Strengthening Local Markets through Partnerships and Engagement

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Colorado State University

Presentation to Wyoming Consumer Issues Conference
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What we Should Consider…

- **Consumer Motivations and Choices**
  - What Outcomes do they Seek from more Local and Direct Market Relationships?
  - How Does this Influence their Behavior?

- **Grassroots Developments**
  - Building Farmers and Ranchers
  - New Govt and Public Programs to Support Prod.

- **The Role of Community Driven Programs**
  - Local Foods to Address Food Security
    - Farm to School….has led to new Extensions to Srs. and Food insecure
  - Remaining Barriers and Challenges
Locavores: An Overview

- Many potential factors driving consumer trends
  - Perceptions of quality (nutrition, fresh)
  - Assurances of safety and health benefits
  - Support for the local economy, farms
  - Environmental benefits, farmland preservation

- More broadly, what are private and public attributes consumers seek? Are there research and policy implications?
Local Food and Farmers Markets

Worldwide, interest has grown

Farmers markets more seasonal but increasing as well
U.S. National Map of Community Supported Agriculture
“You may not feel any healthier right away, but you’ll definitely feel more smug.”
Funding of this research project by USDA/CSREES NRI grants #2005-55618-15634 and 2008-35400-18693 are gratefully acknowledged.


Willingness to Pay Differences

<table>
<thead>
<tr>
<th></th>
<th>Max Premium</th>
<th># would not buy</th>
<th>n</th>
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<tbody>
<tr>
<td><strong>Local, Organic, 25% Higher</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin C Melon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Sample</td>
<td>0.257</td>
<td>284</td>
<td>1549</td>
</tr>
<tr>
<td></td>
<td>(0.25)</td>
<td>18.3%</td>
<td></td>
</tr>
<tr>
<td>Supermarket/center</td>
<td>0.243</td>
<td>199</td>
<td>1023</td>
</tr>
<tr>
<td></td>
<td>(0.25)^a</td>
<td>19.5%</td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>0.286</td>
<td>74</td>
<td>466</td>
</tr>
<tr>
<td></td>
<td>(0.26)^a</td>
<td>15.9%</td>
<td></td>
</tr>
<tr>
<td><strong>Purple, Organic 3x Higher</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antioxidant Potatoes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Sample</td>
<td>0.329</td>
<td>684</td>
<td>1549</td>
</tr>
<tr>
<td></td>
<td>(0.50)</td>
<td>44.2%</td>
<td></td>
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<tr>
<td>Supermarket/center</td>
<td>0.306</td>
<td>457</td>
<td>1023</td>
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<tr>
<td></td>
<td>(0.48)^a</td>
<td>44.7%</td>
<td></td>
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<tr>
<td>Direct</td>
<td>0.368</td>
<td>199</td>
<td>466</td>
</tr>
<tr>
<td></td>
<td>(0.54)^a</td>
<td>42.7%</td>
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</table>

- Average 44% premium for melon (from base $0.59):
  - $0.075 cents higher than local (29% premium)
  - Direct shoppers 18% higher

- Average 17% premium for potatoes (from base $1.95):
  - $0.10 cents higher than for organic claim: 22%
  - Direct consumers 20% higher

^a Mean significantly different from rest of sample at the 5% level.
Support for ag and local economy seems most important.
Food miles does not seem to be driving locavores.
Organic, Locality, and Food Miles – Implications for Trade, Supply Chains, Environment, and Consumer Welfare


Funding of this research project by USDA/CSREES NRI grant #2008-35400-18693 are gratefully acknowledged.
Fall 2008 Local Foods Survey

• Much higher penetration for local foods (over 80%), than organics (over 50%), with significant share buying both (over one-third)
• County and/or 100 mile radius seem to be the majority perception of local
• Expense and availability as most commonly cited “barriers”
What is “Local”? 

