

Iowa Local Food & Farm Plan



**Report to the Iowa Legislature from the
Leopold Center for Sustainable Agriculture**

January 2011



LEOPOLD CENTER



Find this report on the web at: www.leopold.iastate.edu/foodandfarmplan.html

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Acknowledgements

The Leopold Center acknowledges the following for their role in facilitating discussions, providing counsel, and/or collecting data for the Iowa Local Food and Farm Plan:

Brenda Ranum – ISU Extension	Laura Kuennen – ISU Extension
Teresa Wiemerslage – ISU Extension	Matt Russell – Drake University Agricultural Law Center
Johnice Cross – GROWN LOCALLY	Mark Runquist – Farmer
Andrea Geary – University of Northern Iowa	Teresa Opheim – Practical Farmers of Iowa
Kamyar Enshayan – University of Northern Iowa	Carole Richardson Smith – Consultant
Bahia Barry – Golden Hills RC&D	Andrew Larson – ISU Extension
Dennis McDonald – Iowa Lakes RC&D	Mallory Smith – Louisa County Economic Development
Mel Houser – Pottawattamie County Board of Supervisors	Yvonne Knapp – Lee County Economic Development
Mark Schuff – Prairie Winds RC&D	Mary Swalla Holmes – Consultant
Elisabet Humble – Pathfinders RC&D	John Lawrence – ISU Extension
Detra Dettman – Pathfinders RC&D	Alan Vanderhaar – ISU Extension
Linda Gobberdiel – 1000 Friends of Iowa	Hannah Lewis – National Center for Appropriate Technology
Cori Burbach – City of Dubuque	Nick McCann – National Center for Appropriate Technology
Jason Grimm – Iowa Valley RC&D	Margaret Smith – ISU Extension
Tanya Meyer Dideriksen – Iowa Valley RC&D	Arion Thiboumery – Lorentz Meats
Neil Hamilton – Drake University Agricultural Law Center	Jerry DeWitt – Former Leopold Center Director
Angie Tagtow – Consultant	Jeri Neal – Leopold Center
Linda Barnes – Marshalltown Community College	Malcolm Robertson – Leopold Center
Jan Swinton – Harvest from the Heart	Jerry Chizek – ISU Extension
Joe Sellers – ISU Extension	
Dave Lyons – Consultant	
Sherry McGill – ISU Extension	

Special thanks to **Mary Adams**, Leopold Center, for editing and **Laura Miller** and **Tina Davis**, Leopold Center, for design and layout of the Iowa Local Food and Farm Plan document



CALL TO ACTION:

Implementing the recommendations in the Iowa Local Food and Farm Plan

The Iowa legislators who sponsored the Iowa Local Food and Farm Plan amendment strongly encouraged the Leopold Center to develop a plan that is “actionable” – meaning that it is well researched and contains enough detail so that legislators could easily take action when the legislative session opened in January 2011. The Center has taken this charge very seriously. This plan has emerged from an inclusive process of gathering information and feedback on the key issues, conducting research to understand those issues, drafting recommendations, and directly engaging those agencies, institutions, and farm and food organizations that are part of the plan.

We have concentrated our efforts on formulating a set of recommendations that when implemented in a strategic and collaborative manner can make a growing and robust local food economy part of Iowa’s vision for a sustainable future. This is not pie-in-the-sky wishful thinking; it is a pragmatic plan that if implemented can help to build more profitable local food businesses in the state. Through better coordination and expansion of education and technical assistance efforts, strategic but modest appropriations, specific policy changes, and creation of a practical and voluntary funding mechanism that will leverage external funds, we can create a stronger base to help our local food farmers and food entrepreneurs succeed.

Together, we can make a vibrant local food economy a reality to the benefit of Iowa farmers, entrepreneurs, and communities, and add another chapter to Iowa’s storied agricultural heritage.

Building effective working relationships among business partners in a food supply chain is essential for success. It also is essential for the success of this plan. An unintended but very positive part of the plan development process has been to further cement relationships among those who have a keen interest in seeing local foods contribute more to the state’s economy and communities.

Together, we can make a vibrant local food economy a reality to the benefit of Iowa farmers, entrepreneurs, and communities, and add another chapter to Iowa’s storied agricultural heritage.

Rich Pirog
Associate Director
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January 6, 2011



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Executive Summary

The Iowa legislature passed an amendment in 2010 mandating that the Leopold Center for Sustainable Agriculture develop a Local Food and Farm Plan for the state of Iowa.

AMENDMENT - LOCAL FOOD AND FARM PLAN. To the extent feasible, the Leopold Center for Sustainable Agriculture established pursuant to section 266.39 shall prepare a **local food and farm plan** containing policy and funding recommendations for supporting and expanding local food systems and for assessing and overcoming obstacles necessary to increase locally grown food production. The Leopold Center for Sustainable Agriculture shall submit the plan to the general assembly by January 10, 2011. The plan shall include recommendations for short-term and long-term solutions, including but not limited to the enactment of legislation.

The Iowa Food and Farm Plan contains 34 unique recommendations grouped in three main sections:

1. Recommendations for state appropriations

The key recommendation here is a one-year appropriation to create a full-time Local Food and Farm State Coordinator position.

2. Recommendations to create a Local Food and Farm Advisory Board and a Local Food and Farm Program Fund

Once the Local Food and Farm State Coordinator is on board, he/she will help create a Local Food and Farm Program Fund from voluntary sales of "local food symbol" collectible posters, bumper stickers, and stamps, and local food state license plates. The fund will pay for the salary of the state coordinator after the first year and provide resources to implement recommendations found in section 3.

3. Recommendations related to operation of the Plan

Business development models

– building profitable community-based local food businesses that can serve as models for bankers, economic development officials, and aspiring local food businesses

Financial assistance – increasing availability and access to loans to build local food businesses

Processing – providing more education, training and incentives to increase the productivity and efficiency of Iowa's small meat processors and other local food processors

Food safety – providing more education, training and incentives for local food farmers to profitably access new markets while ensuring food safety to Iowa consumers

Beginning, minority, and transitioning farmers –

education, training and incentives to help local food farmers increase their profitability while protecting Iowa's natural resources.

Assessing progress – setting benchmarks and collecting appropriate data to determine whether Iowa's local food economy is growing and benefitting local food businesses and communities

Local food incentives – pilot local food purchase incentives to open up unique local food markets, and including local food as a designation of an Iowa Great Place

Recommendations, summarized on the next page, are characterized as either short- (one to three years) or long- (more than three years) term in their implementation and need for financial resources.

The Leopold Center drew on the expertise and experience of more than 1,000 individuals across the state to develop the Iowa Local Food and Farm plan recommendations, using a variety of methods including working sessions and workshops, listening sessions, one-on-one visits, and surveys. With the initial set of recommendations drafted, we distributed some or all of them to appropriate representatives from 21 different state agencies, institutions, and organizations mentioned in the Plan. In face-to-face meetings or teleconferences, these representatives were asked to provide feedback on the accuracy and extent to which the agency/organization was already executing the recommendation(s). We reviewed their comments and integrated them into the Plan to ensure the final recommendations were as accurate and actionable as possible. Complete details of the methodology we used in our process to gather feedback for the Plan can be found in Appendix 1.

Iowa Local Food and Farm Plan Recommendations at a Glance

January 2011

			Short-term	Long-term
Needs state appropriation	1.1	Hire Local Food & Farm state coordinator*	✓	
	1.2	Provide 2-year support for Iowa Farm-to-School Program*	✓	
State-level local food program fund and advisory board	2.1	Appoint Local Food & Farm Program advisory board*		✓
	2.2	Set up voluntary funding mechanism for Local Food & Farm Program (to fund coordinator after year 1)*		✓
	2.3	Annual local food and farm report*		✓
Business development and financial assistance	3.1	Implement 4-6 local food business projects across the state	✓	
	3.2	Extend Iowa Small Business Loan Program Fund*	✓	
	3.3	Recruit women & minorities for local food small business program	✓	
	3.4	Offer local food business development program for bankers	✓	
Processing	3.5	Offer local food processing educational program for farmers, entrepreneurs		✓
	3.6	Pilot small meat processing facility investment credit program*	✓	
	3.7	Reclassify small meat plants as industrial property*		✓
	3.8	Pilot meat-cutting education and mentoring program for small businesses	✓	
	3.9	Expand education and training for small meat processors		✓
Food safety	3.10	Set up task force to review state laws and regulations on local foods*	✓	
	3.11	Offer recurring Good Agricultural Practice (GAP) educational training		✓
	3.12	Pilot food safety audit cost-share program for farms selling wholesale to larger volume buyers	✓	
	3.13	Increase outreach about Iowa food regulations		✓
	3.14	Add local food producer to Iowa Food Safety Task Force		✓
	3.15	Train educators working with local food producers about food safety	✓	
Beginning, minority, transitioning farmers	3.16	Develop programs for beginning farmers and food entrepreneurs with outreach to minority populations	✓	
	3.17	Business training program for food brokers and supply aggregators	✓	
	3.18	Business training program for recruiting, managing and optimizing labor for small food operations	✓	
	3.19	Create sample contracts/production agreements for local food sales	✓	
Assessing progress	3.20	Set up subcommittee to oversee data collection and track growth of local food businesses*		✓
	3.21	Track state agency purchases of Iowa grown foods*		✓
	3.22	Survey producers of edible horticultural food crops	✓	
	3.23	Survey producers about labor skills needed for fruit/vegetable production, processing	✓	
	3.24	Survey capacity of food production and aggregation centers for distribution, storage and processing	✓	
	3.25	List sources of technical assistance for local food businesses		✓
	3.26	Increase outreach for local food producer liability insurance options	✓	
Local food incentives	3.27	One-year pilot program to reimburse five K-12 school districts that serve Iowa produce	✓	
	3.28	One-year pilot program to reimburse five health care facilities that serve Iowa produce	✓	
	3.29	Add local foods component to Iowa Great Places program		✓

* These recommendations require legislative action; others could be implemented in whole or in part without legislative action.

Iowa Food and Farm Plan Process and Impacts

The Local Food and Farm Plan Amendment: the Leopold Center for Sustainable Agriculture established pursuant to section 266.39 shall prepare a **local food and farm plan** containing policy and funding recommendations for supporting and expanding local food systems and for assessing and overcoming obstacles necessary to increase locally grown food production. The Leopold Center for Sustainable Agriculture shall submit the plan to the general assembly by January 10, 2011. The plan shall include recommendations for short-term and long-term solutions, including but not limited to the enactment of legislation.

Why Develop a Plan?

Need For

- Rural community revitalization
- Unmet market demand for local food
- Opportunity for farm and food sector job creation and retention

Iowa's Assets

- Iowa's rich agricultural tradition and history
- Consumer demand for local food
- Excellent education and research support
- Culture of collaboration between private/public sectors

Inputs (What?)

- Assessment of challenges and opportunities to build a more robust local food economy in Iowa
- Policy and regulatory changes
- State investment leveraging federal, foundation, and private investment (grants and loans)
- Coordinated research, education, and planning
- Loans and financial incentives

Strategies (How?)

- Hiring of a State Local Food and Farm Coordinator to carry out programs and coordinate efforts
- Create a Local Food and Farm Program Fund from voluntary sources
- Develop and showcase viable business models of profitable local food commerce
- Provide incentives for local food farmers, entrepreneurs, and processors to initiate or grow enterprises
- Expand education and training programs for local food farmers, entrepreneurs and processors
- Ensure local food farmers, entrepreneurs, and processors have adequate tools and resources to produce food in a safe and environmentally responsible manner
- Create benchmarks (collect data) and assess progress on building the local food and farm economy

Outputs (Short-term results)

- State Local Food and Farm Coordinator hired
- Local Food and Farm Program Fund established
- Local Food and Farm Program Advisory board established
- Local food business models established
- Financial assistance opportunities expanded
- Education and training programs developed or expanded
- Benchmark data on local food commerce collected

Outcomes (short-term impacts)

- New local food businesses established
- Better coordination of agency and educational institution local food efforts

Outcomes (long-term impacts)

- Increased food dollars spent on locally grown and processed foods
- Profitable local food businesses
- Increased jobs in the state's food and agriculture economy





Introduction

Local food efforts in Iowa: 1995 to 2010

State efforts to grow Iowa's local food economy have taken many forms over the past 15 years. The Leopold Center began funding local food system projects through its competitive grants program in 1996. Over the next four

years a number of organizations and institutions, including Practical Farmers of Iowa, Iowa State University, Iowa Network for Community Agriculture, the Drake University Agricultural Law Center, and Iowa Department of Agriculture and Land Stewardship worked with farmers to coordinate local food pilot projects.

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What is the Leopold Center for Sustainable Agriculture?

The Leopold Center for Sustainable Agriculture is a research and education center with statewide programs to develop sustainable agriculture practices that are both profitable and conserve natural resources. It was established under the Iowa Groundwater Protection Act of 1987 with a three-fold mission: (1) to conduct research into the negative impacts of agricultural practices; (2) to assist in developing alternative practices; and (3) to work with Iowa State University (ISU) Extension to inform the public of Leopold Center findings.

The Leopold Center carries out its competitive grant funding and other programs under four initiatives:

- Ecology
- Marketing and Food Systems
- Policy
- Cross-cutting (projects that integrate the three initiatives listed above)

In 2000, then-Secretary of Agriculture Patty Judge, responding to requests from farmers and community leaders, sponsored a Local Food Task Force. This group convened for nine months before making recommendations, which included formation of a state-level food policy council. The following year Governor Tom Vilsack created (by executive order) the Iowa Food Policy Council to help increase communication and collaboration on food issues across state agencies, and address challenges that impaired the progress of local food commerce in a variety of market venues. The Council, chaired by Neil Hamilton of the Drake University Agricultural Law Center, remained active until 2006, when Governor Vilsack left office. The executive order to continue the Iowa Food Policy Council was not renewed during Governor Chet Culver's term in office (2006-2010). In fall 2010, a nonprofit Iowa Food Systems Council was created outside of state government, with elected board members and staff from state agencies serving in an ex-officio capacity.

Since 2001, the Leopold Center's Marketing and Food Systems Initiative has funded more than 130 competitive grant projects. In addition, through the collaborative, multi-organization Value Chain Partnerships project (www.valuechains.org) led by the Center's Marketing and Food Systems Initiative, more than 80 additional projects were conducted. Most of these projects focused on local food systems and food value chains. The funded competitive grant projects have produced new marketing tools, business planning workshops, food distribution feasibility studies, training and education workshops for minority farmers, and economic impact studies for various increased local food production scenarios.

Through the Value Chain Partnerships project, a number of multi-organizational working groups have been created with partner organizations to address economic, community, and environmental challenges found in food value chains. The working groups active within the last two years include:

- Niche Pork
- Regional Food Systems
- Fruit and Vegetable
- Small Meat Processing
- Grass-based Livestock
- Food Access and Health

The Regional Food Systems Working Group (RFSWG) has grown from three local food groups in 2006 to 14 groups covering 70 of Iowa's 99 counties in 2010 (Figure 1, below). RFSWG offers a collaborative environment for a diverse group of farmers, community leaders, and nonprofit, government, and private organizations to share resources and support. The group works to maximize the potential for community-based, economically sustainable, and environmentally responsible regional food enterprises by supporting education, conducting research, and facilitating partnerships.

Why was the Leopold Center asked to develop this plan?

The Leopold Center's reputation in exploring local food systems has increased within the state and nationally in the past 10 years because of its funding of local food systems research and education, building local food networks, and conducting local food research. Project results and publications from this work have been used widely by farmers, universities, and local food educators in Iowa and across the nation. Given the marked increase in local food commerce across the state and the requests for action by constituents to help grow local food commerce, the Iowa legislature recognized that the Leopold Center would be an appropriate state-funded institution to lead development of this plan.

Local food commerce as a driver of local and state economic and community development is the primary theme in this report. There are many other critical food system issues where local foods may play a role, such as health, food access, community food security, childhood obesity, and wellness. The Leopold Center and its many partners are committed to these issues as well, however, programs and recommendations to address these issues will come through other channels rather than this plan.

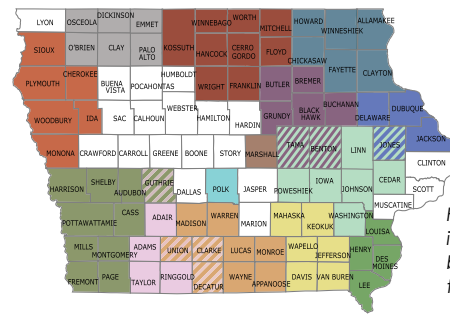
Figure 1

Regional Food Systems Working Group (RFSWG)



Where is our work?

- Flavors of Northwest Iowa:** Working in Cherokee, Ida, Monona, Plymouth, Sioux, and Woodbury counties
- Iowa Great Lakes Local Foods Network:** Working in Clay, Dickinson, Emmet, O'Brien, Osceola, and Palo Alto counties
- Northeast Iowa Food & Farm Coalition:** Working in Allamakee, Chickasaw, Clayton, Howard, Fayette, and Winneshiek counties
- Northern Iowa Food & Farm Partnership:** Working in Benton, Bremer, Black Hawk, Buchanan, Butler, Grundy, and Tama counties
- Healthy Urban Food and Farming Group:** Working in Polk County
- Great River Food Alliance of Southeast Iowa Inc.:** Working in Des Moines, Henry, Lee and Louisa counties
- Farm Fresh, Local Harvest Food Alliance:** Working in Adair, Adams, Clarke, Decatur, Guthrie, Ringgold, Taylor, and Union counties
- Hometown Harvest of Southeast Iowa:** Working in Davis, Jefferson, Keokuk, Mahaska, Van Buren, and Wapello counties



Hashed counties indicate counties belonging to more than one local group.

