REGIONAL/LOCAL FOOD SYSTEM DEVELOPMENT IN IOWA

Overview
Iowa State University Extension and Outreach is committed to Healthy People, Environments, and Economies. Regional and Local food systems provide an opportunity to meet increasing demand for locally produced food including fruits and vegetables, livestock, egg and dairy products while addressing the need of Iowans for food security with adequate diets and improving regional economies.

There is a significant and rising demand for fresh, local food produced throughout the Upper Midwest and the nation. 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 large 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.

- Direct-to-consumer markets include 237 farmers markets, which increased by 75 percent over the last 15 years and place Iowa second in the nation in the number per capita. In 1995 there were three CSAs in Iowa. Iowa now has more than 70 Community Supported Agriculture (CSA) farms that serve people in 90 percent of Iowa counties (Iowa Department of Agriculture and Land Stewardship, Practical Farmers of Iowa).
- The number of farm to school programs, which use local farms as food suppliers for school meals programs, increased to 2,095 in 2009, up from 400 in 2004 and 2 in the 1996-97 school year, according to the National Farm to School Network. Iowa currently has 15 active farm to school chapters up from 9 in 2010. Many more schools have school gardens and farm to school projects that are not registered with the formal Farm to School network, but are every bit as important and valuable (Iowa Department of Agriculture and Land Stewardship).
- The most recent national data suggest that while local food consumers are demographically diverse, they are very similar in their motivations for buying local. The majority of respondents to a national study cited freshness (82 percent), support for the local economy (75 percent), and knowing the source of the product (58 percent) as reasons for buying local food at direct markets or in conventional grocery stores (Food Marketing Institute, 2009).
- Among restaurateurs, chefs buy locally grown foods for perceived superior quality and freshness, to meet customer requests, to access unique products, and to support local businesses (Painter, 2008). From the restaurants’ perspective, local products add consumer appeal and represent a way of differentiating from the competition (Packaged Facts, 2007).
- Farmers who sell their food through direct marketing channels tend to operate smaller farms with a variety of products, such as fruits and vegetables; engage in entrepreneurial activities; and follow environmentally sustainable production practices. The smaller farm size allows beginning farmers to more easily enter the market. In addition, the opportunity to interact with consumers provides farmers with firsthand information on the demand for their products (O’Hara, 2011).
- In 2007, direct sales by all U.S. farms surpassed custom work to become the leading on-farm entrepreneurial activity in terms of farm household participation. (Martinez, et al., 2010).
Local Food System Benefits
There are many benefits that a robust local food sector could bring to a state’s economy and local communities. Four of the major benefits are: economic, environmental, food safety (including bioterrorism), and nutrition (including food security). A detailed listing of some of the relevant research follows our response.

Our Response
Iowa State University Extension and Outreach recognizes the need for a variety of production systems to meet food needs and preferences of Iowans. There is a need to foster three types of capacity to ensure sales of local and regional food products are increased. First, appropriate expertise and technical assistance are key assets for developing local food markets (Martinez et al., 2010). For example, with the extensive outreach effort of local and regional food systems, food plans documenting the networks, relationships, and coordination mechanisms required need to be developed to effectively use resources (social and economic). Innovative proposals such as those outlined in the Iowa Local Food & Farm Plan, the Local Food Assessment for Northern Virginia, and a northeast Ohio report, *The 25% Shift*, address the capacities needed to help ensure the successful implementation of such plans. ISU Extension and Outreach has expertise to lead these types of efforts.

Second, the presence of adequate infrastructure is a basic need for local-food-system development (Martinez et al., 2010). One challenge to integrating local processing facilities, such as local slaughterhouses and dairy bottling plants, into direct marketing has been the closures of many in recent decades because of consolidation trends (Martinez, 2007). ISUEO interdisciplinary expertise in community development, agriculture and natural resources, value added agriculture, youth and 4-H, and families can address infrastructure issues within the state.

Third, food safety regulations to protect the public’s health must ensure local and regional food systems can be supported. For example, the 2010 Food Safety Modernization Act proposed development of fresh produce standards; yet exempted small farms engaged in direct marketing from these requirements. However, retail foodservices may impose more rigorous standards such as GAPs (Good Agricultural Practices) Certification; thus Extension and Outreach can provide on farm food safety training in preparation for third party certification. In addition, ISUEO, through collaborative efforts with state regulatory agencies, can develop educational resources to help direct market vendors understand jurisdictions, requirements, and enforcement procedures that apply to them and the products they produce.