Produced within 50 mile.. 
Produced within 100 mile.. 
Produced within 300 mile.. 
Produced within 500 mile.. 
Produced in my county. 
Produced in my state. 
Produced in United States. 
Produced in Canada. 
Produced in Mexico.
Median WTP Comparisons (Tomatoes)
Changes in Perceptions of Food System Partners after 2008 Food Safety Events

![Bar chart showing changes in perceptions of food system partners after 2008 food safety events. The chart includes stakeholders such as USDA, US Farm, Food Retailers, FDA, Intl Trade Food, Restaurants, and Food Dist. & Handlers. The bars indicate the percentage of individuals who felt perceptions stayed the same, worsened, improved, or had no answer.](image-url)
What Does Consumer Psychology Say?

- **Perceived Social Norms**
- **Attitude**
- **Perceived Consumer Effectiveness**
- **Current Purchase Behavior (WTP)**
- **Availability**

### Dimension and Mean

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
<td>5.43</td>
</tr>
<tr>
<td>Impact local economy</td>
<td>5.08</td>
</tr>
<tr>
<td>Positive effect on society</td>
<td>4.74</td>
</tr>
<tr>
<td>Positive impact on environment</td>
<td>4.33</td>
</tr>
<tr>
<td>Statement for social fairness</td>
<td>4.09</td>
</tr>
</tbody>
</table>
Consumer Behavior

• Consumers are more savvy in using their money to make a public statement of activism and pursue “sustainable” consumption
  – Vermeir and Verbeke (2006), among others

• Farmers Markets role in enhancing “perceived consumer effectiveness” (PCE)
  – Extent to which the consumer believes that their personal efforts can contribute to the solution of a problem
Fruit and Vegetable Sales, 2007
County Average: $10.289M
Standard Deviation $82.043M

Direct Sales, 2007
County Average: $0.373M
Standard Deviation: $0.965M
Pearson correlation coefficient

<table>
<thead>
<tr>
<th>US County Totals</th>
<th>Obesity, % of adults</th>
<th>Cardiovascular disease mortality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Sales*</td>
<td>-0.21</td>
<td>-0.15</td>
</tr>
<tr>
<td>Number of CSAs*</td>
<td>-0.19</td>
<td>-0.16</td>
</tr>
<tr>
<td>Number of Farmers' Markets</td>
<td>-0.27</td>
<td>-0.14</td>
</tr>
<tr>
<td>Fruit and vegetable sales over total farm sales*</td>
<td>-0.18</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

Sources: * data from Census of Agriculture (2007)
Number of farmers' markets from USDA-ERS Food Environment Atlas (2010)
Obesity rate from CDC (2006-2008)
Cardiovascular mortality calculated using CDC Mortality Tape (98-00 and 03-05)
Note: Correlations for 2990 US counties for which data were available
Why Do Consumer Motivations Matter?

- Local Markets are Place-based....
  - .....and require place-authentic marketing messages, business models, and community partnerships
- Perhaps the Perception of “making a difference” is linked to social capital you are investing in...
  - ....or farmers and food producers in the system have being invested in their business innovations
- What role can communities play in leveraging the opportunities of altruistic consumers?
  - Rethinking community approaches to food systems
Building Farmers in the West and Colorado Building Farmers

DAWN THILMANY, MARTHA SULLINS, ADRIAN CARD
COLORADO STATE UNIVERSITY EXTENSION
WASHINGTON, UTAH, IDAHO, OREGON, NEW MEXICO,
WYOMING, ARIZONA, MONTANA

Funded by USDA Beginning Farmers and Ranchers Development Program
(grant award number 2009-49400-05877 and 2012-00712).
Our farmer/rancher participants said:

- 90% would recommend the program to others
- 87% increased their farming
- 79% have a network of farmers with whom to work

After the program, participants with a:

- Financial plan grew by 89%
- Marketing plan grew by 85%
- Business plan grew by 78%
- Production plan grew by 70%

Our participants will produce new products and use new markets:

- Herbs, 45%
- Fruit, 48%
- Vegetables, 69%
- Meat/animal products, 27%
- Dairy products, 11%
- Eggs, 31%
- Other, 26%

- Farmers’ Market, 35%
- Restaurant, 34%
- CSA, 26%
- Other, 17%
- Wholesale, 13%
- Individuals, 14%
- Farm/Road Stand, 16%