- Iowa Corridor Food and Agriculture Coalition:** Working in Benton, Cedar, Iowa, Johnson, Jones, Linn, Poweshiek, Tama, and Washington counties
- North Central Iowa Local Food Partnership:** Working in Cerro Gordo, Floyd, Franklin, Hancock, Kossuth, Mitchell, Winnebago, Worth and Wright counties
- Southwest Iowa Food & Farm Initiative:** Working in Audubon, Cass, Fremont, Guthrie, Harrison, Mills, Montgomery, Page, Pottawattamie, and Shelby counties
- South-Central Iowa Area Partnership:** Working in Appanoose, Clarke, Decatur, Lucas, Madison, Monroe, Union, Warren, and Wayne counties
- Harvest from the Heart (COMIDA):** Working in Marshall County
- Dubuque Eats Well:** Working in Delaware, Dubuque, Jackson and Jones counties

Iowa's agricultural heritage

In order to understand the potential role of local foods in Iowa's communities and economy, it is important to provide a snapshot of the state's agricultural heritage. Iowa's soils are among the most productive in the world, and are considered to be one of the state's most important natural resources. Through a fortuitous combination of geological history, abundant rainfall, and hard-working farmers, Iowa offers an agriculturally productive environment that few places on earth can match. More than 30.8 million acres are devoted to agriculture in Iowa, which accounts for 86 percent of the state's land area.¹ Iowa ranks first nationally in corn, soybean, hog, and egg production.² In 2009, Iowa farmers produced agricultural products worth \$24.3 billion dollars², and exported 26 percent of these products around the world.³

In addition to its contribution to the economy, agriculture plays an important role in the cultural and social fabric of the state. County and state fairs, farm toy museums and historical farm re-enactments offer Iowans a chance to celebrate and explore their state's agricultural heritage. Many Iowans also honor their agrarian traditions through antique power shows, "barn quilts," the recognition of heritage and century farms, and restoration and tours of historic barns. Agricultural events like the World Pork Expo, Cattle Congress, and World Food Prize Symposium attract many out-of-state and international visitors to Iowa.

Poised as it is on the cusp of all things agricultural, Iowa has led the nation, and sometimes the world, in agricultural innovation. Iowa was the first state to accept the provisions of the Morrill Act in designating Iowa State University as the nation's first land grant university. The nation's first tractor factory set up shop in Charles City, and agricultural innovator George Washington Carver is a prominent Iowa State alum and food pioneer. Henry Wallace, the inventor of hybrid seed corn and founder of Pioneer Seed Company, traces his roots to Adair County. Cresco native Norman Borlaug started "the green revolution," and Grant Wood found artistic fame depicting Iowa's agricultural heritage.

Given Iowa's prominent agricultural heritage and tradition of agrarian innovations, Iowans are well suited to lead the next agricultural wave by empowering a new generation of farmers and food entrepreneurs to build a

strong local food economy that capitalizes on its citizens' traditional values of self-reliance and vibrant local economies.

What is local food?

There is no nationally accepted definition for local food, although several definitions focus on the geographical distance between where food is produced and where it is consumed. The definition adopted by the U.S. Congress in the 2008 Food, Conservation, and Energy Act (2008 Farm Bill), states that the total distance that a product can be transported and still be considered a "locally or regionally produced agricultural food product" is less than 400 miles from its origin, or within the state in which it is produced. However, for Iowa farms near border cities such as Council Bluffs, Davenport, and Dubuque, local food markets areas likely will extend into neighboring states. When considering local food, it is therefore important to

Local food is meat, poultry, eggs, dairy, fruit and vegetables, grains, herbs, honey, and nuts grown or raised in Iowa, and marketed for human consumption in Iowa and its neighboring states (Minnesota, Missouri, Illinois, Wisconsin, Nebraska, and South Dakota).

think beyond mileage and political boundaries and focus on marketing arrangements, the relationships present in the food value chain, and the percent of the food dollar that accrues to farmers and local communities.

Is local food the same thing as regional food? In a 2010 issue of *Choices* magazine devoted entirely to local food issues, Kate Clancy and Kathy Ruhf discussed the dimensions of a regional food system. In their research they state:

"We see that local is a necessary but not sufficient component of a regional food system. Regional is larger geographically and in terms of functions—volume/supply, food needs, variety, supply chains, markets, land use, and policy. A regional food system includes multiple "locals" within a state, and those that cross state boundaries. Regional food systems operate in relation to other regions as well as to the national and global food systems."⁴

Regardless of the definition of local and regional foods, interest in food grown or processed with some kind of place-based distinguishing characteristic or connection has increased over the past 10 years in Iowa and across the United States. What started as a consumer-driven preference to shorten the supply chain between farmer and consumer has evolved into a viable option to increase farm profitability and support rural and urban communities. More community, business, and government leaders in Iowa are beginning to understand that local foods may provide an important economic and community development opportunity that promises to benefit farmers, consumers, and the communities in which they live.

Although there is not a set definition of local foods, we realize that for the purposes of the Iowa Local Food and Farm Plan and the recommendations to be provided, we need to establish a working definition of the term:

Local food is meat, poultry, eggs, dairy, fruit and vegetables, grains, herbs, honey, and nuts grown or raised in Iowa, and marketed for human consumption in Iowa and its neighboring states (Minnesota, Missouri, Illinois, Wisconsin, Nebraska, and South Dakota).



Why do we need a local food and farm plan?

There is a significant and rising demand for fresh, local food produced throughout the Upper Midwest and the nation.^{5, 6} This demand comes not just from farmers market customers, but also from schools and hospitals, large institutional buyers, food distribution companies, food retailers, and restaurants that are striving to make local items a larger part of their product offerings, but often cannot source enough products to meet the demand. The rising demand for local produce, meat and dairy is evident in Iowa and throughout the Upper Midwest. What is less clear, however, is how to strengthen and, where appropriate, scale up Iowa's local food industry to meet this significant and fast growing public call for fresh, local food.

Although recent trends support the development of more local food businesses, farmers and food entrepreneurs cannot do it alone.

Community commitment to local economic prosperity, shifting consumer demand that favors locally grown and other differentiated foods that offer various quality, environmental, or community benefits, and changes in state and local government policies all help set the stage for building a vibrant local food business sector.

Consumer demand in the United States

Demand for locally produced food has increased sharply in recent years across the country as shown by the growth in direct markets. In the past 10 years, the number of operating farmers markets has more than doubled from 2,863 to 6,132.⁷ The USDA's 2007 Census of

Agriculture found that 1 percent of farms in the United States are participating in Community Supported Agriculture; nearly 4000 CSAs are registered nationally at www.localharvest.org. Consumers, retailers, and institutional buyers may seek out local foods to satisfy demand for product quality, to support local farmers and the local economy, or to express a preference for certain agricultural production and distribution methods. Interest in supporting local food systems also has been sparked among federal, state, and local policymakers, and has

been spearheaded by national "Buy Fresh, Buy Local" and Farm-to-School networks, among others. Local food systems increasingly are incorporated into programs designed to reduce food insecurity, support small farmers and rural economies, encourage more healthful eating habits, and foster closer connections between farmers and consumers.⁸

Government policies support local food systems

Government policy is typically slow to change, but recent shifts in agricultural policy are being signaled across the country, including from Washington D.C. In 2009, former Iowa Governor and current U.S. Secretary of Agriculture, Tom Vilsack, announced a new national initiative called "Know Your Farmer, Know Your Food." This new program supports the development of local and regional food systems. In the words of Secretary Vilsack:

"An American people that is more engaged with their food supply will create new income oppor-

tunities for American agriculture. Reconnecting consumers and institutions with local producers will stimulate economies in rural communities, improve access to healthy, nutritious food for our families, and decrease the amount of resources to transport our food."

In December 2010 the U.S. Congress passed the Healthy, Hunger-Free Kid's Act, which was signed into law by President Obama on December 13, 2010. Among the provisions is \$5 million per year in mandatory funding for farm to school programs, which will help connect local farmers interested in selling fresh produce and other items with interested schools.

Iowans spend more than \$8 billion on food each year; but only 14 percent of this food is estimated to be produced within the state.

Other states in the Upper Midwest and across the nation have taken the lead in capitalizing on this surge in local food demand by investing in their own local food economies and developing statewide local food plans. Iowa is ideally positioned to learn from these states, including Illinois, Michigan, and North Carolina, as well as metropolitan areas such as New York City, which have already developed plans and made progress in addressing challenges to provide more local foods to its residents.

As a key agricultural state, Iowa possesses unique advantages and incentives to build the state's local food economy. Almost three-quarters of our state's land is already vested in agriculture and the commercial farming infrastructure is in place. With the support of federal programs, complementary initiatives in neighboring states, and the clout and capability of a strong network of locally committed farmers and community leaders, Iowa is well positioned to expand its leadership in agriculture by more intentional investments that grow the local food economy.

Status of Iowa's local food commerce

Iowans spend more than \$8 billion on food each year; but only 14 percent of this food is estimated to be produced within the state.⁹ While there are challenges to expanding Iowa's local food economy, there have been many successes throughout the state that indicate Iowa has a burgeoning local food sector with room to grow. Local food commerce has increased in many areas across Iowa, although local food "hot spots" have emerged in specific regions such as Northeast Iowa and around metropolitan areas such as Des Moines, Waterloo, Iowa City, and Sioux City. In order to build a strong, statewide local food economy, it is essential to expand access to local food in all corners of the state. This means increasing direct-to-consumer sales of local food as well as retail and institutional sales. It also means providing the infrastructure, research and development, and incentives to support increased local food production and marketing.

The recent growth in direct-to-consumer sales indicates that there is a strong demand for local food. In 2007, nearly 3,000 farms in Iowa sold products worth \$16.5 million directly to consumers, an 18 percent increase over 2002.¹⁰ While this represents only 1 percent of all produce, meat, and dairy sold in the state, sales of local food directly from farmers to consumers have an important role to play in Iowa's farm economy. Other direct-to-consumer markets include more than 225 farmers markets, which have increased by 75 percent over the last 15 years and place Iowa second in the nation in the number per capita.¹¹ The state has more than 50 Community Supported Agriculture (CSA) farms that serve people in 90 percent of Iowa counties.^{12, 13}

In addition to growth in direct sales, there are many other potential markets for local foods across the state. Building a strong local food and farm economy depends on accessing the significant institutional and retail markets in order to increase the total supply of local food available to Iowa consumers. A snapshot of many of these Iowa markets for local food is found in Table 1 on the next page.

Table 1. Selected list of potential markets for local food

#	Market Venue	#	Market Venue
>6,000	Restaurants (\$3.2 billion in sales 2010) ¹⁴	443	Certified nursing homes ¹⁵
1,184	Grocery and food stores ¹⁶	12,201	Child care programs ¹⁷
36	Natural food stores and cooperatives ¹⁸	317	Food pantries ¹⁹
115	Meat and poultry markets ²⁰	9	State prisons ²¹
39	State government buildings ²²	1,490	K-12 public schools (477,019 students) ²³
148	Museums ²⁴	61	Post-Secondary (286,891 students) ²⁵
118	Community hospitals ²⁶	588	Caterers ²⁷

Local food production

In order to increase local food sales across the state, it is critical for Iowa farmers to have the tools they need to be able to meet demand, especially in institutional and retail markets that show the most promise for increasing sales of locally produced food.

Typically, smaller fruit, vegetable, and livestock farms produce food items intended for local consumption rather than supplying out-of-state export markets. According to the 2007 Census of Agriculture, Iowa has 743 orchards and 881 vegetable farms covering approximately 12,000 acres²⁸ and more than 20,000 livestock producers with small herds or flocks.²⁹ This segment of Iowa's farming population will be a critical asset to include in any model for building Iowa's local food infrastructure. It also should be noted that conventional farms raising corn, soybean, cattle and hogs also may be interested in local food markets as a way to diversify or start out a son and daughter on their own farm enterprise.

Additionally, greenhouse production also has the potential to play a role in expanding year-round fruit and vegetable production. Greenhouses, as well as plastic-covered high tunnel

structures can extend the growing season, reduce seasonal fluctuations in farm income, and provide opportunities for increasing the circulation of local food dollars in the winter months when farm product sales typically stall. Sales of greenhouse crops were \$7.6 million in 2007 and covered over 900,000 square feet,³⁰ which indicates tremendous opportunity for growth in expanding Iowa's total year-round food production capacity with attendant benefits to farm communities and the local economy. In 2010 through the Environmental Quality Incentive Program (EQIP) coordinated by the Natural Resources Conservation Service, more than 100 high tunnel contracts were granted in Iowa, with more farmers waiting for contracts in 2011 and 2012.³¹

Currently, Iowa fruit and vegetable farmers meet local statewide demand for only three crops: sweet corn, watermelon, and pumpkins,³² which requires a little more than 5,000 total acres of crop production.³³ Although 86 percent of Iowa's total land base consists of farmland, when compared to other states, Iowa lags in fruit and vegetable production. Nationwide, the average state devotes 9.3 acres of vegetables per 1,000 persons. In the

Midwest, states average only 4.6 acres. Despite its agricultural heritage and dominant agricultural economy, Iowa ranks near the bottom with a mere 1.6 acres per 1,000.³² The potential is there to commit more land to fruit and vegetable production in response to the increasing demand.

Benefits of local foods

There are many benefits that a robust local food sector could bring to a state's economy and local communities. A strong local food market would allow existing farm operations to diversify and expand their product offerings, and would complement Iowa's global-oriented food and farm economy with one that also supports local and diversified production. According to USDA research, producers receive a greater share of retail prices in local food supply chains than they do in mainstream chains, and producer net revenue per unit in local chains ranges from about equal to more than seven times the price received in mainstream

Although 86 percent of Iowa's total land base consists of farmland, when compared to other states, Iowa lags in fruit and vegetable production.

chains.³⁴ For Iowa, this means that farmers can retain a greater portion of each food dollar that Iowans spend on local food, whether it's at a farmers market, through a CSA, at a roadside farm stand, or a neighborhood grocery store featuring locally grown produce.

Building a strong local food sector does not replace or threaten existing commodity farm production, but rather expands agricultural opportunities and welcomes more people into the farm sector by establishing new markets, encouraging more farmers, keeping more of each food dollar spent in the state, and leveraging federal programs to bring more federal dollars into the state's economy. A strong local food economy may help retain jobs in the food and farm sector, keeps dollars circulating and multiplying locally, provides business opportunities for young people, and offers more opportunities for ancillary businesses to grow and rural communities to thrive.

Increased local food production, marketing, processing means more jobs

In Black Hawk and surrounding counties, sales of local foods to various markets have increased from \$150,000 in 1998 to more than \$2.5 million in 2009 (Figure 2). One restaurant in Black Hawk County purchases more than 70 percent of its food items from Iowa farmers and processors. When compared to an average regional restaurant of its size purchasing from conventional sources, this "local food" restaurant has realized higher labor income and net jobs (Figure 3).

The growing number of farmers markets also contributes jobs. Based on a 2009 study coordinated by Iowa State University and the Iowa Department of Agriculture and Land Stewardship, there were 374 direct jobs and 200 additional indirect jobs attributed to Iowa farmers markets in 2009, with estimated overall sales of \$38.4 million.

Numerous other economic studies funded by the Leopold Center and conducted by David Swenson at Iowa State University demonstrate the potential benefits that accrue to a region when dollars are spent locally. In a ten-county area in southwest Iowa combining two different production scenarios, farm-level production increases of fruit and vegetables could generate \$2.67 million in labor incomes and the equivalent of 45 jobs.³⁵ In a six-county area in southeast Iowa, given the scenarios assessed in this study, local food production, retailing, and enhanced processing could create from 50 to 75 jobs divided between rural areas and communities.³⁶

A 2010 six-state study examining the potential value of an increased fruit and vegetable industry in six states (Iowa, Illinois, Indiana, Michigan, Minnesota, and Wisconsin) focused on increased production of 28 fruits and vegetable crops and a projected increased consumption of in-state produce.³⁷ The analysis indicated this scenario would yield \$882 million in sales at the farm level, more than 9,300 jobs and nearly \$395 million in labor income. This same scenario in Iowa would mean farm-level sales of about \$61.4 million, with a potential retail value of \$230.1 million and a total of 657 farm-level jobs, compared to the 131 jobs currently generated from this acreage under corn and soybean production.

It is important to note that although there are potential benefits to increased local food

Figure 2

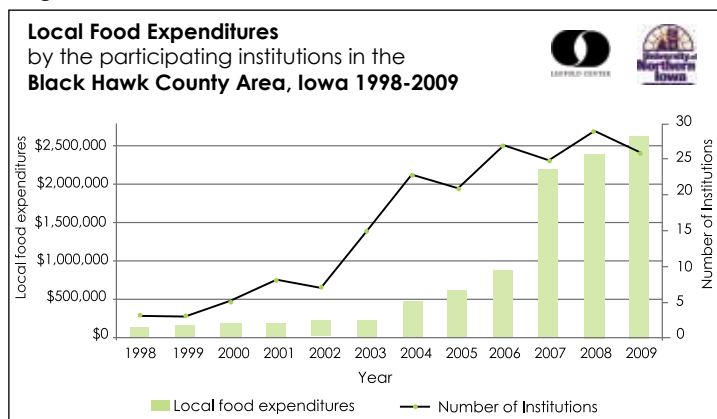
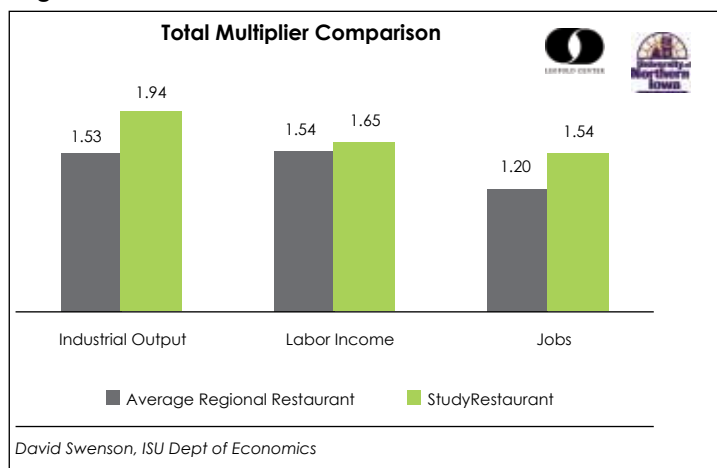


Figure 3



production and marketing in Iowa, more conclusive evidence needs to be presented as to which local food enterprises can indeed be profitable for farmers. Unlike organic foods, local foods without other defined attributes do not often command premiums in wholesale markets.