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Relevant research listed by type of benefit.

Economic:
- The growing number of farmers markets contributes jobs. Based on a 2009 study coordinated by Iowa State University and the Iowa Department of Agriculture and Land Stewardship, there were 574 total additional jobs attributed to Iowa farmers markets in 2009, with estimated sales of $38.4 million (Otto, 2010). Moreover, customers of Iowa farmers markets shopped at an average of 1.2 additional local businesses the day they attended the farmers market.
- Based on a 2006 economic impact study conducted by Iowa State University (Swenson, 2006), if all Iowans followed a diet including five servings of fresh fruits and vegetables a day for three months of the year, and if all of those servings were grown by Iowa farmers, it would provide (considering existing production) $302.4 million in total new industrial output, $112.6 million in labor income, and 4,094 jobs. Other economic impact studies conducted by Swenson for southwest Iowa, southeast Iowa, Black Hawk and surrounding counties, and the upper Midwest, came up with the same conclusion that an increase in local food consumption increased economic activity and jobs.
- The American Farmland Trust published a report suggesting local foods could provide farmers with greater returns for their products and allow greater wealth retention within local communities (Anderson, 2007). Selling products direct to consumers increases profit margins received by producers.
- A recent USDA study on direct and intermediated marketing channels indicated that for every $1M in produce sales, 13 on-farm jobs were created (Low and Vogel, 2011).

Environmental:
- Local and regional food systems have the potential to reduce the environmental footprint of our overall food system (Pirog, et al., 2001).
- In 2007, food-related energy use accounted for 16 percent of the U.S. energy budget (Canning et al., 2010). Some of the greatest opportunities in the food system for mitigating heat-trapping emissions are in the significant energy savings that would result if consumption was largely shifted from processed food to relatively unprocessed food (e.g., Garnett, 2011; Weber and Matthews, 2008). For example, 2002 U.S. per-capita energy flows for snacks, baking, sugar, and fats were almost three times those of fresh and processed fruits and vegetables across all stages of the food production system (Canning et al., 2010).

Bioterrorism/Food safety:
- According to a Congressional Research Service and Government Accounting Office report, concentration in slaughter, processing, and distribution makes large scale contamination of agro-terrorism more likely (Monke, 2005). It has also been suggested that local food systems could reduce food safety risks by decentralizing production (Peters et al., 2008).
- No published literature has identified differences in levels of pathogenic microbes (disease causing organisms) found on fresh, unprocessed fruits and vegetables produced by local or national sources.

Food Security/Nutrition:
- Farmers markets have been associated with food security programs because they are
increasingly capable of accepting benefits from Federal and State food and nutrition programs (e.g., food stamps) (Thilmany and Watson, 2004).

- Hospital and foodservice administrators note that healthcare institutions can influence better eating habits through purchasing local foods for use in cafeteria or food-court service and patient meals (Sachs and Feenstra, undated). Local seasonal produce can be less expensive than nonlocal purchases. However, it is often more expensive because of economies of scale. Featuring local foods has been found to increase sales at hospital cafeterias, and represents a potential strategy to attract employees and patients (Sachs and Feenstra, undated).
- Studies indicated that local and/or organic foods are not higher in nutrients than those provided through conventional channels (Dangour, et al., 2009). Similar studies have found fresh fruits and vegetables are not more nutritious than canned or frozen products. Packaged fruits in heavy syrups or with high sodium content, however, do detract from nutrient content.
- CDC’s 2009 Behavioral Risk Factor Surveillance System (BRFSS) data indicates less than half of all Americans consumed the recommended number of servings of fruits and vegetables in their diets. Approximately 28% of Iowa adults eat 2 or more servings of fruit per day and 22% eat 3 or more servings of vegetables per day (Center for Disease Control and Prevention, 2010).
- Engagement in where and how food is produced can lead to increased consumption of fruits and vegetables (O’Hara, 2011).

References


Sachs, E. and G. Feenstra. Undated. Emerging Local Food Purchasing Initiatives in Northern California Hospitals. Agricultural Sustainability Institute, University of California-Davis.

Swenson, D. 2006. The Impacts of Increased Fruit and Vegetable Production and Consumption in Iowa: Phase II. Leopold Center for Sustainable Agriculture, Iowa State University.