- Other, 26%

Flowers, 34%
Value-added products, 29%
Building Farmer Linkages to the Food System

- Fort Lewis College Farm Incubator
  - Funded by Colorado Dept of Ag Specialty Crops Grant
  - May be an Anchor region for Colorado Land Link
- Northern Colorado Food Cluster Winters Markets
  - FMPP
- Extended Leasing of Boulder Open Space to Small Specialty producers
  - Larimer County exploring similar options
- GreenLeaf and Sprout City Farm
  - Two key Denver urban ag initiatives that won Denver Slow Food micro-grants
Food Community: Where Cooperation Matters

- Wholesale buyers, driven by consumer demand, have shown a desire to purchase local food
  - In a National Restaurant Survey, #1 trend for 2011 was cited as locally sourced meat and seafood and the number two trend is locally sourced produce (Chef Survey: What's Hot in 2011, 2011)
  - 2,352 farm to school programs (Farm to School, 2011)
  - 164 farm to college programs (Farm to College, 2011)
- The demand exists, the challenge is in the supply chain
What makes a value chain different?

- All actors are seen as partners with each receiving a fair price
- High level of transparency and trust throughout the organization
- Partners in the value chain provide high levels of support, interaction and assistance with one another
- Focus on long-term relationships, creating horizontal linkages to provide adequate volume and partnerships to utilize existing infrastructure and knowledge
A Scan of Colorado-CSU Linkages

- **Value-Based Market Development**
  - Farm to School and Farm to Seniors
  - Food Bank Partnerships
  - Value Chains and Food Hubs

- **Technical Assistance and Partnerships**
  - Colorado Farm to Market and Cottage Foods Project
  - Colorado MarketMaker

- **Food Assessments to Inform Policy**
  - Northern Colorado Food Assessment
    - Pueblo, La Plata, Chaffee, Denver, Routt Counties
  - New Colorado Food Policy Network
Market Development

AN OVERVIEW OF INNOVATIONS
FARM TO SCHOOL
IN COLORADO
FTS Efforts as of 2012
District 6 Local Purchases

Actual Purchases – 2011-2012 SY

- **Produce**: 4% ($28,297.22)
- **Grains**: 5% ($35,830.80)
- **Beef**: 1% ($6,196.50)

**Dairy Products**: 90% ($596,123.07)

Total: $666,447.59
District 6 Local Purchases

Anticipated Purchases 2012-2013 SY

22% of all food purchases from local sources!

Dairy Products 86% $600,000.00

Produce 7% $51,845.60
Grains 5% $37,000.00
Beef 1% $8,000.00

Total $696,845.60
The Burrito Story...

Before: 35+ ingredients
532 MG of Sodium

After: 12 ingredients
406mg NA
Small Farms by Market Outlet

- FM: 41%
- CSA: 22%
- Other direct: 18%
- Distributor: 8%
- Restaurant: 6%
- Institution: 1%
- Farm stand: 1%
- Other wholesale: 3%
- Other direct: 1%

Average Sales: $24,000
Average Labor: 1.7 year-round full time employees
N=8
Large Farms by Market Outlet

- Other wholesale: 45%
- FM: 21%
- Farm stand: 7%
- Restaurant: 6%
- Retail: 6%
- Marketing co-op: 6%
- Other direct: 3%
- Other wholesale: 45%

Average Sales: $5,466,667
Average Labor: 15.4 year-round full time employees
N=3
# New York Food Systems: Expenditure Patterns

