through gardening. Through the Baltimore Ecosystem Study, the Forest Service's Northern Research Station is a major partner in efforts to expand urban agriculture as a desired land use in Baltimore's sustainability plan. Forest Service staff helped the city identify opportunities for revitalized landscapes, including vacant lands and park land that could be used for orchards, grain production and other crops to supply local food businesses. The Forest Service's Urban and Community Forestry Program is helping cities all across America transform the urban landscape and boost healthy food access by growing and harvesting orchards in public spaces; learn more here.

Successfully increasing healthy food access will take a variety of creative, localized approaches. Local and regional foods play an important role, and through the Know Your Farmer initiative, USDA has a space to coordinate and publicize these win-win approaches for producers and consumers. To see projects that are expanding healthy food access across the country, visit the **KYF Map**.



# CASE STUDY

#### Farmers' Market Promotion Program

In Forest Grove, Oregon, a rural community west of Portland with a 27 percent poverty rate, Adelante Mujeres is working with the Hispanic population to increase economic and social equity and boost healthy food access. The group provides an intensive 22-week land-based training program called Adelante Agricultura that runs throughout the year. By increasing producers' knowledge of local growing conditions, training participants in farm/ business management, and providing market mentoring, Adelante Mujeres helps farmers successfully grow and market their produce. Products have a guaranteed market outlet: the Forest Grove Farmers' Market, managed by Adelante Mujeres, and three local apartment complexes. The market is now drawing additional customers through the introduction of EBT technology. By using USDA funding as leverage, Adelante Mujeres was able to secure support from Pacific University and others for a SNAP incentive program, which provides a \$5 match per customer using SNAP to purchase food at the market.

Adelante Mujeres secured a 2009 Farmers' Market Promotion Program grant through USDA's Agricultural Marketing Service to conduct an outreach and marketing campaign targeting senior and low-income customers, who represent 40 percent of the local population. During the FMPP funding period, foot traffic at the Forest Grove Farmers' Market nearly doubled, increasing from 800 customers per week to 1,500. EBT redemption increased 422 percent. 25 farmers now regularly sell within Adelante Mujeres' guaranteed markets, which represent approximately 80 percent of their sales.



With 2009 funding from USDA's Farmers Market Promotion Program, Adelante Mujeres in Forest Grove, OR is helping Latino and new immigrant farmers access land and markets.

First Lady Michelle Obama visits MA'O Organic Farms in the Waianae area of Hawaii, the largest Native Hawaiian community in the world and one of the most economically challenged communities in the state. MA'O is a 24.5 acre certified organic farm that is primarily run by area youth who participate in the Youth Leadership Training (YLT) internship.

### **CAREERS IN AGRICULTURE**

A renewed interest in farming, ranching and food business entrepreneurship is influencing the professional decisions of people young and old across the country. Farming and ranching offers opportunities to develop innovative businesses and generate income while working outside on the land. Growing and selling food, educating students, or training aspiring farmers helps producers feel a connection with the broader community. And off the farm, cutting-edge entrepreneurs are developing new food infrastructure and plotting creative ways to reach new markets.

This groundswell of interest comes on the heel of a long decline in the number of farmers and ranchers at work in America. Since 1980, our nation has lost over 200,000 farms<sup>9</sup> due to retirement, low market prices, and other factors. The exodus has left many rural communities with dwindling populations and fragile economies. We need to reverse this trend for young members of existing farm families and bring new people into agriculture, including young people, immigrant and refugee farmers, military veterans and others.

For many new farmers, local markets are a logical starting place. Some are naturally drawn

### FAST FACTS

- In 2009, USDA funded 29 Beginning Farmer and Rancher Development projects that trained more than 5,000 new producers in the first year. In 2010, 40 projects were funded. The projects operate in 40 states.
- Since taking office in April 2009, Deputy Secretary Kathleen Merrigan has presented to over 25 colleges and universities across the country, helping to educate young people about the food and farm industries and opportunities to work "in the field."

to the scale of these markets, while others see them as the first step in a scaling-up strategy. When farmers enter the local market, they may choose to locate near population centers and produce high-value crops for urban populations. Economically viable farms are a strong buffer against **development pressure** on the edge of cities, which threatens not just open





space but also our nation's capacity to produce food for a growing population.

But farming involves a lot of uncertainty, and the weather is only the beginning. New farmers frequently lack access to training and technical assistance; many struggle to get credit and gather the resources needed to purchase land and equipment. Access to land is a major challenge: the average cost of farmland has doubled nationally over the last decade.<sup>10</sup> And finding ways to access storage, cooling, processing, and distribution infrastructure can be difficult for all farmers involved in local markets. (For more information on infrastructure barriers and projects that are overcoming them, see the Infrastructure section of the KYF Compass.)