Research conducted by the Fruit and Vegetable Working Group in 2009 and 2010³⁸ on six beginning vegetable farm families in the Upper Midwest provides a picture of the challenges posed with getting started in fruit and vegetable production and marketing. Returns to labor and management ranged from \$0 to approximately \$13,000 after four to six years of operation. Income trended upward for all the farms

over this period as they learned from their own experience and visited with other farmers. All these farmers, who had a spouse working off the farm, took intensive business management classes, apprenticeships on working farms, and/or a series of workshops and mentoring experiences to increase their efficiency and effectiveness as vegetable producers and marketers. All agreed that knowing one's costs and net profit per unit sold with each market were essential to growing the business. They also observed that matching the right product line with the market to find that "sweet spot" is essential for success.

Fruit and vegetable production and marketing are not the only food enterprises that offer

Case Study

In a recent Leopold Center-funded study commissioned specifically for this Local Food and Farm Plan report, ISU researcher David Swenson gauged the productivity and regional economic impacts of Iowa's small meat processors (the report is expected to be finalized and posted on the Leopold Center website in spring 2011). Table 2 shows the regional economic impacts per 1,000 beef cattle, hogs, and goats/lambs processed.

This and other economic value studies in this report illuminate the "local multiplier effect"

concept, which suggests that even small shifts in consumer spending offer positive results for local economies. Every time money changes hands within a community, it boosts overall income and community-level economic activity, which ultimately fuels job creation. Spending money at locally owned businesses has an even greater multiplier effect because local businesses are more likely to spend those dollars in their community.

Increasing profitability in Iowa's small meat processing plants

Although small meat processing plants often are not as productive and efficient as the larger plants in the state, they do contribute significant labor income and jobs and offer livestock producers options in processing differentiated (niche) meat and poultry products that can be sold for higher prices in the marketplace. Investments in Iowa's small meat processing industry to increase its productivity and efficiency could provide markets for livestock producers and additional jobs for rural communities.

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Table 2. Regional Economic Impacts of Small Meat Processors

Regional Economic Impacts of Small Meat Processors per 1,000 Cattle Processed					
	Direct	Indirect	Induced	Total	Multiplier
Industrial Output \$	420,000	49,680	153,079	622,759	1.48
Value Added \$	198,746	25,190	86,351	310,286	1.56
Labor Income \$	195,245	15,804	46,460	257,509	1.32
Jobs	5.6	0.3	1.5	7.4	1.32
Regional Economic Impacts of Small Meat Processors per 1,000 Hogs Processed					
	Direct	Indirect	Induced	Total	Multiplier
Industrial Output \$	180,000	21,291	65,605	266,897	1.48
Value Added \$	85,177	10,796	37,008	132,980	1.56
Labor Income \$	83,677	6,773	19,911	110,361	1.32
Jobs	2.4	0.1	0.6	3.2	1.32
Regional Economic Impacts of Small Meat Processors per 1,000 Goats/Lambs Processed					
	Direct	Indirect	Induced	Total	Multiplier
Industrial Output \$	70,000	8,280	25,513	103,793	1.48
Value Added \$	33,124	4,198	14,392	51,714	1.56
Labor Income \$	32,541	2,634	7,743	42,918	1.32
Jobs	0.9	0.1	0.2	1.2	1.32

Source: Dave Swenson, Department of Economics, Iowa State University

significant opportunities to increase the local food economy in Iowa. Although numbers have declined in recent decades, Iowa is fortunate to have nearly 280 inspected meat and poultry processing facilities; 115 of these plants are federally inspected, 71 are state inspected, and 91 are custom plants (meaning they offer no commercial sales of meat).³⁹ Forty percent of these plants have fewer than 10 employees and 21 percent have 10 to 99 employees. A 2001 study coordinated by the Iowa Department of Agriculture and Land Stewardship found that Iowa's direct market meat sales exceeded \$53 million annually.⁴⁰

colleges, 15 community college districts – many with multiple campus locations – and a Cooperative Extension Service covering the entire state and based at Iowa State University. These institutions equipped with appropriate resources can support local food business development.

Use of regional aggregation and distribution systems will be essential for moving local food into appropriate mainstream markets.

The Leopold Center, housed at Iowa State University, and Iowa State University Extension are committed to researching and providing education on local food sector issues, as are various centers and faculty at the University of Northern Iowa, University of Iowa, the Drake University Agricultural Law Center, Dordt College,

Iowa's competitive advantages in building a robust local food economy

and several Iowa community colleges.

Iowa has the necessary assets to meet rising consumer demand for local foods. Agricultural production and food processing generate 10 percent of Iowa's gross state product, one of the highest percentage shares in the nation.⁴² Iowa offers a world-class educational system, with three Regents institutions, multiple private

In addition, several farm groups and non-profit organizations such as Practical Farmers of Iowa, Iowa's Resource Conservation and Development districts, Iowa Farmers Union, Iowa Farm Bureau Federation, the Women, Food and Agriculture Network, Iowa Buy Fresh, Buy Local, and the Iowa Network for Community Agriculture have provided valuable

Recent work with two small Iowa meat plants⁴¹ has identified four concrete steps that can be taken to increase profitability for small meat processors. These actions likely will require little financial investment; but will necessitate significant changes in management policies. The actions are as follows:

1. Scheduling: Most meat plants in Iowa do not slaughter animals every day. When managers do not slaughter every day, flow through the meat plant is constrained. This causes slow service, overtime, significant stress levels, and lost capacity. Changing the policy to slaughter every day evens out the flow of product through a meat plant, and has the ultimate effects of increased capacity, less overtime, and faster service to customers.



2. Employee Placement Stability: Many Iowa meat plants are in the habit of moving employees to an overloaded processing station each time there is a need to get caught up. When the overloaded station gets caught up with the workload, the problem repeats itself at another station where employees had not been working. This often results in high stress, employee turnover, and added overtime. Keeping employees focused on their respective jobs and allocating employees to the most important processing stations has proved to reduce these staffing level problems.

3. Product Mix Decisions: Currently, many meat plant managers make reactive decisions about which products and animals to process. Helping processors to understand the

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educational events, webinars, field days, saving incentive programs, and publications to help Iowa farmers produce and market local foods. Other state agencies and nonprofit organizations, including the Iowa Department of Public Health and the newly formed Iowa Food Systems Council are looking into the links between local food, health, and food access. Most importantly, a diverse set of partnerships continues to expand across the disciplines of education, health and nutrition, sociology, economic development, public policy, sustainable agriculture, business management and finance, community organizing and youth engagement. As of August 2009, there were 65 organizations and programs including state, federal, university, and private groups engaged in helping build Iowa's local food economy.⁴³

Local food sector assistance

The business of creating and maintaining all the links in the local supply chain – growing, aggregating, processing, packaging, storing, and transporting products – translates into jobs that cannot be outsourced.

Although increased support for Iowa's farmers markets, roadside stands, and community supported agriculture enterprises will help

build a robust local food economy, we must look beyond direct markets to urban and suburban markets in Iowa's bordering states to bring greater economic opportunity to rural Iowa communities. Local food systems need to move from the current emphasis on small-scale, typically direct markets to include larger, mid-scale operations that can supply larger-volume buyers. Use of regional aggregation and distribution systems will be essential for moving local food into appropriate mainstream markets. Farmers in the various corners of the state have tremendous opportunities to serve Iowa, as well as markets in neighboring states.

Farmers in Northeast Iowa, for example, are interested in serving markets in the Twin Cities and Rochester, Minnesota, and Chicago, Illinois. Farmers in southwest Iowa have their eye on markets in Omaha, Nebraska. Although the infrastructure, business models, and technical assistance to help Iowa farmers profitably reach these markets are limited, increased private and public investment could help Iowa develop one of the most productive and efficient local food business sectors in the nation. This expanded model of local food systems will capture effective and cost-efficient ways of transporting and selling local products, yet retain important consumer preferences that

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different impact each animal has on profitability is key to utilizing each plant's capacity in a way that enhances profitability. The basic concept is that profitability is governed by both the rate at which a product moves through the plant to the customer and the margin that is charged for the product. Often, processors only

focus on the margin of a product, without taking into account the rate of time for processing.

4. Scheduled Replenishment of Stock for the Retail Counter: Many meat processors suffer from stock outs on their retail shelves. Stock outs cause some customers to shop elsewhere for their meat. Additionally, a stock out creates a need for a large amount of processing in the back of the plant. When this large amount of processing is combined with other orders overtime hours, slow



service, and unsatisfied customers result. If stock replenishment is scheduled at certain times of the week keeping in mind what was purchased the week before, this problem can be minimized.

Management changes adopted in two small Iowa meat plants to address one or more of

these issues led to a 13 percent and 100 percent improvement in profitability, respectively, over a period of six months. If profitability increases in these small plants, so will the opportunity to offer workers higher wages, which will reduce worker turnover.

support priorities such as sustainable agricultural practices and profitability for small and mid-scale family farms and food businesses.

To accomplish these goals, public awareness campaigns are needed to showcase the benefit of local foods for Iowans. Beginning, minority, and transitioning farmers will need training, mentoring, business planning, land, labor, equipment, and financing in order to develop profitable businesses. Higher education institutions and state agencies will need to secure resources to provide research, education, and other market and technical services to help local food farmers succeed. Banks and other lending institutions will need to better

understand local food systems as a business sector so they can offer more loans. Farmers and entrepreneurs will need to build supply chains capable of profitably delivering large volumes of farm products to meet institutional standards in local and regional markets. This plan outlines actionable recommendations related to these needs that, when implemented, will help Iowa achieve these goals and provide greater economic opportunities to diversify and expand the state's agricultural economy, heritage, and influence.

End Notes

1. Iowa Department of Agriculture and Land Stewardship. "Iowa Agriculture Quick Facts." 2009. Found at <http://www.iowaagriculture.gov/quickFacts.asp>
2. USDA National Agricultural Statistics Service. "Iowa's Rank in United States Agriculture. 2009." Found at http://www.nass.usda.gov/Statistics_by_State/Iowa/Publications/Rankings/09Ranking.pdf
3. USDA Economic Research Service. "Total Agricultural Exports by State, Last 5 Fiscal Years." 2009. Found at <http://www.ers.usda.gov/Data?stateExports/>
4. Clancy, K., and K. Ruhf. 2010. Is local enough? Some arguments for regional food systems. *Choices* 25(1).
5. Onozaka, Y., G. Nurse, and D.T. McFadden. 2010. Local Food Consumers: How Perceptions and Motivations Translate Into Buying Behavior. *Choices* 25(1).
6. VanDerKamp, J., and J. Ennis. 2009. Marketing Study for Opportunities for Foods Grown Locally or Sustainably in Minnesota. Food Alliance Midwest and Cooperative Development Services.
7. USDA Agricultural Marketing Service. 2010. "Farmers Market Growth: 1994-2010." Found at <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateA&navID=WholesaleandFarmersMarkets&page=WholesaleandFarmersMarkets&resultType=&topNav=null&leftNav=WholesaleandFarmersMarkets&acct=whlsldirmkt>
8. USDA News Release No. 0440.09. Found at <http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid+2009/09/0440.xml>.
9. Sales and Marketing Management. "1998 Survey of Buying Power." 1998
10. USDA/NASS. 2007 Census of Agriculture. Found at http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Iowa/st19_1_002_002.pdf
11. Otto, D. 2010. Consumers, Vendors, and the Economic Importance of Iowa Farmers Markets: An Economic Impact Survey Analysis. Strategic Economics Group. Found at http://www.agriculture.state.ia.us/Horticulture_and_FarmersMarkets/pdfs/FarmersMarketEIS2009.pdf
12. DeWitt, J., and A. Martin-Schwarze. 2006. "2006 Statewide List of Iowa CSA Farms, Producers and Organizations". Iowa State University Extension Publication PM 1693.
13. USDA/NASS. 2007 Census of Agriculture.
14. Iowa Restaurant Association. "About Us." Found at http://www.restaurantiowa.com/index_files/Page385.htm
15. Found at <http://www.medicare.gov/NHCompare/Include/DataSection/Questions/ProximitySearch.asp>
16. Iowa Market Maker. Found at: <http://ia.marketmaker.uiuc.edu/> [December 28, 2010]
17. Iowa Child Care Resource & Referral. Found at <http://www.iowaccr.org/County%20Data/Statewide%20Data%20Sheet%20FY%2020101.pdf>
18. Iowa Market Maker. Found at: <http://ia.marketmaker.uiuc.edu/> [January 5, 2011]
19. Food Bank of Iowa Legal Aid. Found at [http://www.iowalegalaid.org/documents/201041A%20Guide%20to%20Food%20Pantries%20in%20Iowa%20\(updated%20September%2004\)\).pdf?stateabbrev=IA](http://www.iowalegalaid.org/documents/201041A%20Guide%20to%20Food%20Pantries%20in%20Iowa%20(updated%20September%2004)).pdf?stateabbrev=IA)
20. Iowa Market Maker. Found at: <http://ia.marketmaker.uiuc.edu/> [December 28, 2010]
21. Iowa Department of Corrections. Found at <http://www.doc.state.ia.us/DailyStats.asp>
22. Found at <http://phonebook.iowa.gov/doc/buildinglocations.pdf>
23. Iowa Department of Education. "Condition of Education Report." 2009. Found at http://www.iowa.gov/educate/index.php?option=com_content&view=article&id=346&Itemid=2454
24. Iowa Museum Association. Found at <http://www.iowamuseums.org/asp/museum/search.aspx>
25. U.S. Department of Education. Table 228, "Fall enrollment in degree-granting institutions, by race/ethnicity of student and state or jurisdiction: 2008." Found at http://nces.ed.gov/programs/digest/d09/tables/dt09_228.asp. Table 266, "Degree-granting institutions and branches, by type and control of institution and state or jurisdiction: 2008-09." http://nces.ed.gov/programs/digest/d09/tables/dt09_266.asp
26. Iowa Hospital Association. Found at: http://www.ihaprofiles.org/index.php?option=com_report&task=viewReport&id=30&Itemid=87
27. Iowa Market Maker. Found at: <http://ia.marketmaker.uiuc.edu/> [December 28, 2010]
28. USDA/NASS. 2007 Census of Agriculture. Found at http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Iowa/st19_1_033_033.pdf

29. USDA/Nass Agriculture Census 2007. Based on herd sizes less than 50 and flock sizes less than 400 for beef, dairy, hog and poultry operations.
30. USDA/NASS. 2007 Census of Agriculture. Table 32. Found at http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Iowa/st19_1_032_032.pdf
31. Personal communication, Ray Hansen, Iowa State University Value Added Agriculture Extension.
32. Calculated from the Produce Market Potential Planner developed by the Leopold Center and Iowa Transportation Institute with data from the Census Bureau and USDA Economic Research Service. Found at <http://www.intrans.iastate.edu/marketplanner/>
33. USDA/NASS. 2007 Census of Agriculture. Found at http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Iowa/index.asp
34. King, R. P., M. Hand, G. DiGiacomo, K. Clancy, M. Gomez, S. Hardesty, L. Lev, and E. McLaughlin. "Comparing the Structure, Size, and Performance of Local and Mainstream Food Supply Chains." Economic Research Service Report No. ERR-99. June 2010.
35. Swenson, D. 2009. The Economic Impact of Fruit and Vegetable Production in Southwest Iowa Considering Local and Nearby Metropolitan Markets. Leopold Center for Sustainable Agriculture, Iowa State University. Found at http://www.leopold.iastate.edu/research/marketing_files/swiowa.pdf
36. Swenson, D. 2009. Investigating the Potential Economic Impacts of Local Foods for Southeast Iowa. Leopold Center for Sustainable Agriculture, Iowa State University. Found at http://www.leopold.iastate.edu/research/marketing_files/seiowa.pdf
37. Swenson, D. 2010. Selected Measures of the Economic Values of Increased Fruit and Vegetable Production and Consumption in the Upper Midwest. Found at http://www.leopold.iastate.edu/research/marketing_files/Midwest_032910.pdf
38. Personal communication, Margaret Smith, ISU Extension, Fruit and Vegetable Working Group. December 2010.
39. Iowa Department of Agriculture and Land Stewardship. 2010. Found at <http://idalsdata.org/IowaData/MeatAndPoultryDirectoryReportPDF.cfm?version=PDF>
40. Iowa Department of Agriculture and Land Stewardship. 2001. Economic Impact of Directly Marketed Livestock in Iowa. Study conducted by Cooperative Development Services, Minneapolis, MN.
41. Personal communication, Nick McCann, from unpublished research for M.S. in Sustainable Agriculture, Iowa State University. December 2010.
42. Iowa Workforce Development news and trends. 2010. Found at <http://www.iowaworkforce.org/trends/gsp.html>
43. Learning About Local: A Resource Guide to Iowa Organizations and Programs Supporting Local and Regional Food Systems. August 2009. Found at <http://www.leopold.iastate.edu/resources/guide/guide.pdf>





Inside the Local Food and Farm Plan Recommendations

Recommendations for the plan are presented in three sections:

1. Recommendations for state appropriations
2. Recommendations to create a Local Food and Farm Advisory Board and a Local Food and Farm Program Fund
3. Recommendations for operation of the Plan

Recommendations are characterized as either short- (one to three years) or long- (more than three years) term in their implementation and need for financial resources.

