The Economic Impacts of Community & Regional Food Systems

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What is a food system?
Why do food systems matter?
What we know about economic impacts of food systems
What we don’t know
Data and Resources
What is a community food system

Shared Principles of ADA, AMA, ANA, APA, APHA

A food system includes everything from farm to table. A community food system is a food system in which **food production, processing, distribution and consumption are integrated** to enhance the environmental, economic, social and nutritional health of a particular place. A community food system can refer to a relatively small area, such as a neighborhood, or progressively larger areas – towns, cities, counties, regions, or bioregions. We support socially, economically and ecologically sustainable food **systems that promote health** – the current and future health of individuals, communities and the natural environment. A healthy, sustainable food system emphasizes, strengthens, and makes visible the interdependent and inseparable **relationships between individual sectors** (from production to waste disposal) and characteristics (health-promoting, sustainable, resilient, diverse, fair, economically balanced and transparent) of the system.”

For more definitions of food systems
Trends in Local Foods Activity

Figure 1
Direct-sales farms and direct sales of local foods, 1978-2007

Note: Inflation adjusted sales were calculated based on the gross domestic product implicit price deflator published by the Bureau of Economic Analysis, U.S. Department of Commerce and calibrated to 2007=100.
## Direct Sales for Human Consumption

### Value of Products Sold Direct to Consumers ($1000)

<table>
<thead>
<tr>
<th></th>
<th>2002 (adj)</th>
<th>% Total Sales</th>
<th>2007</th>
<th>% Total Sales</th>
<th>Overall % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>33,433</td>
<td>0.52</td>
<td>43,491</td>
<td>0.48</td>
<td>30%</td>
</tr>
<tr>
<td>United States</td>
<td>934,035</td>
<td>0.40</td>
<td>1,211,270</td>
<td>0.40</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Number of Farms Selling Direct to Consumers

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>% Total</th>
<th>2007</th>
<th>% Total</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>4,918</td>
<td>6.4%</td>
<td>6,243</td>
<td>7.9%</td>
<td>26.0%</td>
</tr>
<tr>
<td>United States</td>
<td>116,733</td>
<td>5.5%</td>
<td>136,817</td>
<td>6.2%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

US Agricultural Census 2002 and 2007
Direct Sales for Human Consumption, 2007

Total amount of sales made directly to consumers (in thousands)

- $1-$250
- $250 - $499
- $500 - $999
- $1000 - $1499
- $1500 - $2684

US Agricultural Census 2002 and 2007
Maps from www.foodsystems.wisc.edu
Farmers Markets, 1994-2011 US, Wisconsin

Number of Farmers Markets
1994-2011

Spatial Hotspot Analysis
Getis-Ord Test

United States
7,175

Wisconsin
231

USDA Agricultural Marketing Services Division - Farmers Market Database http://search.ams.usda.gov/farmersmarkets/
Maps from www.foodsystems.wisc.edu

University of Wisconsin-Extension
Trends are driving community interest
Goals of Food Systems Initiatives

- Improved nutrition-health and diet related disease
- Environmental sustainability
- Transparency and food safety
- Food quality
- Social justice
- Social capital or relationship building
- **Community or rural economic growth and development**

Rationales supporting food systems initiatives for economic development

- Import substitution - capture more local dollars and that will multiply in the economy
- Producers can charge higher prices
- Region has appropriate assets i.e. existing demand, small producers
- Address an identified challenge, i.e. distribution or training
Strategies for Promoting Local Foods as Economic Development

Waste Management
- Farmer training, networks, technical support programs
- Farm incubators
- Community gardens
- Processing facilities
- Kitchen incubators
- Food hubs
- Cooperative distribution
- Farm to school
- Composting programs

Production

Distribution & Marketing

Consumption
Do local foods contribute to economic development?

**What we know**

Lots of studies about impact of local foods

If # people and # institutions in X region increase local food purchasing to X% this will mean $$ more dollars spent in the local community
If # people and # institutions in X region increase local food purchasing to X%, what does this mean for the local community? Impact studies let’s take a closer look…

Where are they buying food now?

Are people going to eat more, or replace existing purchases?
Economic Impact vs. Growth vs. Development

- Economic impact is a static concept (with and without)
- Growth and Development are dynamic concepts
Let's take a closer look…

Some event

The growth rate is 2% prior to the event and is then 3% after the event.

The “impact” of the event is said to be 1%.
Do local foods contribute to economic development?

What we know

Lots of articles advocating for growth of local foods through particular types of markets or channels like CSA, food hubs, farmers markets

(Matson and Thayer 2013; Matson and Sullins 2013; Stagl 2002; Brown and Miller 2008; Brsier et al 2007; Taylor and Miller 2010)
Do local foods contribute to economic development?

**What we know**

“As community development practitioners and planners play an important role in food systems design, organization, and policy, it is important for practitioners to distinguish between objective, research-based information and speculative advocacy-oriented analysis.”

- Stickel and Deller, *Local Foods and Community Development Annotated Bibliography*
Do local foods contribute to economic development?