#### ON THE GROUND: KYF AND THE NEW FACE OF LOCAL

Although not all new entrants will sell their food locally, USDA has recognized the significant role that local and regional market opportunities play for the recruitment and retention of new farm and food businesses. As part of the Know Your Farmer, Know Your Food initiative, several USDA agencies have come together to publicize opportunities and develop new resources for beginning producers and businesses selling locally. Some of USDA's work on this issue includes:

**Preparing new farmers.** One of the key programs supporting new farmers and ranchers, many of whom sell locally, is the **Beginning Farmer and Rancher Development Program** (BFRDP), administered by USDA's National Institute of Food and Agriculture. In 2009, USDA funded 29 BFRDP projects at organizations around the country that in turn trained more than 5,000 beginning farmers and ranchers in the first year of the grant. In 2010, 40 projects were funded. Together the



# CASE STUDY

Preserving Farmland and Growing New Farmers in Butte County, CA



Many projects funded through the Beginning Farmer and Rancher Development Program train new producers to take advantage of local and regional marketing opportunities. For example, in Butte County, California, the Northern California Regional Land Trust received a grant in 2010 to help beginning farmers and ranchers increase sales in local and regional markets. In its first year, the Land Trust formed a tri-county technical advisory committee that includes county agriculture commissioners, university professors, economic development agency representatives, farmers, Land Trust staff, and farm credit personnel; conducted six technical workshops for new farmers and ranchers on topics ranging from accessing credit to successful direct marketing; and is developing a program to match new producers with available farmland. "We were working hard to protect the region's farmland but realized that without a new generation of farmers and a strong local food system, there would be no one to work the land, protected or not," said Noelle Ferdon, Director of Local Food Systems for the Land Trust. "It's our goal to bring resources to beginning farmers and ranchers so they can help protect the rich agricultural history of our region."





Seniors from Calvert High School in Texas visit USDA as part of a senior trip sponsored by the "Ag in the Classroom" program. Acting Undersecretary for Farm and Foreign Agricultural Services Michael Scuse spoke to students, parents and chaperons about careers at USDA. Young farmers in Florida participate in the New and Beginning Farmers Training Program to learn skills that will help them start successful farming operations.

69 projects are located in 40 states and serve beginning farmers and ranchers across the entire nation. Training activities include webinars, conferences, on-farm field days, and work with mentor farmers; many of these activities focus on tapping into local market opportunities. Read more about BFRDP's successes here.

Providing space to share knowledge. The Cooperative Extension Service offers programs on the campuses of more than 100 land-grant colleges and universities and in county and regional offices throughout the country. They are developing tools for local producers, providing training, and helping farmers network with and learn from one another. Read more about how Extension is supporting beginning farmers engaged in local food production on the KYF blog. The Cooperative Extension Service's online system, eXtension, makes the technical expertise of Extension agents available to all.



USDA is also helping build the knowledge base for new farmers and the institutions that serve them by funding research efforts in the field. For more information, see the Local Food Knowledge section.

Online resources are also available. The Field Guide to the New American Foodshed, a new website developed with funding from USDA's Risk Management Agency, helps beginning farmers, ranchers and entrepreneurs interested in local and regional marketing find business planning tools and learn from their peers. This guide and a wealth of other resources are collected at Start2Farm. gov, a curriculum and training clearinghouse for new farmers developed by USDA and the American Farm Bureau Federation.

Helping new farmers access land for local food production. 40 percent of farmers are now located in metro counties, according to USDA's Agricultural Resource Management Survey. Through its website,



# CASE STUDY

#### A Young Farmer Stewards the Land in New Hampshire



In New Hampshire, USDA's Natural Resources Conservation Service is helping beginning farmer Meghan Bickford of Diamond B Farm in New Durham implement a number of sustainable practices through the **Environmental Quality Incentives Program**. With NRCS support, Meghan established a rotational grazing plan for her herd of Belted Galloway and Angus cattle; built a ground gutter and grassed waterway to treat barnyard runoff; and is implementing a forest stand improvement plan. Although developers are keenly interested in the farm's real estate, Meghan has instead expanded local sales through Facebook and word-of-mouth relationships, securing a year-round group of local customers dedicated to supporting the farm as a community resource and a steward of the environment.