Recommendations for state appropriations

1.1 Allocate funds in fiscal year 2012 for one Full-Time Equivalent (FTE) position to serve as Local Food and Farm State Coordinator; funding after FY2012 will come from other sources. Term: Short (one year)*

Funding for fiscal year 2012 will include the position and operating funds for travel within state, convening meetings, and office supplies. Candidates for this position should have experience running their own local food businesses or in providing education or technical assistance to those starting local food businesses. Funding for this position beyond fiscal year 2012 will come from the voluntary funding mechanism described in section 2. This position will be housed in an Iowa state agency or state-funded educational institution and have the following job responsibilities:

- Direct the development of the Local Food and Farm Program Fund outlined in recommendation 2.1.
- Coordinate and improve communication across agencies and programs in Iowa government and state-funded institutions that regulate, educate or provide support to local food businesses.
- Work with Department of Administrative Services, the agency that buys food

for Department of Human Services institutions and Veterans Homes, and manages the food service contracts for the Iowa Capital and Lucas Building cafeterias, to locate and procure local foods.

- Work with other state agencies and state-funded educational institutions to locate and procure local foods.
- Provide Iowa agencies, universities, nonprofit organizations and local communities with up-to-date information on all federal program grant, loan, and incentive opportunities relating to local foods to bring more federal dollars for local food projects to Iowa.
- Survey appropriate state agencies on a recurring basis regarding their local food purchases.
- Increase coordination of web-based local food information available across appropriate Iowa state agencies, state-funded educational institutions and nonprofit organizations to make it easier for Iowa farmers and all citizens to obtain information about local foods.
- Initiate and chair the Local Food and Farm Program Advisory Board to ensure that funds are used appropriately to carry out activities stipulated in the Iowa Local Food and Farm Plan, and to evaluate new Iowa local food program priorities and data collection needs that arise.
- Coordinate an interagency committee that reports to the Local Food and Farm Program Advisory Board to oversee local foods data collection, establishing benchmarks and identifying gaps in the data and compiling an annual report on local food commerce.
- Develop performance goals for the position and for the Local Food and Farm Program Fund, the achievement of which will be assessed in a yearly report to the Iowa legislature.

1.2 Appropriate funds to the Iowa Department of Agriculture and Land Stewardship Program for two years to continue support of the Iowa Farm-to-School Program. Term: Short*

Why is this important?

In 2007, Iowa lawmakers passed Farm-to-School legislation to establish a program that would link elementary, secondary, public and non-public schools with Iowa farmers; provide schools with fresh and minimally processed Iowa grown food for inclusion in school meals and snacks; and encourage children to develop healthy eating habits and provide them with hands-on learning opportunities, such as farm visits, cooking demonstrations, and school gardening and composting programs. There currently are nine Farm-to-School chapters in the state. Funding for the Farm-to-School program was not renewed in the past fiscal year. Lack of state support for the Farm-to-School program may limit opportunities to attract significant federal funding of Farm-to-School programs.

What are the benefits?

In December 2010 the U.S. Congress passed the Healthy, Hunger-Free Kid's Act. It was signed into law by President Obama on December 13, 2010. Among the provisions is \$5 million per year in mandatory funding for farm to school programs, which will help connect local farmers interested in selling fresh produce and other items with interested schools. A modest state appropriation for the Iowa Farm-to-School program will greatly increase the state's chances to attract some of this federal funding to support growth in the number of Farm-to-School chapters in the state and provide more opportunities for Iowa farmers to market fruits, vegetables, and other items within the state.

Create a Local Food and Farm Advisory Board and a Local Food and Farm Program Fund

2.1 Create a Local Food and Farm Program Advisory Board. Term: Long*

The board will

- Oversee creation of the Local Food and Farm Program Fund (2.2), and actively participate in the grant decision-making process to disburse resources from the fund
- Provide feedback and counsel to the Local Food and Farm State Coordinator in his/her plan of work
- Collect and evaluate critical local food systems production and marketing data
- Respond to any further requests by the Iowa legislature to provide additional funding and policy recommendations that will increase local food commerce to benefit Iowa farmers and communities.

The advisory board shall include, but not be limited to, a representative or representatives from each of the following agencies and organizations: Iowa Department of Agriculture and Land Stewardship, Iowa Department of Economic Development, Iowa Department of Administrative Services, Iowa Department of Human Services (Office of Refugee Services), Iowa Department of Inspection and Appeals, Iowa Department of Education, Iowa Department of Public Health, Iowa Workforce Development, Iowa Department of Cultural Affairs, Leopold Center for Sustainable Agriculture, Iowa State University Extension, each of the three Regents educational institutions, Iowa's private colleges, Iowa's community colleges, local food producers (at least three representatives), private retail or wholesale company that buys local food, a food distribution company that buys local food, an Iowa food or meat processor, Iowa banks, farm groups whose farmer members produce

SURVEY RESPONDENTS

Iowa feeds the nation. Why shouldn't our states' residents be able to capture the majority of local products raised here rather than buying products in our grocery stores grown in Mexico or elsewhere year-round? We have innovative projects across the state that are growing vegetables year-round. The goal should be to ultimately provide 25%+ of our state foods for the public through locally grown products. It is doable - but there needs to be planning, education, and support by the state legislature as well as the public.

— Economic development professional, northern Iowa

and market local foods (two representatives), and nonprofit organizations that conduct local food education or research programs (two representatives).

Why is this important?

Currently many state agencies and state-funded educational institutions have research, education, grant, or loan programs relevant to local food producers, processors, and entrepreneurs. There is no united effort to coordinate programs and collect local food sales and market data and assess the economic impact to the state. Coordination and collaboration across these entities needs to be strengthened to provide better services, training, and market information for local food producers, processors, and entrepreneurs.

What are the benefits?

Increased communication and collaboration across these organizations will result in improved services to local food producers, processors and entrepreneurs, increase opportunities for these organizations to receive federal and foundation funding to provide more programs, grants and loans, and anchor a much-needed data collection effort to assess progress in growing the local food economy in Iowa.

2.2 Create a voluntary funding mechanism to support local food programs. Term: Long*

Financial support to pay the salary and travel of the state Local Food and Farm State Coordinator after fiscal year 2012 and to help implement recommendations found in section 3 of this Plan will originate in full or in part from a new Local Food and Farm Program Fund. Money will be generated using the following voluntary funding mechanisms:

- a) "Local Food Symbol" allowing consumers, producers, and institutional buyers of local food (retailers, restaurants, hospitals) to show support for local foods through voluntary purchase of a local food "symbol" in the form of a bumper sticker, collectible stamp, and/or collectible poster for commercial businesses that can be prominently displayed. Collectible posters and stamps can be purchased annually and will feature unique artwork from an Iowa artist selected through an annual contest coordinated by the Iowa Arts

- Council (with funds from the Local Food Program Fund). All net proceeds from these purchases go toward the Local Food Program Fund. We estimate \$150,000 in revenue collected in FY2012 (see Appendix 2 for details), with a projected increase to \$300,000 by FY2017. The "Local Food Symbol" will not be affixed to local food products and is not intended to compete with state branding programs such as Choose Iowa. It is a way for buyers and sellers of local food in Iowa to show support for building local food commerce in Iowa without placing a financial burden on all Iowans.
- b) Local food license plates - estimate \$100,000 in revenue collected in FY2012, with projected increase to \$300,000 by FY2017.
- c) Donations to the Local Food and Farm Program Fund from Iowa citizens and businesses for use in supporting local food programs in Iowa.

The fund shall be administered by the state agency or state-funded educational institution that houses the state local food coordinator.

Why is this important?

There are numerous challenges that must be addressed in order to build a more robust local food economy in Iowa. Without a dedicated source of funds to start projects and attract other financial resources, many of these challenges likely will not be addressed, and opportunities to grow the local food economy in Iowa could be lost, with neighboring states taking advantage of regional markets.

What are the benefits?

A Local Food and Farm Program Fund derived from voluntary sources will not burden Iowa citizens with required fees or taxes; the fund resources will be voluntarily generated by those most supportive of buying and selling local foods. Although this fund is projected to grow over time, it is not intended to provide all the support needed to implement the recommendations in this plan. It will, however, afford Iowa a unique competitive advantage to get programs started and attract federal and foundation funds that require a state match, and possibly attract private investment and donations.

2.3 The Local Food State Coordinator shall issue an annual report of his/her program activities and the funding decisions made by the Local Food and Farm Advisory Board to the Iowa legislature and the general public to ensure accountability. Term: Long*

Why is this needed?

The activities of the State Local Food Program Coordinator and the projects and resources dispersed by the Iowa Local Food and Farm Program Fund need to be reported to the Iowa legislature to evaluate performance of the program; making the report available to the public ensures transparency.

What are the benefits?

The report shall serve as the primary mechanism through which to assess performance goals of the Local Food and Farm State Coordinator, and the Local Food and Farm Program Fund and its advisory board.

Recommendations related to operation of the Plan

Resources to implement the following recommendations may originate from: the Iowa Local Food and Farm Program Fund created in this plan; grant awards from public/private foundation and federal sources; Iowa food industry support; user fees; and existing budgets of agencies and institutions.

Business development models

3.1 Plan and implement a set of four to six innovative and comprehensive local food business projects across the state starting in 2012. Term: Short (two to three years)

Why is this important?

One of the constructive criticisms of current local food efforts is that there is a lack of high-profile, visible local food business projects that document profitability of the business and associated economic and community impacts including labor income and jobs created.

Who will do this?

The Leopold Center for Sustainable Agriculture, ISU Extension, Iowa Department of Agriculture and Land Stewardship, and Iowa Department of Economic Development will partner with local farmers, business leaders, and nonprofit organizations to coordinate this effort. These organizations will work with local business leaders and the Local Food State Coordinator to identify projects across the state with the greatest potential to address local challenges and serve as models for additional local food business development.

Where will the resources come from?

The Local Food and Farm Program Fund, other state, federal and private foundation grants, and financial support from the communities and local businesses leaders who will incubate these business models are possible sources.

What are the benefits?

Real business cases and data describing the challenges, opportunities, and economic and community benefits of local food enterprises will help give local bankers and economic development representatives a clearer picture of the role local food businesses can play in local economies. These cases can serve as models for building new or growing existing local food businesses.

SURVEY RESPONDENTS

There needs to be an evaluation of "bang for the buck" when it comes to attracting economic development. Cities and counties spend millions attracting industries that may yield 20 jobs, but at what cost? By comparison, investments in food system infrastructure would be a fraction of that amount with a higher probability of keeping money local.

— Government employee, Boone County

Financial Assistance - loans

3.2 Extend the Iowa Small Business Loan Program Fund, managed by Iowa Department of Economic Development, beyond its current sunset of March 31, 2011. Request that IDED work with the state Local Food Coordinator and other agencies, institutions, and organizations to increase the access of any remaining loan funds to local food farmers and businesses. Term: Short*

Why is this important?

The Iowa Local Food and Farm Plan survey identified lack of financial assistance to build local food enterprises as one of the biggest obstacles for farmers and food entrepreneurs wishing to start or expand local food businesses.

Who will do this?

The Iowa Department of Economic Development and its subcontractor Iowa Microloan, and the Local Food and Farm State Coordinator will take the lead. Iowa State University Extension, the Leopold Center, and other state agencies and non-profit organizations that work extensively with local food producers and entrepreneurs will help identify loan candidates.

Where will the resources come from?

Financial resources are already in place.

What are the benefits?

More loans will be made to Iowa local food and farm businesses.

3.3 Increase outreach to recruit women and minorities interested in developing local food and farm businesses to apply to the Department of Economic Development's Targeted Small Business program by partnering with the Leopold Center and other agencies, institutions and nonprofit organizations that have working relationships and ways to contact these audiences. Term: Long

Why is this important?

Research and evaluation data from Women, Land and Legacy, an effort designed to improve outreach to women on agriculture and food issues, shows that increased targeting of women landowners (many of whom are interested in supporting new and young farmers and diversified operations), leads to greater trust of the agencies, greater rent incomes, and more involvement of young women in food production.¹ And a recent Iowa survey of new businesses indicated that Latinos in Iowa started the highest percent of new businesses compared to other ethnic groups. More effort needs to be placed on appropriate incentives to recruit women and minorities to participate in local food enterprises.²

Who will do this?

The Iowa Department of Economic Development, with certification from the Department of Inspection and Appeals, and the State Local Food and Farm Program Coordinator. Iowa State University Extension, the Leopold Center, the New Iowans Center, and other state agencies and nonprofit organizations that work extensively with women and minority local food producers and entrepreneurs will help identify participants.

Where will the financial resources come from?

Financial resources are already in place.

What are the benefits?

More low-interest loans and grants will be made to women and minority local food farmers and entrepreneurs.

SURVEY RESPONDENTS

Farm loan managers need to change their attitude regarding small producers and have a more open mind when someone does talk to them. Think local, instead of semi-truck loads of products headed to the processing industry.

— Farmer, Delaware County

3.4 Develop and deliver a curriculum and training program on local food business development for Iowa bankers. This training will include model business plans of successful local food businesses that bankers can refer to when making loans. Term: Short (Two to three years)

Why is this important?

Surveys show that Iowa bankers perceive local food businesses as high-risk enterprises. Developing model business plans based on the performance of successful Iowa local food businesses as the centerpiece for this program could provide bankers the level of understanding they need to increase loans to local food businesses.

Who will do this?

ISU Extension and University of Northern Iowa, in collaboration with Iowa Department of Economic Development, Small Business Development Centers, Iowa Department of Agriculture and Land Stewardship, University of Iowa, and Iowa community colleges. The Iowa Bankers Association, and the Iowa Foundation for Microloan and Community Vitality also should be engaged.

Where will the financial resources come from?

The Iowa Food and Farm Program Fund and other federal and private foundation grants, user fees and sponsorships from Iowa's banks.

What are the benefits?

Iowa bankers will better understand performance of local food businesses and will more readily offer loans to these businesses.

Processing

3.5 Establish a Local Food Processing Educational Program for local food farmers and entrepreneurs. Term: Long

Why is this important?

Many Iowa local food farmers and entrepreneurs travel to the University of Nebraska-Lincoln or other out-of-state institutions to receive training on food processing. The Iowa Local Food and Farm Plan survey analysis show that more readily accessible food processing training would help local food businesses add more value to their food products.

Who will do this?

ISU Extension, in collaboration with Iowa's community colleges, Iowa Department of Agriculture and Land Stewardship, and Iowa Inspection and Appeals. The program will include training in business development. There is an opportunity to develop a network of retired farmers, educators, and food business professionals similar to SCORE (a service which offers free and confidential business advice, often from retired business owners and professionals) willing to mentor program participants.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund, federal and private foundation grants and loans, user fees, and private donations are likely sources.

What are the benefits?

More Iowa local food businesses will be able to add value to their food products and know how to process and market them profitably.

SURVEY RESPONDENTS

[Our top production obstacle] is the lack of working capital to be considered a fruit and vegetable production farmer. There are too many obstacles to jump over to get financing. Lenders need to realize that there are other types of farms in Iowa besides corn and soybeans. If we have produce to extend the marketing time [season], people just assume there is no food because we can't afford the advertising to let them know that we still have produce available to them.

— Farmer, southwest Iowa

3.6 Develop a pilot meat processing facility investment credit program for state-inspected meat processing facilities with fewer than 20 full and/or part-time employees. Term: Short (two to three years)*

Why is this important?

Iowa has a competitive advantage compared to other states in still having significant infrastructure for small meat processing facilities, but those facilities are in need of modernization to better serve customers and meet food inspection standards.

Who will do this?

Iowa Department of Commerce will administer the program, with forms created by the Department of the Treasury.

Where will the financial resources come from?

These are tax credits, so the primary cost is to administer the program. The Local Food and Farm Program Fund could be a potential source for administration.

What are the benefits?

This recommendation, which is patterned after an existing program in Wisconsin, will help modernize and increase capacity for these plants so that more state or federally-inspected Iowa-grown meats can be available for retail sale.

3.7 Repeal section of the Iowa Code: 428.22 LOCKER PLANTS to allow locker plants to be declassified as commercial property and re-classified as industrial property; this action may provide tax breaks that could benefit these businesses. In addition, include locker plants in the Iowa Code 428.20 definition of a manufacturer, a classification applied to larger packing plants, to exempt them from the sales tax on plant equipment purchases for upgrades, etc. (as outlined in 423.3, subsection 47.a., of the Iowa Code). Term: Long*

Why is this important?

Currently, small Iowa meat processors are not to be considered "manufacturers" under the Iowa tax code, and thus are not exempt from sales and use tax on equipment. This is because small plants (unlike large plants) are not considered as "meatpackers" by the Iowa Department of Revenue. "Meatpackers", according to interpretations from the Iowa Department of Revenue, smoke, chop, and add spices and other ingredients to meat products. A valid case can be made that small meat processors do all the same things that large meat processors do, and therefore should be exempt from paying sales tax on equipment.

Who will do this?