**What we know**

- We know a lot about direct markets.
- Some evidence of minimal positive impact from important substitution (Swenson 2008, Hughes 2008).
- Our research suggests that local foods have minimal to no impact on overall economic growth (Deller, Brown, Haines, and Fortenbery 2014).
Do local foods contribute to economic development?

What we DON’T KNOW

- Know very little about inter-mediated markets (restaurants, hospitals, schools) “which may account for significantly more local food sales than direct to consumer sales alone.” (Low and Vogel, 2011)

Direct Sales (2007): $1.2 billion
Intermediated Sales (2008): $4.8 billion
Do local foods contribute to economic development?

**What we DON’T know**

There is no universally accepted definition for “local”

consumer or intermediated consumer perspective (Dunne, 2010, Zapeda, 2006).


geo-political boundaries - states (Darby, 2008)

local ownership of farm (Low, 2011)

relationship to place (Marsden, 2000)

production techniques used

marketing channels used (Low, 2011)

size/scale (Low, 2011)

products (commodity versus non commodity crops)

quality relationships /supply chain (Marsden, 2000, King, 2010)

Integration of supply chain (Marsden, 2000)
Where to Find Data

Wisconsin Food Security Portal

www.foodsecurity.wisc.edu

Project Description

The Wisconsin Food Security Project provides localized information about the food security infrastructure in Wisconsin. The project promotes food security by helping planners and policymakers identify strengths and gaps in their communities, and by helping service providers and individuals and families to locate food-related resources. Community planners can use this website to learn about the components of food security—including economic security, the food environment, federal food assistance programs, and emergency food programs. Individuals, families, and service providers can use this website to learn about where food programs are located—including summer meal programs for children, farmers markets, food pantries, and more.

Getting Started

To create custom maps, click on the mapping tab. More information on creating and saving maps is available on the help tab.

To create a custom profile for a county, municipality, or school district, click on the profiles tab.

To create custom charts showing how local characteristics change over time, or illustrating relationships among local characteristics, click on the charts tab.

To download data for multiple locations into a spreadsheet, click on the download data tab. A description of the variables available for downloading is available on the help tab.
Farmers market access and availability for people with limited incomes

Persons below 185% poverty, % 2006-10

- 0 to 14.4
- 14.5 to 20.7
- 20.8 to 28.0
- 28.1 to 38.3
- 38.4 to 102.0

Farmers Market
Accepting FoodShare

Wisconsin Food Security Project

UW Extension University of Wisconsin-Extension
Where to Find Data

North Central Region
Count Food Systems Profiles Portal

Home | How To Use Your Profile | Food Systems Resources | Data Definitions & Sources | About This Project

View a Profile:

--Select a County-- OR Select a County Using a Map

Regional Maps by Indicator [Maps Explanation]

--Select a Map--

The production, consumption, distribution, and disposal of food are critical to the health in the Midwest. This Food Systems Profile provides an overview of existing data across a broad scope of food systems activities, documents how key indicators are changing over time, and serves as a baseline for community leaders and educators to identify opportunities for growth or expansion in regional food systems. Data for this profile was accessed from existing secondary data sources including the US Census of Agriculture and the United State Department of Agriculture. The regional average includes: Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

Site Created by: The Applied Population Laboratory

www.foodsystems.wisc.edu
Are local foods a driver of your local or regional economy?

- SWOT
- What are our assets?
- What physical food related infrastructure exists?
- Who are our major employers?
- What demographic or other trends are affecting our community?

Sources
- USDA Food Environment Atlas
- Know your farmer know your food Compass Map
- USDA Agricultural Census
LOCAL FOODS AND COMMUNITY ECONOMIC GROWTH AND DEVELOPMENT

Index of "Local Foods"
Getis-Ord Gi*

"Local Foods" Index
GiZScore
-5.87 - -3.34
-3.33 - -2.14
-2.13 - -1.58
-1.57 - 0.00
0.01 - 2.14
2.15 - 7.49
7.50 - 18.81
Where to Find Data

USDA Food Environment Atlas

http://www.ers.usda.gov
List of Data References for Public Use

Ag Census: http://www.agcensus.usda.gov/

2013 Status of Wisconsin Agriculture

Economic Impact of Wisconsin Agriculture:
http://www.uwex.edu/ces/ces/ag/wisag/

USDA Farmer’s Market:
http://search.ams.usda.gov/farmersmarkets/

Local Harvest
www.localharvest.org

USDA Food Environment Atlas

County Health Rankings
http://www.countyhealthrankings.org/
Food Systems Resources for Planners

American Planning Association Food Systems Resources & Food Interest Group - lots of resources!
http://www.planning.org/nationalcenters/health/food.htm

Planning and Zoning for Local food Systems- Food Production
http://www.uwsp.edu/cnr-ap/clue/Documents/Ag/FoodSystemProductionFinal.pdf

Urban Agriculture in Practice

Addressing Food Systems Through Comprehensive Plans
References


References


THANK YOU!

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