"This farm is really a 4-H project that got out of hand," says Meghan Bickford, 22, who manages a farm in New Durham, NH. Read more about Meghan's conservation efforts with USDA's Natural Resources Conservation Service. Hillside Farmers Co-op in Minnesota is helping Latino farmers plan farm businesses and cooperatively market pastured poultry and other products.

#### MISSISSIPPI'S WINSTON COUNTY SELF-HELP COOPERATIVE USES A MENTORSHIP MODEL TO TRAIN YOUTH IN FARMING.

Click here to watch the video



blog, inter-agency collaboration and meetings with external stakeholders, KYF highlights USDA resources available to maintain farmland near cities, where producers can take advantage of nearby urban markets to increase their revenues. For example, USDA's Farm and Ranch Lands Protection Program, administered by the Natural Resources Conservation Service, helps secure land under pressure from development so that farms can continue to exist on the urban periphery. NRCS also supports beginning farmers, including those producing for local markets, by sharing the cost of practices to protect soil, air and water as part of the Environmental Quality Incentives Program. Beginning farmers are eligible for a higher cost-share from NRCS to implement these practices than experienced farmers. Finally, the Farm Service Agency's Transition Incentives **Program** provides retiring farm operators with incentive payments for selling or leasing some of their expiring Conservation Reserve Program acreage to beginning or socially disadvantaged farmers and ranchers who can then sustainably graze or farm the land.

Farm mentorship programs are another way to help new farmers access land. For example, in Northfield **Minnesota**, Hillside Farmers Co-op is pairing new Latino farmers with established producers who rent out their land for crop and poultry production. With the help of a 2010 **Small Socially Disadvantaged Producer Grant** from USDA Rural Development, Hillside Co-op is expanding its mentorship and training programs for new farmers and developing a cooperative business plan to develop local free-range poultry markets.

Making access permanent through farm ownership. Through USDA's Farm Service Agency, beginning farmers and ranchers qualify for specific farm loans designed to assist people with limited farming experience in Job Corps participants build a raised bed for a people's garden in Laona, Wisconsin.

#### USDA JOB CORPS TOP CHEF!

Click here to watch the video



purchasing their own operations. In Unionville, VA, young farmers Zach Lester and Georgia O'Neal had spent thousands of hours and dollars improving the soil and caring for a leased farm. They knew that if the lease came up, they would lose the farm and all of the hard work that went into it. So in 2009, USDA's Farm Service Agency provided them with financing to purchase land of their own and move the vegetable operation to their property. They also financed the purchase of equipment and a seasonal high tunnel. Mr. Lester and Ms. O'Neal now use high tunnels and greenhouses to extend their growing season to provide fresh produce at farmers' markets across the Washington, DC area. For more examples of how FSA is working with young and beginning farmers selling locally, see the **KYF Map**.

Helping young people find non-farm work in the agricultural sector. Local and regional food systems, like all of agriculture, offer jobs for young people in more than just farming. Some find opportunities to innovate in business by getting involved in storing, processing, marketing, distributing or selling local food. Others are drawn to public service—a critical need given that a large portion of USDA employees will retire over the next few years. In Utah, a young Navajo woman named Semira Crank joined USDA's Natural Resources Conservation Service to help local farmers and ranchers protect the environment. (Watch a video of Semira discussing her work here.)

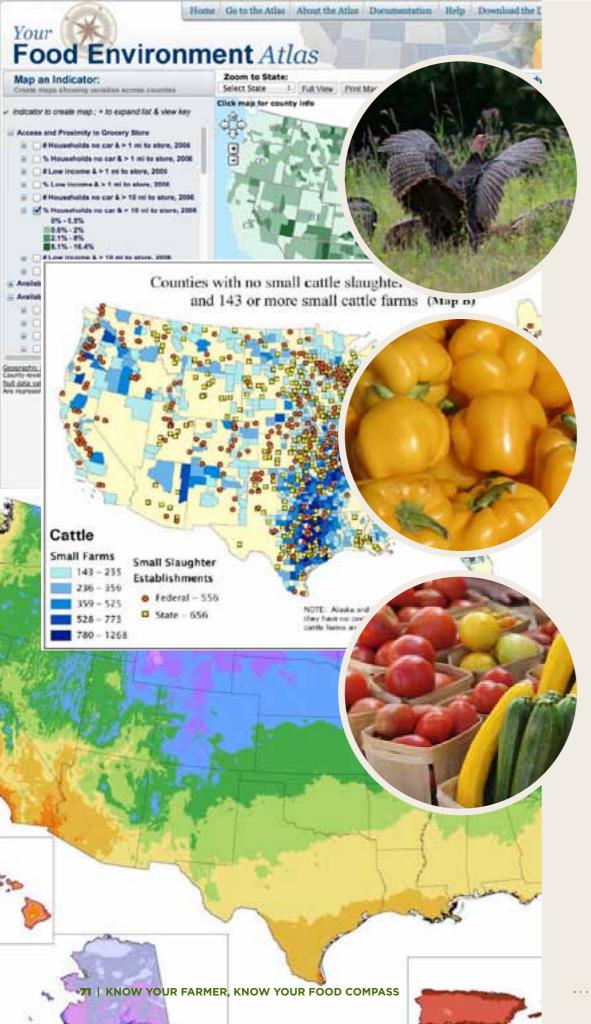
The Forest Service runs 28 Job Corps Civilian Conservation Centers around the country, educating and training young people in a variety of vocational trades. Watch a video of Job Corps students judging a "White House Top Chef" competition at the USDA cafeteria using healthy local foods from DC farmers' markets. In partnership with the American Forest