A ruling change in the tax code must be made by the Iowa Department of Revenue.

Where will the financial resources come from?

No additional financial resources are needed.

What are the benefits?

Iowa's small meat processors will have additional incentives to modernize their plants.

SURVEY RESPONDENTS

There are so few places left to get livestock processed, and unlimited demand for local meat, dairy and eggs. We won't have a strong local system without including livestock in the equation.

— Farmer and county elected official, eastern Iowa

3.8 Pilot a meat-cutting education and mentoring program geared to supply the highly skilled labor needed for Iowa meat processing businesses with 20 or fewer full-time equivalent employees. Term: Short

Why is this needed?

Iowa's small and mid-size meat processors have identified high turnover rates as one of their main challenges to business profitability. There currently is no comprehensive training and mentoring program for meat cutters in small Iowa plants, nor is there one available in a neighboring state.

Who will do this?

Iowa State University's College of Agriculture and Life Sciences and ISU Extension (including the Iowa State University Meat Laboratory and the Center for Industrial Research and Service – CIRAS), in cooperation with Iowa Department of Agriculture and Land Stewardship, the Iowa Meat Processors Association, and Iowa's community colleges. The program will include apprenticeships at existing Iowa small meat processing facilities.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund, federal and private foundation grants and loans, local government, user fees, and private donations are possible sources.

What are the benefits?

More highly skilled meat cutters employed in Iowa's small meat processing facilities. Assuming these plants are able to increase their profitability due to implementation of the other recommendations found in this section, these plants feasibly could pay these newly trained, highly skilled workers higher wages and decrease plant turnover rates.

3.9 Expand educational and training opportunities for Iowa's small meat processors. Term: Long

Why is this important?

Although small meat processing plants are not as productive and efficient as the larger plants in the state, they do contribute significant labor income and jobs and offer livestock producers options in processing differentiated (niche) meat and poultry products that can be sold for higher prices in the marketplace. Additional training and education programs for Iowa's small meat processing industry can increase business profitability and efficiency, which could result in these plants being able to offer higher wages to reduce labor turnover and possibly create new processing jobs.

Who will do this?

The Iowa State University Meat Laboratory, in collaboration with ISU's College of Agriculture and Life Sciences and the ISU Extension Center for Industrial Research and service (CIRAS). Training and education programs offered should include follow-up with participants to assess whether the program increased plant profitability.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund, federal and private foundation grants and loans, local government, user fees, and private donations are possible sources.

What are the benefits?

Iowa's small meat processing plants are more efficient and profitable, paying higher labor wages and offering more product processing services to their customers.

SURVEY RESPONDENTS

The importance of local/regional food systems as an issue needs to be brought to the attention of city and county officials, in order that they can consider how local government can support and develop this emerging industry for local economic development, make more fresh food available to local residents, and reduce the carbon footprint.

— Extension employee, central Iowa

3.10 Convene a task force of state agencies that regulate Iowa agriculture and food processing and local food producers and entrepreneurs to review laws and regulations and recommend scale-appropriate changes that reduce financial compliance costs to local food producers and entrepreneurs while maintaining a high level of food safety and environmental protection for Iowa citizens. Term: Short*

Why is this important?

Small local food farmers and food entrepreneurs participating in listening sessions and/or surveys commissioned for the Iowa Local Food and Farm Plan have identified compliance with food safety and environmental regulations designed for much larger businesses to be cost prohibitive – due to required purchase of additional equipment, keeping of detailed records, certification and licensing costs, and other transaction costs. These costs are barriers to local food farmers and entrepreneurs wishing to start or grow their businesses.

Who will do this?

Iowa Department of Natural Resources, Iowa Department of Agriculture and Land Stewardship, and Iowa Department of Inspection and Appeals will come together with local food farmers and entrepreneurs. The ISU College of Agriculture and Life Sciences can play a role in providing science-based information.

Where will financial resources come from?

This recommendation should require limited financial resources. Costs are mainly for convening agency staff and local food farmers and entrepreneurs, and examining existing rules and regulations.

What are the benefits?

Scale-appropriate changes to existing rules and regulations that continue to provide the same level of food safety and environmental protection may ease financial burdens and open markets for local food farmers and entrepreneurs.

3.11 Develop a comprehensive and recurring Good Agricultural Practice (GAP) educational training program to ensure that farmers and food entrepreneurs participating in local food commerce are providing safe food to their buyers. Term: Long

Why is this important?

Local food fruit and vegetable farmers and entrepreneurs need continuing education training to assure their customers that they are providing safe food products. Many food retailers, wholesalers, restaurant chains, food service distribution and management companies, and universities want to purchase more local fruits and vegetables, but they also want reassurance that sellers of local food have followed practices that guarantee food safety.

Who will do this?

Iowa State University Extension and the Iowa Department of Agriculture and Land Stewardship should build on existing training and education efforts. Programs offered for local food farmers and entrepreneurs should include information about and implications of the Food Safety Modernization Act, passed by the U.S. Congress in December 2010 and signed into law by President Obama in January 2011.

Where will financial resources come from?

The Iowa Local Food and Farm Program Fund, federal and private foundation grants and loans, food service and food retail company sponsorships, user fees, and private donations are potential sources.

What are the benefits?

Safer local food products for consumers and increased market access to larger volume food buyers for local food producers and entrepreneurs.

3.12 Implement a pilot food safety audit cost-share program targeted at farms selling local and regional food to wholesale market venues that require audits. Term: Short (two years)

Why is this important?

More and more mid- and large-scale buyers of local fruits and vegetables are requiring food safety audits of farms. The costs for these audits for small-scale farmers can be prohibitive and discourage farmers from expanding production to serve these larger markets.

Who will do this?

Iowa Department of Agriculture and Land Stewardship, in cooperation with Department of Inspection and Appeals and in consultation with ISU Extension.

Where will financial resources come from?

The federal Specialty Crops grant program is a likely source; New York's Department of Agriculture has used funds from this source to provide cost-shares for these audits. Other sources include the Local Food and Farm Program Fund, food service and food retail company sponsorships, and private donations. Fruit and vegetable growers will be required to pay part of the audit costs.

What are the benefits?

This program would reduce the cost of on-farm audits that are required of fruit and vegetable growers that sell to larger volume retailers, wholesalers, distributors, and food and facility management companies. The program should be evaluated after two years for its cost-effectiveness and benefit to local food producers.

3.13 Increase outreach and availability of information regarding Iowa food regulations that involve selling food to hospitals, nursing homes, and educational institutions, and provide additional information on local food regulations in selling to food retail, wholesale, and foodservice markets. Term: Long

Why is this important?

Both sellers and buyers of local food indicated in the Iowa Local Food and Farm Plan survey that they would like better access to information on Iowa food regulations when selling to an array of market venues. In some cases food buyers at schools, nursing homes, hospitals, and other institutions have perceived that state rules prohibited them from buying local fruits and vegetables.

Who will do this?

The Iowa Department of Inspection and Appeals.

Where will financial resources come from?

This recommendation requires very limited financial resources.

What are the benefits?

Increased understanding of food regulations that pertain to the purchase of local foods will increase markets for local food producers and decrease misperceptions relating to the sale of local food to institutions.

SURVEY RESPONDENTS

Cost is the main sticking point in my professional experience with trying to convince food service purchasers to support what little local food is currently available. The volume needed simply isn't there in most categories of vegetables, for instance. And what IS there cannot compete with the rock bottom cost structure that is so attractive with the same vegetables shipped in from California.

—Industry/producer association representative, eastern Iowa

3.14 Add a local food producer to the State of Iowa Food Safety Task Force to ensure that local food producers have a voice in food safety issues. Term: Long

Why is this important?

When the growing demand for local foods is coupled with the need to ensure food safety, it is critical that local food producers are at the table to interact with Iowa state agencies and other institutions that are responding to food safety issues.

Who will do this?

The Iowa Department of Inspection and Appeals.

Where will financial resources from?

This recommendation requires very limited financial resources.

What are the benefits?

Representation on the Iowa Food Safety Task Force will provide a voice for local food farmers on food safety issues and ensure that all additional food safety information generated by the task force shall have, where appropriate, a local food component.

3.15 Provide a “train the trainers” course to educators within ISU Extension, Iowa community colleges, and other organizations working with local food producers, so these educators can increase their understanding of Iowa food safety regulations. Term: Short

Why is this important?

Local food producers and entrepreneurs often turn to their local ISU Extension educators and local food practitioners working with local nonprofit organizations, community colleges, and private colleges for information about food safety. Currently, these educators are not receiving ongoing training on food safety as it pertains to local foods.

Who will do this?

Iowa State University Extension, in collaboration with the Department of Inspection and Appeals and Iowa Department of Agriculture and Land Stewardship

Where will the financial resources come from?

The Iowa Local Food and Farm Fund, federal grant sources, user fees, and current operating budgets of the named organizations are likely sources.

What are the benefits?

Local educators will be better prepared to direct local food farmers and entrepreneurs to the appropriate expertise and information sources on food safety regulations.

SURVEY RESPONDENTS

As farmers age, there are fewer and fewer young people who want to farm the land and know how to. If there were more skills training programs to help young farmers know where to begin to start a farm, more people might be interested in it. The skills training programs need to be in local communities at a low cost, making sure to emphasize the lifestyle change as well as the ability to earn a living for one's self.

— University employee, Wapello County

3.16 Develop an educational program or cooperative agreement to train and provide additional services to beginning farmers and food entrepreneurs interested in local food production, processing, and/or marketing, ensuring that training and education for minority populations is culturally appropriate and easily accessible. Term: Long

Why is this important?

Although there are a number of programs and projects designed to assist beginning and minority farmers, in Iowa there is inadequate coordination and information sharing among these efforts. Beginning farmers and minorities who work at full-time jobs may find it difficult to get the information they need in a timely, efficient manner.

Who will do this?

ISU Extension, the ISU Beginning Farmers Center, Iowa Department of Agriculture and Land Stewardship, Iowa Workforce Development's New Iowans Center, Iowa Department of Human Services' Bureau of Refugee Services, the Leopold Center, and Iowa's community colleges all are currently working with beginning and minority farmers. Representatives of these organizations should meet to discuss how to better coordinate programs, identify gaps that need attention, and build new programs. It is important that these organizations coordinate with existing programs from groups such as Practical Farmers of Iowa and Farm Bureau to avoid duplication.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund, federal grant sources, user fees, and current operating budgets of the named organizations are likely sources.

What are the benefits?

A more coordinated education program shall cover best practices to help beginning and minority farmers produce and market local food in a manner that increases profitability, conserves natural resources, and provides positive benefits to neighboring communities. Combined with other incentives, Iowa can increase the number of farmers in the state who will supply local food to interested buyers.

3.17 Develop a local/regional food training course for growers and entrepreneurs who wish to work with other Iowa local food farmers and/or brokers to aggregate supply for sale to larger volume buyers. Term: Short

Why is this important?

The Iowa Local Food and Farm Plan survey and listening sessions revealed that many Iowa local food farmers and local food educators perceived that many of the existing farmer-led aggregation and distribution models were not robust enough to expand readily to provide larger volumes of products. This perception was confirmed by four food system consultants (hired by the Leopold Center and funded by USDA Rural Development) who visited with local food farmers and entrepreneurs across the state in November 2010.

Who will do this?

ISU Extension, in collaboration with the Leopold Center, and (where appropriate) Iowa community colleges shall partner with nonprofit organizations and local farm groups to identify individuals with the desire and capacity to complete the course, which will include training in business development. Satisfactory completion of the course will result in the participant being eligible for a small grant from the Local Food and Farm Program Fund to implement the aggregation plan.

Where will the financial resources come from?

The Iowa Local Food and Farm Fund, federal grant sources, private foundations, sponsorship from food retailers and food service companies, user fees, and current operating budgets of the named organizations are potential sources of funding.

What are the benefits?

Farmers will be able to profitably aggregate their local food products for sale to larger volume buyers; local food will be more readily available in mainstream food outlets.

SURVEY RESPONDENTS

Local foods need to be provided where consumers already shop... We need local food to be available in more locations (including large-scale groceries) at all times.

— Nonfarm-related business owner, Johnson County

3.18 Develop a workshop to train local food producers and food entrepreneurs to recruit, manage, and optimize labor within their operations to the mutual benefit of laborers and farmers. Term: Short

Why is this important?

Access to and management of labor was identified in the Iowa Local Food and Farm survey and listening sessions, and in other farm organization surveys, as a serious challenge for local food farmers who want to diversify or scale up their farming operations. Farmers need to better understand how to recruit and manage labor for the mutual benefit of the farmer and farm worker.

Who will do this?

Iowa State University Extension, in collaboration with Iowa's community colleges and Iowa Workforce Development. It is important to note that local food producers must fully understand their costs and market demand to receive maximum benefit from this labor management course. And if these farms are more profitable, they can pay farm workers a higher wage and reduce labor turnover.

Where will the financial resources come from?

The Iowa Local Food and Farm Fund, federal grant sources, user fees, and current operating budgets of the named organizations are possible sources of support.

What are the benefits?

An increased supply of farm labor allows farmers more options in diversifying their local food enterprises and scaling up to reach new markets.

3.19 Develop sample contracts/production agreements relevant to local food sales to wholesale and institutional markets. Term: Short

Why is this needed?

Local food farmers, particularly fruit and vegetable growers, want assurances from their buyers that if they take the risk to produce a high-quality product in the quantity desired, they will be able to sell that product. Contracts can provide that assurance. Many local farmers have not participated in formal contracts and need more information about how these contracts typically are structured.

Who will do this?

Drake University's Agricultural Law Center is uniquely positioned to coordinate this effort. Examples include contracts between farmers and food cooperatives, college dining services, and retail food grocers. The sample documents developed are for information purposes only and are not intended to serve as legal advice. Farmers and entrepreneurs using these forms are encouraged to contact a legal professional before entering into a formal contract.

Where will the financial resources come from?

The Local Food and Farm Program Fund and other federal, state, or foundation grant programs.

What are the benefits?

Local food farmers will be able to reduce market risks by learning how to best participate in contractual agreements.

SURVEY RESPONDENTS

Growers and buyers must have a better centralized forum for meeting one another, face to face, to address their respective challenges and, hopefully, at the end of the process, make deals! Since farmers need to plan their growing cycles well in advance of the next season, and budgets for buyers are annualized, the scheduling of such a summit must work within the needs of those realities.

— Youth educator, Johnson County

3.20 Create a subcommittee of the Local Food and Farm Advisory Board, chaired by the local food state coordinator, to oversee the collection of local food data critical to tracking growth of the local food business sector in Iowa. Term: Long*

Why is this important?

Data collected on the production and marketing of corn, soybeans, hogs, and other key enterprises in the state provide clear evidence of the contribution these enterprises make to the state's economy. Tracking of this data over time provides farmers, lenders, investors and policy makers with critical information to inform decisions that affect Iowa's agricultural future. Other than limited data compiled on Iowa's farmers markets and through the U.S. Agricultural Census, there is little information collected on the production, sale, and marketing of local foods in Iowa.

Who will do this?

The State Local Food Coordinator will work with the Iowa Department of Agriculture and Land Stewardship, ISU College of Agriculture and Life Sciences, Iowa State University Extension, other agencies and food and farm groups. The subcommittee will identify gaps in the data and compile an annual report to the Local Food and Farm Advisory Board. The state local food coordinator will work with the State Data Center of Iowa to ensure local food data collected in cooperation with partners across the state is in a format appropriate for public web access that easily interfaces with the State Data Center's existing software.

Where will the financial resources come from?

Convening the subcommittee will require minimal financial resources. Data collection may require additional resources from the Iowa Local Food and Farm Program fund.

What are the benefits?

Collecting local foods data in Iowa will provide benchmarks to measure increases in production, sales, and marketing. It also can be used when requesting financial assistance from banks and investors for local food businesses.

3.21 The state local food coordinator shall, starting in fiscal year 2012, conduct a recurring survey of state agencies and state-funded educational institutions to track the purchases of Iowa grown foods. Term: Long*

Why is this important?

See response to recommendation 3.20.

Who will do this?

The Local Food and Farm State Coordinator and participating state agencies and state-funded educational institutions. The results of this survey shall be made available to the Iowa legislature and the general public. With FY2012 data as a baseline, it is recommended this survey be conducted every three years to track changes in local food purchases.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund, federal grants, and budgets of the named organizations are potential sources of support.

What are the benefits?

Collecting local foods sales data on a recurring basis will provide evidence of the state's success in keeping more of Iowa's purchasing dollars within the state. This information will be helpful in characterizing the contribution local foods make to the state's economy, and attracting federal grant funds to support local food commerce.

SURVEY RESPONDENTS

It's difficult for lenders to understand where someone will sell his/her products - especially compared to commodities. Sometimes the producers themselves don't have a good understanding of the market and have a difficult time "proving" it to a lender.

— City official, west central Iowa

3.22 Conduct a comprehensive survey of Iowa producers of edible horticultural food crops, including production and marketing activities. Term: Short

Why is this important?

The Iowa Agricultural Census provides a state-level summary of the production of Iowa's fruit and vegetable crops, but this data set is limited in its ability to accurately characterize the production and marketing efforts of Iowa's local fruit and vegetable businesses at county or regional levels. The last time such an in-depth horticultural food crops survey was conducted was 2001, when there was less interest in local foods in the state than exists today.

Who will do this?

Iowa Department of Agriculture and Land Stewardship, with assistance from Iowa Agricultural Statistics and Iowa State University Extension. The survey results shall be compiled in a report for use by local food businesses and the general public.

Where will the financial resources come from?

The Local Food and Farm Program Fund, state and federal grants and Iowa food industry and farm group contributions are potential sources of support.

What are the benefits?

This information will be helpful in characterizing the contribution fruits and vegetables make to the state's economy. It will aid in attracting federal and foundation grant funding and private investment to expand the fruit and vegetable industry in the state.

3.23 Research data collected in other states, and, in collaboration with appropriate Iowa organizations and agencies, survey Iowa producers to determine the labor skill needs of fruit and vegetable producers and processors at various stages of the production and processing cycles. Term: Short

Why is this important?

Access to and management of labor has been identified in the Iowa Local Food and Farm survey and listening sessions, and in other farm organization surveys, as a serious challenge for local food farmers who want to diversify or expand their farming operations. Data on the labor skills for fruit and vegetable production and processing in Iowa have not been collected. Skills needed to manage new technologies such as high tunnels to extend the growing season for fruit and vegetable crops have not been analyzed from a labor perspective.

Who will do this?

Iowa Workforce Development and the New Iowans Center, in coordination with ISU Extension.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund and existing resources within the named agencies and institutions may be tapped for financial support.

What are the benefits?

The data may help benchmark potential new job categories created through local food commerce and identify training and certification programs which could be developed and delivered by Iowa community colleges.

SURVEY RESPONDENTS

Producers are good at growing but not usually comfortable going out and "selling" their product, especially if their goal is to get into institutions, schools, etc.

— Nonprofit employee, Cass County

3.24 Survey capacity of existing food production and aggregation centers, distribution, storage and processing facilities in the state. Term: Short

Why is this important?

Information on existing Iowa infrastructure to store, cool, pack, and process local foods is limited to small studies covering individual counties; other data may be available but are not readily accessible by local food farmers and entrepreneurs.

Who will do this?

The Leopold Center will convene a work group with expertise in food storage and transportation and familiarity with Geographic Information Systems (GIS) technology to design and conduct the study.

Where will the financial resources come from?

The Leopold Center will request proposals for this type of project as part of its FY2012 competitive grants program.

What are the benefits?

Information in this public report will help local food producers and entrepreneurs partner with local banks and economic development groups to locate sites advantageous to store, cool, pack, or process local foods.

3.25 Provide an updated list of consultants who offer technical assistance to local food businesses. Term: Long

Why is this needed?

More than a dozen individuals in Iowa have offered their services as consultants to local food groups and businesses. There is no formal public listing of these consultants, other than a partial listing in the Leopold Center's local food resources guide published in 2009.³ Many local food farmers and entrepreneurs are unaware there are such consultants working in Iowa.

Who will do this?

Given that local food farmers and entrepreneurs are likely to contact different agencies and institutions for assistance, it is important that an updated list of consultants be maintained on the websites of the Iowa Department of Agriculture and Land Stewardship, Iowa Department of Economic Development, ISU Extension, and Iowa Small Business Development Centers. These lists will be updated yearly with a disclaimer that the listing of consultants is not a recommendation or assurance of the quality of their services.

Where will the financial resources come from?

This recommendation requires a very limited amount of financial resources.

What are the benefits?

Local food farmers and entrepreneurs will have easy access to a list of business consultants who offer a wide variety of services.

SURVEY RESPONDENTS

There is a large population of people who come to Iowa from agricultural backgrounds, but when they get here, it is very rare that they make use of those skills or know what opportunities, large or small, are available in agriculture. We need to do a better job of educating refugee communities on opportunities available for gardening or small scale farming and provide the training and assistance they need to understand farming in Iowa.

— Nonprofit employee, central Iowa

3.26 Request the Iowa Insurance Division convene an ad hoc committee of appropriate Iowa state agencies, local food producers, and insurance providers to provide more information regarding options of liability policy coverage for local food producers selling to buyers that require liability insurance. Term: Short

Why is this important?

Iowa's local food farmers need to carry liability insurance in order to sell to a wide variety of markets. Although such insurance is available, public information on the options is limited.

Who will do this?

The Iowa Insurance Commission will convene the appropriate stakeholders.

Where will the financial resources come from?

This recommendation requires a very limited amount of financial resources.

What are the benefits?

Iowa local food farmers and entrepreneurs will have a centralized location to get information on the types of liability insurance available, and a place to have questions answered or receive referrals on liability insurance.

Local food incentives

3.27 Implement a one-year pilot reimbursement program in 2012 or 2013 for five K-12 schools to provide an additional 10 cents for each school lunch that offers Iowa-grown fruits and vegetables. Term: Short

Why is this important?

Iowa local food farmers often do not participate in K-12 markets because the limited purchasing budgets of schools and low profit margins make this market less attractive than other buyers who can pay higher prices.

Who will do this?

The Local Food and Farm State Coordinator together with the Department of Education – Bureau of Food, Nutrition, and Transportation Services, and Iowa Department of Agriculture and Land Stewardship and their Farm-to-School Program. The reimbursement funds would supplement existing school meal funds. The pilot program will include an evaluation of the impact on farmer participation and student selection of local fruit and vegetable choices.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund and local grants and contributions are potential financial supporters. There will be a maximum \$2,000 payment per institution.

What are the benefits?

Providing incentives for farmers to begin participation in farm to school programs may attract more farmers to the program and allow districts to learn how to make such a program work after the pilot ends to the benefit of farmers, students and school districts.

SURVEY RESPONDENTS

Farmers' markets are a great resource but the products need to get into schools and local grocery stores.

— Farm-related business owner, southwest Iowa

3.28 Implement a one-year pilot reimbursement program in 2012 or 2013 for five Iowa nursing homes, care centers, or assisted living facilities to receive \$5 for every \$100 of locally-grown fruits and vegetables purchased. Term: Short

Why is this important?

Many Iowa nursing homes, care centers, and assisted living facilities want to purchase local foods, but because of limited food budgets cannot pay competitive prices to local farmers.

Who will do this?

The State Local Food Coordinator will work with local nonprofits to implement this program. There will be a maximum \$1,000 payment per institution. The program will include evaluation of the impact on farmer participation and facility resident selection of the local fruit and vegetable choices.

Where will the financial resources come from?

The Iowa Local Food and Farm Program Fund and local grants and contributions are potential financial resources.

What are the benefits?

Providing incentives for farmers to begin selling to nursing homes, care centers, and assisted living facilities may attract more farmers to these markets. Community leaders will gain an opportunity to learn how to continue the program after the pilot ends to the benefit of farmers, facility residents, and local communities.



3.29 Add a local foods component into one of the seven existing dimensions of the Iowa Great Places Program. Term: Long

Why is this important?

The Iowa Great Places Program is designed to promote bold thought, innovation, and entrepreneurship at the local and regional level in Iowa. Currently this program does not characterize local foods as an important attribute.

Who will do this?

The Department of Cultural Affairs.

Where will the financial resources come from?

This recommendation requires a very limited amount of financial resources.

What are the benefits?

Regions of the state that have developed a sense of place around certain local foods and have grown local food businesses will be able to increase their chances of being designated an Iowa Great Place, which provides additional benefits to the region.

Recommendations marked with an asterisk () require legislative action; others could be implemented in whole or in part without legislative action.*



End Notes

1. Personal communication, Corry Bregendahl, Leopold Center for Sustainable Agriculture, December 2010.
2. "Hispanic Businesses see 60 Percent Growth in Iowa" November 9, 2010. Associated Press. Found at: <http://juantornoe.blogs.com/hispanictrending/2010/11/hispanic-businesses-see-60-percent-growth-in-iowa-.html>
3. Learning About Local: A Resource Guide to Iowa Organizations and Programs Supporting Local and Regional Food Systems. August 2009. Leopold Center for Sustainable Agriculture. Found at: www.leopold.iastate.edu/resources/guide/guide.pdf

Appendix 1: Methodology

The Leopold Center relied on public input to inform every step as the Plan progressed. During this process, we drew on the expertise and experience of more than 1,000 individuals across the state through a variety of methods including workshops, listening sessions, one-on-one visits, and surveys (see Table 3 below).

Gathering public input

Initial workshop. The first step in gathering public input occurred at a June workshop attended by 162 stakeholders who represented more than 60 public sector and nonprofit groups and more than 30 businesses. Stakeholders identified assets, obstacles, and strategies for developing a more robust local/regional food business sector in Iowa.

Participants included farmers and producer groups (11 percent), universities and colleges (20 percent), ISU Extension (15 percent), state and federal agencies (12 percent), retailers and food service (6 percent), food processors (2 percent), food distributors (3 percent), community and economic development groups (15 percent), resource conservation and development agencies (6 percent), lenders (1 percent), and other groups (9 percent).

Listening sessions. The second step in gathering public input for the plan was to organize 15 listening sessions across the state during June, July,

Here are the 10 food system sectors we used to identify obstacles and discuss strategies:

1. Crop production
2. Livestock production
3. Food safety and regulations
4. Processing
5. Aggregation-distribution
6. Beginning-underserved farmers
7. Financial assistance
8. Marketing and market venues
9. Planning: Roads and land use
10. Consumers (education)

August and September 2010 involving 161 participants from 37 of Iowa's 99 counties. The purpose of the listening sessions was to see if the obstacles and strategies identified in the initial June workshop were on target. All but one of the listening sessions were hosted and facilitated by partner leaders in the statewide Regional Food Systems Working Group; the remaining session was hosted by ISU Extension.

All facilitators, recorders and participants were asked to follow a uniform set of instructions and scripts to ensure that data were collected systematically and consistently. Basic demographic data also were collected from each participant. Leopold Center staff attended each session, took notes, and transferred the notes to a matrix for aggregation and further analysis.

Invitation survey: In July 2010, we invited 1,608 stakeholders to complete an electronic survey. This purposive sample was selected from Leo

Table 3. Overview of public input methods and number of participants/respondents.

Method of Public Input	Number of participants/respondents
Initial workshop – June 24, 2010	162
Listening sessions (15)	161
Invitation survey	256
Public survey	330
Regional Food Systems Working Group policy recommendation session	57
Target group policy recommendation session	57
<i>Total</i>	<i>1024*</i>

*This total does not represent the total number of different individuals. We estimate that 2 percent of the total number of participants/respondents participated in multiple methods of public input (for example, by completing the survey and participating in one of the work sessions or listening session). Hence, it is likely that an estimated 1,002 different individuals offered public input to the Plan.

pold Center and other mailing lists based on occupational and organizational affiliation to ensure that a variety of groups and interests would be represented. Targeted groups included commodity and non-commodity farmers and producer associations, processors, retailers, food service, distributors, agricultural educators, Farm Bureau members, elected officials, Extension employees, colleges and universities, nonprofits, restaurant owners, business owners, RC&Ds, and local, state, and federal government employees.

The survey questions can be found at the end of this appendix. Nearly 10 percent of the e-mail invitations sent were undeliverable. After two contacts, we received 256 usable completed surveys, for a response rate of 18 percent.

Building on the issues that emerged from the June workshop and listening sessions, we asked respondents to identify up to two of 10 food system sectors with which they had the most expertise or experience. After making their selections, respondents were asked to choose the top two obstacles for each sector that prevent Iowa from having a strong local and regional food business sector. A follow-up

question asked them to describe the strategies needed to address each obstacle.

In addition, we collected the same demographic data from survey respondents that we collected from listening session participants. Responses to the survey provided more complete and comprehensive data on obstacles and strategies offered during the initial June workshop and the listening sessions.

Public Survey: To reach a broader audience interested in food and agricultural policy, we issued the same electronic survey described above to a convenience sample of web users visiting the Leopold Center site. We invited the public to complete the survey by posting an invitation on the Iowa Local Food and Farm page (www.leopold.iastate.edu/foodandfarmplan), and publishing an invitation in the August and September issues of the monthly Notes from the Leopold Center, an e-newsletter reaching 1,000 subscribers. As a result of these efforts, we received an additional 330 usable completed surveys. Since visitors to the website could be from any state or country, we included a filter question asking about their place of residence and required potential respondents to register with an

Table 4. Demographic characteristics of listening session participants and survey respondents.

Demographic Characteristics	Percent (n=713)
Gender	
Male	50%
Female	50%
Age	
18-24	3%
25-34	12%
35-44	18%
45-54	28%
55-64	29%
65+	10%
Occupation	
Farmer, rancher, farm-related business owner, or employee	29%
Government	16%
College or University	12%
Nonprofit	11%
Non-farm related business owner or employee	10%
Extension	9%
Community or economic development and planning	6%
Youth education	5%
Health professional	4%
Food service (retail, restaurant, and institutional)	3%
Industry or producer association	3%
Farm Bureau	2%
Lender	1%

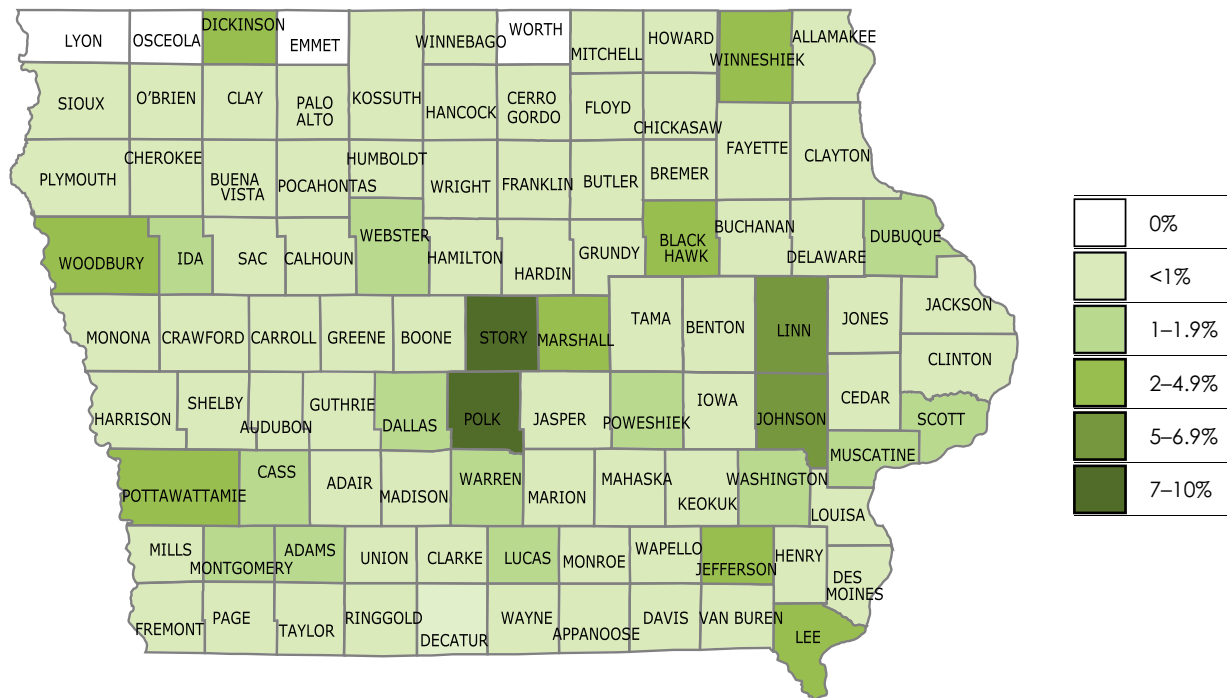


Figure 4. County of residence (percent of total survey and listening session respondents).

e-mail address. We removed responses from several people who did not live and/or work in Iowa.

Analysis of public input

Participants in the Public Input Process. We collected demographic data from 713 people offering public input (100 percent of survey respondents and 79 percent of listening session participants). Analysis shows that 97 percent were Caucasian and half were women. The majority (58 percent) were middle-aged (45-64 years old) while 15 percent were young (18 to 34 years old). One in three was a farmer or employed in the farm sector (see Table 4 on previous page). At least one in ten worked for one of the following entities: government, a college or university, a nonprofit, and the non-farm related business sector.

In terms of geographic representation, respondents lived in 95 of Iowa's 99 counties; only four counties in the northern tier along the Minnesota border were not represented (Lyon, Osceola, Emmet, and Worth counties) (Figure 4, above). A regional analysis shows that 23 percent live in central Iowa while 18 percent live in east central Iowa counties.

Participant expertise and obstacles. Survey respondents were asked to select up to two of 10 sectors with which they had the most expertise or experience. They were then asked to choose the top two obstacles in the sectors

they selected, developed from public input gathered in the initial workshop and the 15 listening sessions (see Table 5, next page). Based on the 586 usable electronic survey responses we received, more respondents are knowledgeable about consumer issues (30 percent of respondents), crop production (26 percent), and marketing (23 percent), while fewer are knowledgeable about aggregation and distribution (4 percent), and processing (5 percent).

Sectors needing the most attention. In each listening session, the group of participants was asked to identify priority sectors needing the most attention. Marketing and market venues were ranked #1, followed by consumers (#2) and a tie for #3 between financial assistance and aggregation and distribution (see Table 7, next page). However, when analyzed by region, 88 percent selected aggregation and distribution as a priority, followed by consumers and marketing/market venues (chosen by 63 percent of Iowa's regions).