Foundation, the Forest Service also supports the GreenSchools! Program, which is designed to build healthy, safe, and environmentally friendly school learning environments. Many GreenSchools! have established school gardens, involving students and local communities in growing and cooking their own healthy food. Some schools have even donated the fresh produce they grow to local food pantries.

Young people around the country have learned about these and other opportunities while boosting their knowledge of the agricultural sector thanks to Agriculture Deputy Secretary Kathleen Merrigan's college tour. Since taking office in April 2009, the Deputy has presented to over 25 colleges and universities across the country, helping to educate young people about the food and farm industries and opportunities to work "in the field."

Through the KYF initiative and other efforts, USDA is helping to expand resources for beginning farmers, ranchers and food entrepreneurs specifically interested in local and regional markets. KYF also helps USDA meet the broader goal of getting young Americans more involved in agriculture and connected to where their food comes from. See projects supported by USDA to develop new food and farm businesses on the **KYF Map**.



# LOCAL FOOD KNOWLEDGE

In 1839, Congress established an Agricultural Division within the U.S. Patent Office for "the collection of agricultural statistics and other purposes." In 1862, under President Lincoln, this office became the Department of Agriculture. Since that time, data-gathering and research activities have remained central to the Department's goal of helping Americans better understand agriculture. From the National Agricultural Statistics Service's Census of Agriculture to research activities carried out or supported by many of USDA's 17 agencies, USDA deepens its own understanding of the agricultural sector, shares that knowledge broadly, and encourages the public to undertake its own research and learn more about agriculture-including local food systems.

The sheer number of people and organizations involved in local food work highlights the importance of USDA efforts to conduct research, gather data, and better understand how markets for local foods impact our lives and economy. When policymakers and practitioners on the ground make business and policy decisions, they need this kind of research and data to answer pressing questions: Are local food operations profitable? What are the barriers to their success and how might these

#### FAST FACT

 AMS's Farmers' Market Directory, which shows the locations of farmers' markets throughout the U.S. and which accept nutrition assistance benefits, received 2 million page views in 2011 alone triple its 2010 traffic. Developers have created apps and other tools using the data.

networks become more efficient? Who shops at farmers' markets? How do farm to school programs affect student diets or producers' bottom lines? How many jobs could we generate through local food investments?

Individuals may also be interested in using research and data to learn more about their local food system and gain a better understanding of where their food comes from. What's being grown in my region? How many co-ops, grocery stores, or farmers' markets are marketing local food, and which take nutrition benefits like SNAP (food stamps)? Is USDA funding local



North Carolina's Center for Environmental Farming Sytems, supported by USDA's SARE program, researches locally-adapted plant varieties and growing conditions. food projects in my community? (The last question is now more easily answered with help from the **KYF Map**.)

As with many evolving fields, research on local and regional food still leaves many questions unanswered. There is a lack of peer-reviewed literature and national datasets; local case studies and surveys are inconsistent in their format, making comparison difficult; and there is no standardized way to estimate economic impacts of local and regional markets. For that reason, USDA staff engaged in research and data-gathering came together through the Know Your Farmer, Know Your Food initiative to compile and publicize existing research and data, fill gaps and plan for future work. KYF also highlights resources to help people use research and data tools to learn more about their farmers and their food.