Transforming broad strategies into specific and actionable recommendations

After survey respondents/listening session participants identified the top obstacles for each sector with which they had expertise, they were asked to describe strategies that they thought would address obstacles they identified as significant. We compiled all suggested strategies into a list for each sector. These responses were used to develop a new frame

Table 5. Expertise of respondents and top needs and obstacles facing local/regional food system sectors

Sector	Percent of survey respondents with expertise in each sector	Rank of sector needing most attention (listening sessions)	Percent of regions identifying each sector as needing the most attention (listening sessions)	Top obstacle facing the sector, by percent of respondents*
Crop Production	26%	5	50%	Lack of knowledge to diversify operations (56%)
Livestock Production	15%	10	0%	Processing barriers for small producers (76%)
Processing	5%	6	25%	Lack of facilities (58%)
Aggregation and Distribution	4%	3	87.5%	Lack of coherent business structure for distribution (41%)
Marketing and Market Venues	23%	1	52.5%	Lack of consistent supply (41%)
Food Safety, Regulations, and Policies	10%	9	12.5%	One-size-fits-all standards difficult for small producers and processors to achieve (66%)
Financial Assistance	10%	3	50%	Lack of funding for local food planning and network building systems (45%)
Beginning and Underserved Farmers	9%	7	37.5%	Need for step-by-step information on how to start and operate a farm-based business (50%)
Planning: Roads, Buildings, and Farmland Preservation	8%	7	25%	Lack of awareness of local food systems by local governments (67%)
Consumers	30%	2	62.5%	Lack of access to local foods (61%)

*Only survey respondents stating expertise in that sector were permitted to identify the top obstacles facing that sector; respondents could choose up to two.

work based on issues rather than sectors since many strategies spanned several sectors. We did this by grouping strategies according to 12 emerging issues.

We then categorized the suggested strategies within each issue and reworded each issue to be inclusive of all relevant strategies. With this framework completed, we compared these data from the survey to the feedback elicited in the listening sessions. We combined the data on strategies from the survey with strategy suggestions in the listening sessions. While

merging these data, we again reworded each of the 12 issues to be inclusive of the strategies included under each issue heading.

Table 6 (next page) lists the 12 issues that ultimately surfaced. These 12 issues served as the foundation in a facilitated process to develop a first draft of “actionable” recommendations. In October 2010, the Leopold Center convened two separate working sessions, each attended by more than 50 stakeholders, to suggest specific, actionable recommendations based on the issues and accompanying

strategies collected thus far. The first working session doubled as the quarterly meeting of the Regional Food Systems Working Group, with farmers, community leaders, and educators from 14 local food groups across more than 70 Iowa counties participating.

For the second workshop we selected a diverse group of stakeholders who had considerable experience and expertise in one of the 12 identified issues. In each working session, the stakeholders were divided into 12 different groups, each assigned to develop actionable recommendations for one of the 12 issues. Each small issue-based group also was asked to assess its recommendation(s) based on its answers to the following questions:

- *Is the recommendation specific, realistic, and actionable?*
- *Is it feasible for the Iowa legislature to use the recommendation as a base from which to draft a bill or an amendment?*

We instructed groups to focus on the issue and accompanying strategies provided as the basis for their recommendations to ensure that the feedback we had collected so far was indeed informing the draft recommendations. At the same time, each group was instructed to document information that still was needed to improve the recommendation, such as the appropriate agencies to be targeted, specifics of existing legislation affected by the recommendation, and other research critical for appropriately framing the recommendation. The Leopold Center staff used this feedback to conduct further research on each recommendation.

Public input was critical for representing stakeholders with years of experience and expertise in Iowa's local food and agriculture sector. Input at each point was used to inform the way forward as the Plan evolved. For instance, the initial workshop on June 24 provided information essential for developing the listening session questions. The listening session data and the survey data provided information essential for designing the policy recommendation working sessions in October. This process of building on input from one stage to the next helped the team transform general strategies into the actionable recommendations detailed in this Plan.

After conducting follow-up research on the recommendations provided during the two October 2010 workshops, the Leopold Cen-

Table 6. The 12 Emerging Issues Developed

1. Farmers, processors, and food entrepreneurs need access to affordable loans to start and grow businesses.
2. Farmers, processors, and food entrepreneurs need incentives (such as tax credits, tax rebates, grants, and equipment cost-share programs) to supply markets.
3. Existing and beginning farmers need access to land and water to initiate or expand operations.
4. Farmers, processors, and food entrepreneurs need affordable and comprehensive insurance products to minimize risks in crop production, liability, and health.
5. Existing and beginning farmers, processors, and food entrepreneurs need education and technical assistance to develop profitable enterprises.
6. Small and mid-sized farmers need customized environmental and food safety regulations to be profitable, protect natural resources, and ensure food safety.
7. Farmers and processors need access to a skilled, affordable, and reliable workforce.
8. Iowa needs investment in aggregation, distribution, storage, and processing facilities (such as cold storage, packinghouses, and distribution warehouses) to reach existing and new markets with high-quality local food products.
9. Iowa needs marketing networks for local food processors, food entrepreneurs, and farmers.
10. Consumers need better access to local foods and more information about local foods.
11. More coordination and data collection on the state of local foods is needed within and across organizations and agencies supplying technical assistance, financial assistance, and regulatory oversight to local food producers, processors, and entrepreneurs.
12. Iowa needs innovative and creative ways beyond tax instruments and funding reallocation to pay for programs and assistance to build a strong local food business sector.

ter team drafted an initial set of funding and policy recommendations. These recommendations were discussed at face-to-face meetings or teleconferences with representatives of the following 21 state agencies, institutions, and organizations:

- Iowa Department of Agriculture and Land Stewardship
- Iowa Department of Economic Development

- Iowa Department of Education (Bureau of Food, Nutrition and Transportation Services)
- Iowa Department of Inspection and Appeals
- Iowa Department of Cultural Affairs (Iowa Arts Council)
- Iowa Department of Natural Resources
- Iowa Workforce Development
- The New Iowans Center
- Iowa's Community Colleges (Agriculture Program Chair)
- Iowa State University College of Agriculture and Life Sciences
- Iowa State University Extension
- University of Northern Iowa
- University of Iowa
- Iowa Department of Administrative Services
- Iowa Department of Human Services
- Iowa Insurance Division
- State Data Center of Iowa
- Leopold Center for Sustainable Agriculture Advisory Board
- Iowa Farm Bureau Federation
- Practical Farmers of Iowa
- Iowa Food Systems Council

These representatives were asked to provide feedback on the draft recommendations in terms of their accuracy and the extent the agency/organization was already executing the recommendation(s). The comments were reviewed and revisions were made to ensure the recommendations were accurate and actionable. After the recommendations were finalized, Leopold Center staff pulled together the remaining supporting information to complete the Iowa Local Food and Farm Plan document.



Local Food and Farm Plan Survey

Introduction

Welcome to the Local Food and Farm Plan Survey. The Leopold Center is conducting this survey to gather public input in response to an amendment passed by the Iowa legislature. The Legislature has requested that the Leopold Center develop and submit a Local Food and Farm Plan with recommendations to create a more robust local and regional food and farm economy in the state. The amendment reads as follows:

LOCAL FOOD AND FARM PLAN. To the extent feasible, the Leopold Center for Sustainable Agriculture established pursuant to section 266.39 shall prepare a local food and farm plan containing policy and funding recommendations for supporting and expanding local food systems and for assessing and overcoming obstacles necessary to increase locally grown food production. The Leopold Center for Sustainable Agriculture shall submit the plan to the general assembly by January 10, 2011. The plan shall include recommendations for short-term and long-term solutions, including but not limited to the enactment of legislation. This division of the Act is repealed on January 10, 2011.

The survey should take you 10 minutes to complete. Thank you in advance for your participation!

Primary sector of experience/expertise

**In which of the 10 sectors listed below do you have the most experience and expertise?
(Choose only one. You will be asked follow up questions based on your response.)**

- LIVESTOCK PRODUCTION (all animal-based production systems)
- AGGREGATION AND DISTRIBUTION (moving food from the farm gate to buyers through various market channels)
- PLANNING: ROADS, BUILDINGS, AND FARMLAND PRESERVATION (effective planning for and use of roads, buildings, and farmland to support a local food system)
- FINANCIAL ASSISTANCE (grants and loans used to help support farmer and other food business operations to produce, add value to, or deliver food products)
- MARKETING AND MARKET VENUES (selling at all types of markets including farmers markets, food service, retail, colleges, hospitals, etc.)
- PROCESSING (plant and animal-based products including meat, poultry, dairy, vegetables, etc.)
- CROP PRODUCTION (all plant-based production systems)
- BEGINNING AND UNDERSERVED FARMERS (people wishing to begin farming or return to farming including women, Latinos, African Americans, and other minorities)
- CONSUMERS (What prevents consumers from buying local foods? What would influence them to buy more local foods?)
- FOOD SAFETY, REGULATIONS, AND POLICIES (state and federal regulations that include food safety, processing, labeling, procurement, production quotas, etc.)
- OTHER (please specify)

Local Food and Farm Plan Survey

CROP PRODUCTION

All plant based production systems

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to crop production. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five crop production obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of producers
- Insufficient labor base
- Lack of knowledge to diversify operations
- Lack of equipment to diversify operations
- Few production skills training programs
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five crop production obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of producers
- Insufficient labor base
- Lack of knowledge to diversify operations
- Lack of equipment to diversify operations
- Few production skills training programs
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

LIVESTOCK PRODUCTION

All animal based production systems

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to livestock production. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five livestock production obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of business skills
- Lack of financial resources for producers (i.e. cost of production data, budgets for niche markets)
- Processing barriers for small producers including regulatory barriers, access to processors, and cost of processing
- Limited land access due to high cost and limited availability
- Lack of education on how to market niche products
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five livestock production obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of business skills
- Lack of financial resources for producers (i.e. cost of production data, budgets for niche markets)
- Processing barriers for small producers including regulatory barriers, access to processors, and cost of processing
- Limited land access due to high cost and limited availability
- Lack of education on how to market niche products
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

PROCESSING

Plant and animal based products including meat, poultry, dairy, vegetables, etc.

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to processing. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five processing obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Regulatory challenges (i.e. barriers to inter-state meat sales)
- Insufficient labor base
- Lack of professional skills training
- Lack of facilities due to high start up and operating costs
- Lack of education on community and home kitchen processing
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five processing obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Regulatory challenges (i.e. barriers to inter-state meat sales)
- Insufficient labor base
- Lack of professional skills training
- Lack of facilities due to high start up and operating costs
- Lack of education on community and home kitchen processing
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

AGGREGATION AND DISTRIBUTION

Moving food from the farm gate to buyers through various market channels

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to aggregation and distribution. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five aggregation and distribution obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of coherent business structure for distribution
- Lack of private investment in producer distribution networks
- Lack of pre-planning communication between producers and aggregators
- Little communication of roles between businesses in local food supply chain
- Inadequate distribution infrastructure such as on-farm cold storage facilities
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five aggregation and distribution obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of coherent business structure for distribution
- Lack of private investment in producer distribution networks
- Lack of pre-planning communication between producers and aggregators
- Little communication of roles between businesses in local food supply chain
- Inadequate distribution infrastructure such as on-farm cold storage facilities
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

MARKETING AND MARKET VENUES

Selling at all types of markets including farmers markets, food service, retail, colleges, hospitals, etc.

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to marketing and market venues. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five marketing and market venues obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector.

(Choose ONLY one.)

- Need for a unifying, branding tool for marketing local foods
- Need for resources and training to assist producers in marketing products
- Inadequate business training for producers
- Lack of consistent supply
- Lack of understanding of local food cost infrastructure
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five marketing and market venues obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Need for a unifying, branding tool for marketing local foods
- Need for resources and training to assist producers in marketing products
- Inadequate business training for producers
- Lack of consistent supply
- Lack of understanding of local food cost infrastructure
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Local Food and Farm Plan Survey

FOOD SAFETY, REGULATIONS, AND POLICIES

State and federal regulations that include food safety, processing, labeling, procurement, production quotas, etc.

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to food safety, regulations, and policies. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five food safety, regulations, and policy obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of industry education about food safety laws
- Increasing costs of licensing and certification
- Lack of size appropriate regulations based on outcomes
- Inadequate traceability systems
- "One size fits all" standards difficult for small producers and processors to comply
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five food safety, regulations, and policy obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of industry education about food safety laws
- Increasing costs of licensing and certification
- Lack of size appropriate regulations based on outcomes
- Inadequate traceability systems
- "One size fits all" standards difficult for small producers and processors to comply
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Local Food and Farm Plan Survey

FINANCIAL ASSISTANCE

Grants and loans used to help support farmer and other food business operations to produce, add value to, or deliver food products

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to financial assistance. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five financial assistance obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of funding for local food planning and network building systems
- Banks' difficulty in assessing profitability of local food enterprises
- Lack of financial/budgeting information available to producers
- Lenders adverse to perceived high risk in small alternative enterprises
- Lack of financial assistance for development of processing, aggregation and distribution sectors
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five financial assistance obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of funding for local food planning and network building systems
- Banks' difficulty in assessing profitability of local food enterprises
- Lack of financial/budgeting information available to producers
- Lenders adverse to perceived high risk in small alternative enterprises
- Lack of financial assistance for development of processing, aggregation and distribution sectors
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

BEGINNING AND UNDERSERVED FARMERS

People wishing to begin farming or return to farming including women, Latinos, African-Americans, and other minorities

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to beginning and underserved farmers. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five obstacles for beginning and underserved farmers identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Need for step-by-step information on how to start and operate a farm-based business
- Lack of producer business, marketing, and financial knowledge
- Lack of desirable land for purchase or rent
- Lack of community college/university partnerships to support new farmers
- Lack of agricultural resources targeted at underserved farming community (i.e. bilingual resources, culturally appropriate education and technical assistance)
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five obstacles for beginning and underserved farmers identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Need for step-by-step information on how to start and operate a farm-based business
- Lack of producer business, marketing, and financial knowledge
- Lack of desirable land for purchase or rent
- Lack of community college/university partnerships to support new farmers
- Lack of agricultural resources targeted at underserved farming community (i.e. bilingual resources, culturally appropriate education and technical assistance)
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Local Food and Farm Plan Survey

PLANNING: ROADS, BUILDINGS, AND FARMLAND PRESERVATION

Effective planning for and use of roads, buildings, and farmland to support a local food system

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to planning. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five planning obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of local food system planning in city or county comprehensive plans
- Lack of awareness of local food systems by local governments
- Lack of sufficient funds to maintain transportation infrastructure (including county roads)
- Inadequate budgets to support planning at the local level, including staff resources
- Restrictive zoning regulations in cities and counties
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five planning obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Lack of local food system planning in city or county comprehensive plans
- Lack of awareness of local food systems by local governments
- Inadequate transportation infrastructure
- Inadequate budgets to support planning at the local level, including staff resources
- Restrictive zoning regulations in cities and counties
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Local Food and Farm Plan Survey

CONSUMERS

What prevents consumers from buying local foods and what would influence them to buy more local foods

In this section of the survey, we will ask you to identify the top two obstacles that prevent Iowa from having a strong local and regional food business sector as it relates to consumers. Then we will ask you to identify strategies needed to address each obstacle.

The following is a list of the top five consumer obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the top obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Need for financial education including true costs of food and economic benefits of a local food system
- Limited knowledge of how to prepare, preserve and cook with local produce
- Lack of access to local foods
- Limitations of federal food programs in providing access to local foods
- Limited reach of childhood education on local foods and food quality
- Other (please specify)

What strateg(ies) are needed to address this obstacle?

Included again is a list of the top five consumer obstacles identified by participants of a Food and Farm Plan meeting held in June. Choose the SECOND obstacle that prevents Iowa from having a strong local and regional food business sector. (Choose ONLY one.)

- Need for financial education including true costs of food and economic benefits of a local food system
- Limited knowledge of how to prepare, preserve and cook with local produce
- Lack of access to local foods
- Limitations of federal food programs in providing access to local foods
- Limited reach of childhood education on local foods and food quality
- Other (please specify)

What strateg(ies) are needed to address this obstacle?



Appendix 2: Local Food Symbol Program

The "Local Food Symbol" program will serve as a source of revenue for the Local Food and Farm Program Fund. Iowans will have the opportunity to purchase a local food collectible poster or stamp annually. These items will feature local food artwork from an Iowa artist. Each year, a contest to select a new piece of local food artwork will be coordinated by the Iowa Arts Council. The winning artwork will be featured in a new rendition of a collectible poster and stamp.

All Iowans will be encouraged to purchase the collectible posters and/or stamps. A limited number of bumper stickers also will be made each year featuring the winning artwork.

All net proceeds from the sales of these items will go to the Iowa Local Food and Farm Program Fund. We estimate that a net of \$153,637 will be generated in the program's first year.

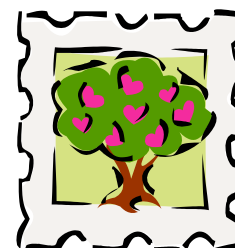


Table 7. Net Profit Estimate for Posters, Stickers and Stamps			
POSTERS	Customers	% Purchase	Total Purchases
Iowa Farms & Producers	92,600	2%	1,852
Food Processors	1,025	3%	31
Warehousing & Distribution	191	5%	10
Restaurants	6,005	15%	901
Food Retailers	1,628	20%	326
Institutional Buyers	13,935	10%	1,394
Educational Buyers	1,603	20%	321
		Total Posters Sold	4,833
Admin Costs per Poster	\$(0.25)		
Poster Costs per Poster	\$(0.15)		
Postage	\$(1.25)		
Poster Price	\$25.00		
Net Profit per Poster	\$23.35		
		Net Poster Profit	\$112,845
STICKERS AND STAMPS			
Population of Iowa	3,007,856	0.1%	3,008
		Total Stickers Sold	3,008
Admin Costs Sticker	\$(0.25)	Total Stamps Sold	3,008
Sticker Cost	\$(0.07)		
Postage	\$(1.25)		
Sticker Price	\$15.00		
Net Profit per Sticker	\$13.43		
		Net Stamp Profit	\$40,396
		Net Sticker Profit	\$40,396
		Total Profit	\$193,637
		Total Costs	\$40,000
Promotion and Administrative Costs	\$(35,000)		
Iowa Arts Council and Artist Costs	(\$5,000)		
		Total Net Profit	\$153,637



Appendix 3: Glossary of terms and organizations

Ancillary business: An ancillary business is any business or non-trade activity that is not associated with the core activities of a firm.