#### ON THE GROUND: KYF AND LOCAL FOOD KNOWLEDGE

#### Tracking existing research and identifying holes.

As part of the KYF initiative, several USDA agencies came together to share, compile, analyze and summarize data on the impacts of local and regional food systems. A 2009 USDA conference brought together government, academic and nonprofit researchers to assess the state of knowledge on these markets; as a follow-up, USDA's Economic Research Service (ERS) published a report in early 2010 that surveyed the landscape of local and regional food systems—how they are defined, who participates in them, and how they are impacting economic development and health. An article published in late 2010 summarizes ERS-sponsored research on the different routes food takes to get from local farms to consumers' tables. And in 2011, ERS published a study that took a more comprehensive look at farmers participating in direct marketing or selling to local retailers and other "intermediated" markets.

Staff from USDA's National Agricultural Library (NAL) and Agricultural Marketing Service (AMS) joined forces to compile annotated bibliographies of existing peerreviewed documents, reports and guides related to two areas of focus: Farm to school programs and food hubs.

**Strengthening USDA's understanding of local foods, supporting yours.** Understanding patterns of data and information can tell USDA a lot about our local food systems. Digital displays of information are some of the most effective ways to show these patterns to the public. The Know Your Farmer, Know Your Food initiative was the impetus for the creation of several new digital tools, most recently the **KYF Map**, which maps local food projects and programs supported by USDA across the country.

The map builds on or complements other local food directories developed through KYF. For example, AMS's Farmers' Market Directory provides the locations of farmers' markets throughout the U.S. and notes whether nutrition assistance program benefits are accepted. The Directory received 2 million page views in 2011 alone, triple its 2010 traffic. The raw data for this map has been fodder for web and applications designers, who have used it to create everything from a local foods locator to a healthy eating badge co-branded by CNN and Foursquare. The AMS Food Hubs Directory helps producers find businesses that aggregate and distribute food from smaller farms to higher-volume markets. AMS and ERS also developed a map and article on farmers' market density and "competition zones" to help market managers understand their customer base and potential competition from other markets. USDA's Food

Safety Inspection Service compiled **maps** of slaughter availability to small livestock and poultry producers; learn more in the Local Meat and Poultry section of the KYF Compass.

How do all of these variables fit together to shape our local food environment? To help answer that question, the Economic Research Service pulled together over 100 variables to design the Food Environment Atlas, which includes the locations of farmers' markets and farm to school programs, the number of producers engaged in direct-to-consumer sales, nutrition program participation, and area demographic characteristics. This tool is used by private and public sector organizations to document the availability of local foods and plan for programs that improve community health.

These tools, combined with the new **KYF Map**, will help users visualize how USDA is supporting efforts to build stronger local food economies and how these efforts might impact the variables that shape our food environments. Although the map is by no means comprehensive, it begins to paint a picture of the breadth and depth of USDA support for this work and can be organized by theme, type of recipient, or funding agency.

KYF encourages people to get to know their farmers and their food by utilizing these tools and others to transform their own pantry, neighborhood, or community. Individuals can also look to the **Census of Agriculture** to find out more about how many farmers are producing food in their region, the type of crops grown, and other information. (Learn more about how to use the Census for local food research **here**.) And the newly-launched **Plant Hardiness Zone map** can help producers, gardeners and local food consumers see what kinds of foods can be grown in their region.



#### April 19-21, 2011 • Detroit, Michigan

In 2010, a new "sustainable food systems" grant focus was started under the Agriculture and Food Research Initiative of USDA's National Institute of Food and Agriculture. Among other efforts, the program supported the "Making Good Food Work" conference in Detroit, which brought together teams to develop local food business strategies, propose solutions to common challenges, and learn from each other's experience.

Supporting research in the field and sharing promising practices. USDA grants also help speed innovative research by academics and practitioners in the field, while the Department's education and outreach programs multiply the benefits of this work. Several funding opportunities, including a number of programs administered by USDA's National Institute of Food and Agriculture, accept grant proposals to develop, test and educate others about innovative research on local foods. USDA also develops and compiles case studies and analysis culled from on-the-ground experience; for example, the Agricultural Marketing Service's National Direct Distribution Study analyzes the distribution and marketing operations of eight regional food distributors selling to institutional customers.

**Plotting next steps.** After assessing the landscape of research and data available on local food systems, USDA staff and partners have identified gaps and developed strategies to gather needed information. With support from the Agricultural Marketing Service,



USDA's Food and Nutrition Service is conducting a pilot survey on barriers to the redemption of SNAP (food stamp) benefits at farmers' markets. FNS and ERS are collaborating on a farm to school census that will describe the number of schools engaged in these programs and some of the outcomes. The National Agricultural Statistics Service continues to improve on the quality of the information it gathers about farms selling local foods through the Agricultural Resource Management Survey (ARMS) and the Census of Agriculture; the agency added questions on farm to school sales to the upcoming ARMS and a question on local food sales to retailers and restaurants to the 2012 Census of Agriculture.

The Economic Research Service is constructing a "food localization index," which uses county-level public data to indicate the degreew of involvement of farmers and consumers in local food systems and the level of investment in these systems by public and private entities.

These kinds of research and data-gathering activities are key to improving our knowledge and understanding of where our food comes from and the environments that shape local food access and economic growth. To see projects supported by USDA related to research on local food systems, visit the **KYF Map**.



# LOCAL AND REGIONAL FOODS

### **NOT JUST USDA**

President Obama has placed an emphasis on local food systems because of the role they play in driving economic development, creating jobs, and preserving open space. As a result, agencies across the Federal government are using local food as a strategy to meet diverse goals. Here are just a few examples:

 Sustainable Communities Planning Grants. The U.S. Department of Housing and Urban Development, the U.S. Department of Transportation and the U.S. Environmental Protection Agency coordinate with USDA to support Sustainable Communities Planning grants, which fund regional planning efforts that integrate housing, land use, economic and workforce development, transportation, and infrastructure investments. This includes regional planning efforts to develop local food systems. For example, the Mid-Ohio Regional Planning Commission will use a grant to develop local food infrastructure in a low-income neighborhood of Columbus, expanding the space available for community gardening

by an estimated 300% and creating at least 20 new jobs associated with a new food distribution center.

- Putting Prevention to Work.
   The Centers for Disease Control's
   Communities Putting Prevention
   to Work (CPPW) and Community
   Transformation Grants (CTG) are
   just two programs working to create
   healthier food systems across the country.
   Successes of these programs can be found
   in urban centers like San Diego, CA, where
   local farm-to-consumer connections will
   increase healthy food access and in rural
   areas like Douglas County, Nebraska
   where farm-to-school and school
   gardening programs are helping students
   learn about and access healthy local food.
- Healthy Food in Parks. Recognizing the importance of national parks and outdoor places to our children's health, the Department of the Interior's National Park Service launched its "Healthy Parks, Healthy People" initiative and is now partnering with the First Lady's Let's



*Move!* initiative to work with food vendors to expand healthy options in the parks, including sourcing from local producers. The Park Service administers approximately 600 food vendor contracts across 392 parks, grossing about \$1 billion annually—so the potential for local producers that tap into this market is great.

- Community Economic Development. The Treasury Department's Community Development Financial Institutions (CDFI) Program expands the capacity of CDFIs to provide credit, capital, and financial services to underserved populations and communities in the United States, including investments in local and regional food systems. USDA is helping communities access these Treasury funds through trainings; for example, in August 2011, USDA staff co-facilitated a training in Wisconsin to help regional CDFIs understand mid-tier food chains and the value of investing in them.
- Small Business Support. The U.S. Small Business Administration (SBA) provides support to small businesses through capital, contracts and counseling. USDA and SBA have signed an agreement to encourage sustainable growth and development, including support for local and regional food systems—like in Iowa, where SBA and USDA partnered in 2010 to run a series of business roundtables with stakeholders interested in getting a foothold in local and regional food systems.
- Job Corps. The Department of Labor spearheads Job Corps, a network of free local job training centers for young people. USDA's Forest Service oversees many of the centers, preparing young people for work in agriculture and forestry-related fields. Learn more here.

CONCLUSIONS

### WHAT WE LEARNED

In 2008, then Senator Obama identified local food systems as a tool to create jobs and spur economic growth. His commitment to these systems has spread throughout the Federal government, with USDA taking a lead role in supporting local food efforts in the field. The track record of this work has only grown stronger over the past three years; the innovation of farmers, ranchers, food businesses and community groups across the country, coupled with the enthusiasm of consumers looking to support their local economy through food purchases, has taken local food efforts to new heights.

Agriculture Secretary Tom Vilsack and Deputy Secretary Kathleen Merrigan launched the Know Your Farmer, Know Your Food initiative in 2009 as a way to harness USDA's resources and publicize them widely. Since its launch, as this document illustrates, KYF has advanced USDA's understanding of and support for local and regional food efforts in important ways. Some of the top lessons of this work include: Local and regional food systems are generating jobs, reinvigorating rural economies, and fostering a sense of community-in thousands of communities. Based on a survey of producers, USDA's Economic Research Service reports that almost 110,000 farmers and ranchers nationwide are selling into local food markets. Large, midsized and small farms are all engaged, and local food generated nearly \$5 billion in sales in 2008. The market has only continued to expand since then. In 2011 alone, USDA has counted over 7,100 operating farmers' markets in the country and over 170 food hubs. And when states submitted funding requests to USDA's Agricultural Marketing Service through the Specialty Crop Block Grant program in 2011, all but one requested funding for projects related to local and regional foods. Across the country, communities are developing these markets and seeking support for their efforts.