Barn Quilts: Barn Quilts is a project founded in Adams County, Ohio, by Donna Sue Groves who painted a quilt block on her family farm barn. Today Ohio, Iowa and Kentucky have over 250 in each state, and the grassroots art project continues to spread. Barn quilts are prominently featured in Iowa agritourism.

Bureau of Nutrition, Health and Transportation Services (BNHTS): The Bureau of Nutrition, Health and Transportation Services has three areas of focus. A large part of the Bureau's work is involved with facilitation and promotion of USDA Child Nutrition Programs in schools and child care that will benefit the education, health and well-being of the citizens of Iowa. The Coordinated School Health programs promote health and healthy behaviors in the lives of students, staff, families, and the community. The HIV/AIDS Education Program conducts activities that establish, strengthen, or expand HIV/STD prevention education and integrate such education into existing comprehensive school health programs. School Transportation serves in a leadership role to assist and motivate Iowa's public and nonpublic schools to provide high-quality, safe and efficient school transportation services for students through bus inspections and bus driver training.

Cattle Congress: The National Cattle Congress, based in Waterloo, Iowa, hosts an annual fair and rodeo and additional agriculture, live-stock, entertainment and education activities open to all of Iowa and the Midwest.

Convenience sample: A sample of subjects selected for a study, not because they are representative of a particular group, but because it is convenient to use them.

Dordt College: Dordt College is located in Sioux Center, Iowa, and provides a complete liberal arts education from a solid, Reformed, Christian perspective. There are over 30 majors and 10 pre-professional programs of study. Degrees include the four-year Bachelor of Arts, Bachelor of Science in Engineering, and Bachelor of Social Work degrees, along with

the two-year Associate of Arts degree and a Master of Education degree.

Drake Agricultural Law Center: Drake Agricultural Law Center was founded in 1983. The Center is internationally recognized for providing opportunities to study how the legal system shapes our food system and influences the ability of the agricultural sector to produce, market and utilize agricultural products. The Drake Law School supports an array of courses, publications, conferences, research initiatives and created a certification program in food and agricultural law. Students learn about legal issues involving the full scope of food and agriculture, including marketing and finance, biotechnology, international trade, tax planning, soil and water conservation, land use and environmental issues, food safety, and federal farm programs.

Greenhouse: A facility where plants are grown within structures, primarily of glass or plastic, in which temperature and humidity can be controlled for the cultivation or protection of plants.

Iowa Arts Council: The Iowa Arts Council (within the Iowa Department of Cultural Affairs) empowers Iowa's leaders in strengthening community life through the arts and providing leadership to stimulate a healthy arts environment.

Iowa Community Colleges: The state of Iowa has 16 community colleges. Each community college offers comprehensive academic programs including transfer courses, career and technical training and retraining programs, adult and continuing education, adult literacy instruction, and a variety of specialized activities and services. Community colleges are known for their innovative partnerships with high schools, four-year institutions, business and industry, and state agencies.

Iowa Department of Administrative Services (DAS): The Iowa Department of Administrative Services (DAS) was created on July 1, 2003, as a way to manage and coordinate the major resources of state government. The DAS mission is to provide high-quality, affordable infrastructure products and services to Iowa

state government customers in a manner that empowers them to provide better service to the citizens of Iowa and support the State of Iowa in achieving economic growth. The formation of DAS is the first and largest endeavor of this kind in the country. DAS has established an alternative to privatization that provides an incentive to employees to drive down the cost of service delivery.

Iowa Department of Agriculture and Land Stewardship (IDALS): The Iowa Department of Agriculture and Land Stewardship offers information and reports about farming, soil and water conservation, farmers markets, auctions, and events. IDALS includes the Division of Soil Conservation; Weights and Measures Bureau; the State Climatologist, Entomologist, and Veterinarian; Agriculture Statistics; Homeland Security; Iowa Horse and Dog Breeding program; Century and Heritage Farm programs; and the Farmers Market Nutrition Program.

Iowa Department of Cultural Affairs: The Iowa Department of Cultural Affairs has primary responsibility for development of the state's interest in the areas of the arts, history, and other cultural matters.

Iowa Department of Economic Development (IDED): Provides information for businesses regarding economic growth, benefits, and programs in the state by engendering and promoting economic development policies and practices which stimulate and sustain Iowa's economic growth and climate and that integrate efforts across public and private sectors.

Iowa Department of Education (IDE): The Iowa Department of Education (the Department) works with the Iowa State Board of Education (State Board) to provide oversight, supervision, and support for the state education system that includes public elementary and secondary schools, nonpublic schools that receive state accreditation, area education agencies (AEAs), community colleges, and teacher preparation programs.

Iowa Department of Human Services (IDHS): The mission of the Iowa Department of Human Services is to help individuals and families achieve safe, stable, self-sufficient, and healthy lives, thereby contributing to the economic growth of the state. They do this by keeping a customer focus, striving for excellence, sound stewardship of state resources,

maximizing the use of federal funding and leveraging opportunities and by working with public and private partners to achieve results.

Iowa Department of Inspection and Appeals (DIA): The Department of Inspections and Appeals (DIA) is a multifaceted regulatory agency charged with protecting the health and safety of Iowans. The agency is responsible for inspecting, licensing and/or certifying health care providers and suppliers, restaurants and grocery stores, social and charitable gambling operations, hotels and motels, and barber and beauty shops. In addition, DIA staff investigates alleged fraud in the State's public assistance programs and conducts contested case hearings to settle disputes between Iowans and various state government agencies.

Iowa Department of Natural Resources (DNR): The Iowa Department of Natural Resources is the government agency that leads Iowans in caring for their natural resources. It is responsible for maintaining state parks and forests, protecting the environment, and managing energy, fish, wildlife, and land and water resources in Iowa through conservation and enhancement of our natural resources in cooperation with individuals and organizations to improve the quality of life for Iowans and ensure a legacy for future generations.

Iowa Farm Bureau Federation: The Iowa Farm Bureau Federation is a member-supported farmer and commodity organization that also operates for-profit businesses in insurance and financial services.

Iowa Farm to School Program: In 2007, Iowa lawmakers passed Farm to School legislation to establish a program that would link elementary, secondary, public and non-public schools with Iowa farmers; provide schools with fresh and minimally processed Iowa grown food for inclusion in school meals and snacks; and to encourage children to develop healthy eating habits and provide them with hands-on learning opportunities, such as farm visits, cooking demonstrations, and school gardening and composting programs. The Farm to School Program is coordinated by the Iowa Department of Agriculture and Land Stewardship in partnership with the Iowa Department of Education and a seven-member Farm to School Council. The Iowa Farm to School Program will reach out to communities to establish strong partnerships.

Iowa Farmers Union (IFU): The Iowa Farmers Union is an organization of farmers and consumers using education, policy, and cooperation to work toward a more sustainable Iowa agricultural future. Iowa Farmers Union fosters the development of local food systems that lead to higher quality food, improved food safety, lower energy costs, and increased income and profitability for local farmer, conservation of natural resources for future farming productivity as well as human health and quality of life and a state rural electric standard that is targeted toward locally owned facilities.

Iowa Food Systems Council (IFSC): The mission of the Iowa Food Systems Council is to recommend policy, research and program options for an Iowa food system which supports healthier Iowans, communities, economies and the environment. The council formed in 2010.

Iowa Great Places: Iowa Great Places was created in 2005 and is a program designed to promote bold thought, innovation, and entrepreneurship at the local and regional level in Iowa. Seven dimensions of a Great Place are:

1. *A Unique Sense of Place* - An Iowa Great Place possesses a sense of place that values historical roots while embracing a shared vision which welcomes, includes, and involves both natives and newcomers and promotes itself as a great place.
2. *Engaging Experiences* - An Iowa Great Place provides and supports authentic and varied opportunities for individual and community expression, interaction, and common experiences.
3. *A Sustainable Community & Pleasing Environment* - An Iowa Great Place proactively implements sustainable community development principles and works toward greater energy efficiency, which produces a clean, healthy, and accessible natural and built environment.
4. *A Rich, Diverse Social Fabric* - An Iowa Great Place promotes and encourages social collaboration – formal and informal – throughout the Place, with equal opportunity for all people to participate.
5. *A Vital, Creative Economy* - An Iowa Great Place contains a balanced, growing, transformative mix of rewarding jobs and sustaining capital.
6. *A Strong Foundation* - An Iowa Great Place is available, accessible, and responsive to everyone – the entire social fabric; A Great Place invests in itself physically and philosophically.

7. *A Creative Culture* - An Iowa Great Place displays a shared attitude of optimism that welcomes new ideas, based on a diverse and inclusive cultural mosaic.

Iowa Insurance Division (IID): Iowa Insurance Division is the state regulatory authority for the insurance industry in Iowa headed by the Iowa Insurance Commission.

Iowa State Data Center: The State Data Center under the auspices of State Library of Iowa is the source for population, housing, business and government statistics about Iowa, including data from the U.S. Census Bureau, Iowa state agencies, and other state and Federal sources.

Iowa State University (ISU): Iowa State University is a well-established land grant university. More than 28,000 students choose from the 100 majors offered and Iowa State is recognized internationally for its comprehensive interdisciplinary research programs. Breakthroughs at Iowa State that are changing the world are in the areas of human, social, economic, and environmental sustainability; new materials and processes for biomedical as well as industrial applications; nutrition, health, and wellness for humans and animals; transportation and infrastructure; food safety and security; plant and animal sciences; information sciences; and renewable energies.

Iowa State University Extension (ISUE): Builds partnerships and provides research-based learning opportunities to improve quality of life in Iowa.

Iowa Workforce Development (IWD): Iowa Workforce Development links job placement and skill development into a system of lifelong learning and opportunity. Through resources and services created for employers, employees, and the unemployed, Iowans can take control of their economic future and the security of their families.

Leopold Center for Sustainable Agriculture (LCSA): The Leopold Center is a research and education center with statewide programs to develop sustainable agricultural practices that are both profitable and conserve natural resources. It was established under the Groundwater Protection Act of 1987 with a three-fold mission; to conduct research into the negative

impacts of agricultural practices; to assist in developing alternative practices; and to work with ISU Extension to inform the public of Leopold Center findings.

Local food: For purposes of this report, local food is meat, poultry, eggs, dairy, fruit and vegetables, grains, herbs, honey, and nuts grown or raised in Iowa, and marketed for human consumption in Iowa and its neighboring states (Minnesota, Missouri, Illinois, Wisconsin, Nebraska, and South Dakota).

Locker plant: According to the Iowa Code, locker plant refers any property used primarily for any or all of the following purposes:

1. To provide, as a part of its business operations, locker facilities which are rented at retail to consumers to be used for the storage of frozen meats, fish, or fowl owned by the person renting the locker.
2. To custom slaughter livestock under contract for a natural person and to process the carcass for the natural person by cutting, wrapping, and freezing the meat.
3. To process an animal carcass to offer at retail processed meat products to a natural person after the facility has purchased the livestock or carcass.

Marketing and Food Systems Initiative (MFSI): The purpose of the Marketing and Food Systems Initiative at the Leopold Center for Sustainable Agriculture is to research and test new marketing strategies and business structures that allow Iowa's farmers and communities to retain more of the value for energy, food or fiber produced; support education, conduct research and facilitate partnerships to increase investment and support of local and regional food, fiber and energy enterprises; and using a communities of practice framework, conduct research and education to address challenges that impede farmers and farmer networks from being equal partners in energy, food or fiber-based value chains.

New Iowan Centers: The New Iowan Centers offer workforce development services to persons who have recently moved to Iowa and are seeking employment. The centers are designed to support workers, businesses, and communities with information, community service referrals, job placement, translations, language training, and resettlement assistance, as well as technical and legal assistance concerning forms and documentation. Through public-private partnerships, the New Iowan Centers provide one-stop workforce development services for new Iowans.

Practical Farmers of Iowa (PFI): Founded in 1985, Practical Farmers of Iowa includes a diverse group of 2,400 farmers and friends of farmers. Corn, soybeans, beef cattle and hay are the top enterprises for PFI farmers, although many have other operations, including fruits and vegetables. The nonfarmer members believe that farmers can provide multiple benefits to society, including food and fiber, but also clean air and water and biodiversity on the land. Their mission is to research, develop and promote profitable, ecologically sound and community-enhancing approaches to agriculture. PFI specializes in farmer-to-farmer networking and relies on farmer members as the catalyst for the directions taken in all program areas.

Purposive sample: A sample composed of subjects selected deliberately because certain characteristics are typical or representative of a certain population. Purposive sampling often is used to ensure that certain groups/characteristics are included in a study.

Regional Food Systems Working Group (RFSWG): The Regional Food Systems Working Group supports education, conducts research, and facilitates partnerships to increase investment and support of community-based, economically sustainable and environmentally and socially responsible regional food enterprises.

Resource Conservation and Development districts (RC&D): Resource Conservation and Development districts and their councils across Iowa work to create jobs, protect the environment, and improve the quality of life in rural communities.

Targeted Small Business (TSB): The Iowa Department of Inspections and Appeals (DIA) certifies businesses owned, operated, and actively managed by women, minority group members, or persons with disabilities as targeted small businesses. Certified TSBs are eligible to apply for low-interest loans and equity grants through the Iowa Department of Economic Development (IDED). State purchasing officers also consider TSBs when seeking bids for state-purchased goods and services.

University of Northern Iowa (UNI): University of Northern Iowa is a quality, state-supported university of approximately 13,000 students, located on the west side of the Cedar Falls/Waterloo metro area in northeast Iowa.

Value Chain Partnerships (VCP): Value Chain Partnerships is an Iowa-based network for food and agriculture working groups that brings together producers, businesses, and state and federal organizations.

World Pork Expo: World Pork Expo is the largest swine specific trade show/conference in North America. Each year thousands of U.S. and international pork producers attend the three-day event in Des Moines, Iowa. The show features the latest equipment, genetics, and computer technology and swine health products. Business seminars focusing on current issues facing producers are offered free of charge. Each year new products and services are rolled out by exhibitors at this world class event. For more than 20 years the World Pork Expo has been the event of choice for pork producers.

World Food Prize: The Norman Borlaug International Symposium is held each year in conjunction with the awarding of the World Food Prize. This annual "Davos-type" dialogue brings together international experts and policy leaders to address cutting-edge issues in food security and nutrition. Through the International Symposium, known informally as the Borlaug Dialogue, the World Food Prize Foundation helps build alliances in the struggle against world hunger and malnutrition. These efforts help to promote health, enhanced nutrition, and safety both at home and abroad with the first-ever conference to simultaneously address obesity and malnutrition and the first post-9/11 conference anywhere to address agro-terrorism.

References and websites used in glossary

- Dordt College** <http://www.dordt.edu/about/>
Drake Agricultural Law Center <http://www.law.drake.edu/centers/agLaw/>
Iowa Arts Council <http://www.iowaartscouncil.org/>
Iowa Code <http://www.legis.state.ia.us/IowaLaw.html>
Iowa Community Colleges <http://www.iowa.gov/educate/>
Iowa Department of Administrative Services http://das.iowa.gov/about_DAS/
Iowa Department of Agriculture and Land Stewardship <http://www.iowaagriculture.gov/>
Iowa Department of Cultural Affairs <http://www.culturalaffairs.org/>
Iowa Department of Economic Development <http://www.iowalifechanging.com>
Iowa Department of Education <http://www.iowa.gov/educate/>
Iowa Department of Human Services <http://www.dhs.state.ia.us/>
Iowa Department of Inspection and Appeals <http://dia.iowa.gov/>
Iowa Department of Natural Resources <http://www.iowadnr.gov/>
Iowa Farm Bureau Federation <http://www.farmbureaukids.com/>
Iowa Farm to School Program <http://www.farmtoschool.org/IA/programs.htm>
Iowa Farmers Union <http://iowafarmersunion.org/about/>
Iowa Food Systems Council <http://www.iowafoodsystemsCouncil.org/>
Iowa Great Places <http://www.iowagreatplaces.gov/content/view/82/57/>
Iowa Insurance Division <http://www.iid.state.ia.us/>
Iowa State Data Center <http://www.iowadatacenter.org/>
Iowa State University <http://www.iastate.edu/about/>
Iowa State University Extension <http://www.extension.iastate.edu/>
Iowa Workforce Development <http://www.iowaworkforce.org/>
Leopold Center for Sustainable Agriculture <http://www.leopold.iastate.edu/>
Marketing and Food Systems Initiative <http://www.leopold.iastate.edu/research/marketing.htm>
Merriam Webster Dictionary <http://www.merriam-webster.com/dictionary/greenhouse>
National Cattle Congress <http://www.nationalcattlecongress.com/history.php>
New Iowan Centers <http://www.iowaworkforce.org/centers/newiowan/index.html>
Ohio Barns <http://www.ohiobarns.com/otherbarns/quilt/QtB-article2.html>
Practical Farmers of Iowa <http://www.practicalfarmers.org/about-us/>
Regional Food Systems Working Group <http://www.valuechains.org/regionalfood?src=top>
Resource Conservation and Development districts <http://www.ia.nrcs.usda.gov/partnerships/rcandd.html>
Targeted Small Business <https://dia.iowa.gov/tsb/>
University of Northern Iowa <http://www.uni.edu/>
Value Chain Partnerships <http://www.valuechains.org/>
Vogt, P. 1999. *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences*. Sage Publications: California.
World Food Prize <http://www.worldfoodprize.org/index.cfm?nodeID=25286>