Chuck Hanagan has worked for USDA-Farm Service Agency for 25 years and operates a family farm in Swink, Colorado. Having an abundance of fresh vegetables has given his office the opportunity to participate in the Department's 'Share Your Harvest' campaign. The pumpkins pictured are in bins awaiting shipment. Many of them ended up with the families of deployed troops on the Army base at Fort Carson.

3

KNOW YOUR FOOD COMPASS



Shepherd's Grain producers in WA and OR grow much of their wheat for export, but between 15 and 30 percent of their crop is high-quality hard red spring wheat that is processed and sold regionally, offering the farmers a better return and local bakeries a popular product.

Local food is a window to a broader national conversation about food and agriculture. The KYF initiative grew out of a recognition that producers, consumers and food-related businesses are looking for local and regional food opportunities. Consumers want to know more about where their food comes from and support their local economy. Producers recognize the potential to reach new markets when they connect more directly with local consumers.



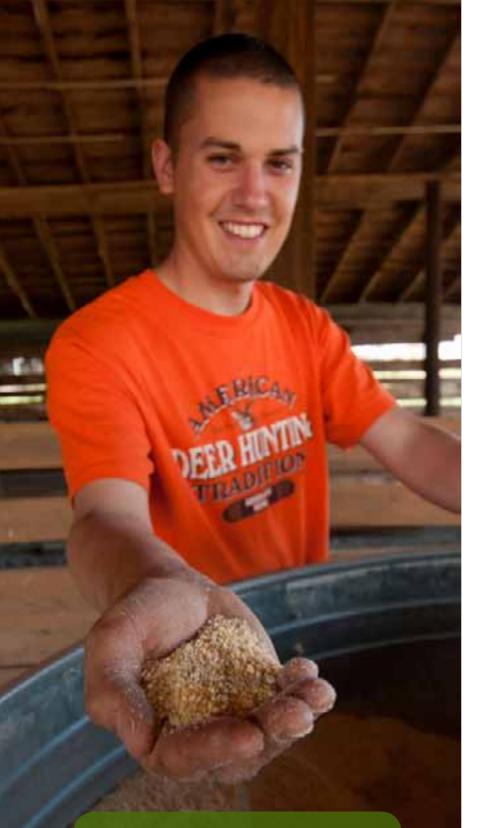
Savvy entrepreneurs see the gaps that prevent these opportunities from being realized and are stepping in to fill them. And everyone is talking about it.

USDA has an important role to play in encouraging this national conversation. The renaissance of interest in local foods has spurred a long-overdue conversation about American agriculture more broadly—about the people and processes that bring us food, the many ways that food travels from farm to plate, and the benefits that come from investing in this sector of our economy. Consumer-producer relationships foster greater understanding of the work that goes into producing food and the role that farmers and ranchers play as stewards of our natural resources. Such a connection benefits all of agriculture. Through KYF, USDA fosters these connections, disseminating information and resources to build strong relationships between consumers, producers and food businesses.

**Stakeholders are putting USDA resources to work for local and regional foods.** USDA has identified at least 27 USDA grant, loan or loan guarantee programs authorized to support work on local and regional foods and found that stakeholders have been utilizing these resources to significant effect. See the KYF map for some of the many projects that USDA is supporting nationwide related to local food. Again, these projects are widely geographically dispersed, showing the breadth of interest in developing strong local food systems.

Demand for local and regional food is creating important new business opportunities. Demand for local food, as measured by the growth in farmers' markets and sales figures as well as by industry sources such as the National Grocers Association and the National Restaurant Association, is growing exponentially. Research finds that local food networks drive economic activity in other parts of the economy as well. Revenue tends to stay in the local economy and be reinvested in supplies, labor, and other spending. For that reason, meeting the demand for local food can have significant payoffs in terms of local economic growth.

A recent study by the Economic Research Service finds that produce and nut growers selling into local and regional markets generate thirteen full time operator jobs per \$1 million in revenue earned, for a total of 61,000 jobs in 2008. Additional farm labor is not included in this figure. In contrast, farms that do not sell into these markets generate only three full time operator jobs per \$1 million in revenue. These findings highlight



Third generation farmer CJ Isbell takes runs Keenbell Farm in Rockville, VA. He sells pastured pork products at the Fall Line Farms food hub. the importance of local food market development to the President's broader jobs agenda and to the ongoing work of the White House Rural Council. Local food systems are also a key component of USDA's work to reinvigorate rural economies, expand job opportunities in agriculture, and strengthen the sector overall.

There are still many barriers to success, but the barriers are also opportunities for innovation and collaboration. Infrastructure gaps at the regional level, lack of access to land or credit, lack of experience developing and running local food businesses, and the challenges posed by the diversified and seasonal nature of local and regional food production are just some of the challenges that communities continue to face. USDA is supporting the people, businesses and organizations that are field-testing innovative new solutions to these challenges. By continuing to fund research, share knowledge between and across communities, support the development of efficient regional supply chains, and offer technical assistance, USDA can help enhance farm profitability and expand food access through strong local and regional food systems.

**Coordination, transparency and responsiveness are good governance.** KYF marked the start of a new way of doing business at USDA. By bringing together staff from across the 7 mission areas and 17 agencies, KYF has fostered a level of coordination, transparency and efficiency fitting for "the people's department."

Regular meetings of the KYF task force, made up of agency representatives from across the Department, help USDA employees coordinate and accelerate efforts to meet common goals and respond to stakeholder feedback. Task force subcommittees grapple with questions and coordinate efforts that require the involvement of more than one agency. KYF is a resource for USDA field staff looking for information on the many programs—some outside of their own agency's purview—available to help their local producers. On one centralized website, KYF offers resources to stakeholders interested in exploring funding opportunities from more than one of USDA's agencies.

The **KYF** map is perhaps the best illustration of the multi-faceted nature of the Department's work on local and regional food. With strong support from Agriculture Secretary Tom Vilsack and Deputy Secretary Kathleen Merrigan, KYF has helped amplify and build on the work taking place around the country and within USDA's offices.

#### **GET INVOLVED**

Across the country, communities are using local food systems to increase job opportunities, access healthy food, revitalize local economies, spark new business ventures, and keep more wealth in their local communities. The Know Your Farmer, Know Your Food initiative shares these stories, supports new efforts, and coordinates USDA's work to harness the enthusiasm for local and regional food and develop new market opportunities for all of agriculture. Food and farming matters to everyone: to the producers who grow and raise our food, to the businesses that store, process, distribute or sell it, and to the families that consume it. Join the national conversation.





### **ENDNOTES**

- 1 National Grocers Association. 2011. National Grocers Association Consumer Survey Report. Available online at http://www.supermarketguru. com/public/pdf/Consumer-Panel-Survey-2011.pdf.
- 2 Blythe, Bruce. 2011. "Local produce near top of hot menu trends." *The Packer*, May 24. Available at http://www.thepacker.com/fruit-vegetablenews/122513864.html.
- 3 National Farm to School Network. Farm to School Programs in the US (Estimated). Available online at http://www.farmtoschool.org/index.php.
- 4 USDA Agricultural Marketing Service. National Farmers' market Directory. Available at http:// farmersmarkets.usda.gov
- 5 Obama for America. 2008. "Barack Obama and Joe Biden on the Environment." Fact sheet.
- 6 U.S. Department of Agriculture. 2009. Strategic Plan FY 2010-2015, at 2. Washington, DC: USDA. Available online at http://www.ocfo.usda.gov/ usdasp/sp2010/sp2010.pdf.

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- 7 USDA National Agricultural Statistics Service, Livestock Slaughter Annual Summaries for
   1990 and 2010, available at http://usda.mannlib. cornell.edu/MannUsda/viewDocumentInfo. do?documentID=1097. These totals represent the annual number of Federally-inspected establishments that slaughtered cattle, calves, hogs, sheep and/or lambs.
- 8 Michelle M. Ratcliffe, K.A. Merrigan, B.L. Rogers and J.P. Goldberg. "The effects of school garden experiences on middle school-aged students' knowledge, attitudes and behaviors associated with vegetable consumption." Health Promotion Practice, Vol. 12 No. 1, 36-43, January 2011.
- 9 USDA National Agricultural Statistics Service.
   Quick Stats: Farm numbers—total farms, land in farms, average farm size, United States, 1980-2010.
- 10 NASS, Agricultural Land Values and Cash Rents, 1999-2003; NASS, Land Values and Cash Rents 2010 Summary.