<table>
<thead>
<tr>
<th>Item</th>
<th>Capital District</th>
<th>Local Food Sales</th>
<th>No Local Food Sales</th>
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<tbody>
<tr>
<td></td>
<td>All F/V/Crop</td>
<td>All F/V/Crop</td>
<td>All F/V/Crop</td>
</tr>
<tr>
<td>All livestock related</td>
<td>6% 1%</td>
<td>18% 1%</td>
<td>29% 2%</td>
</tr>
<tr>
<td>Seeds and plants</td>
<td>10% 10%</td>
<td>3% 5%</td>
<td>4% 9%</td>
</tr>
<tr>
<td>Fert and chem</td>
<td>8% 10%</td>
<td>7% 10%</td>
<td>8% 21%</td>
</tr>
<tr>
<td>Labor</td>
<td>22% 24%</td>
<td>18% 29%</td>
<td>14% 14%</td>
</tr>
<tr>
<td>Fuel and oil</td>
<td>9% 9%</td>
<td>7% 9%</td>
<td>7% 10%</td>
</tr>
<tr>
<td>Rep and Maint</td>
<td>8% 8%</td>
<td>11% 11%</td>
<td>9% 10%</td>
</tr>
<tr>
<td>Custom work</td>
<td>2% 1%</td>
<td>2% 2%</td>
<td>4% 3%</td>
</tr>
<tr>
<td>Utilities</td>
<td>6% 7%</td>
<td>4% 3%</td>
<td>3% 3%</td>
</tr>
<tr>
<td>Other var exp</td>
<td>16% 15%</td>
<td>16% 18%</td>
<td>10% 10%</td>
</tr>
<tr>
<td>Tax, land, prop.</td>
<td>7% 7%</td>
<td>9% 2%</td>
<td>6% 10%</td>
</tr>
<tr>
<td>Insurance prem</td>
<td>5% 5%</td>
<td>3% 4%</td>
<td>3% 5%</td>
</tr>
<tr>
<td>Rent and lease</td>
<td>2% 1%</td>
<td>1% 2%</td>
<td>2% 3%</td>
</tr>
</tbody>
</table>

NY ARMS: Bold indicates statistical difference in means at significance level of 10% or lower (Local food sales vs. no local food sales)

Jablonski and Schmit 2014
Food Assistance as a Partner

- VOA currently serve 5,100 meals per day
  - Integrate local produce/lightly processed into a variety of meal programs:
    - Congregate Senior Meal Sites
    - Meals on Wheels
    - MOMS Meals (Third Party)
- Coordination of Incubators
  - Food Bank of Larimer County
  - Produce Bounty of Durango
- Urban Agriculture
Colorado MarketMaker

Colorado MarketMaker:
- 5 taste of the states featured on website
- 9 business spotlights featured on website
- 12 businesses featured in CSU Extension Local Foods Newsletter

Most comprehensive online directory for food related businesses in the state

Farm to School profiles

Used in CSU agribusiness mktg

Profiles and Users

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Agritourism</td>
<td>185</td>
</tr>
<tr>
<td>Buyer</td>
<td>24</td>
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<tr>
<td>Eating &amp; Drinking</td>
<td>13,774</td>
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<tr>
<td>Farmer/Rancher</td>
<td>549</td>
</tr>
<tr>
<td>Farmers Markets</td>
<td>105</td>
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<tr>
<td>Fisheries</td>
<td>7</td>
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<tr>
<td>Food Retailer</td>
<td>6,898</td>
</tr>
<tr>
<td>Processor</td>
<td>1,893</td>
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<tr>
<td>Wholesaler</td>
<td>1,199</td>
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<tr>
<td>Wineries</td>
<td>83</td>
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2012 Averages

<table>
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<tr>
<th>Category</th>
<th>Count</th>
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<tbody>
<tr>
<td>Total Users</td>
<td>16,000</td>
</tr>
<tr>
<td>Website Hits</td>
<td>229,000</td>
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www.comarketmaker.com
Colorado Farm to Market
http://cofarmtomarket.com

This site was developed to familiarize Colorado food producers and food product manufacturers with federal, state and local food licensing regulations and to help ensure that the path food travels from farm to fork is safe.

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Envisioning the Northern Colorado Food System

www.larimer.org/foodassessment/

- Understand the local food system as it relates to public health, economic development and quality of life
- Identify economic development opportunities resulting from current gaps in the food system
- Document needs and possible projects to strengthen the local food system
USDA Programs that Support Food Hub Development

- **Rural Development**
  - Rural Business Enterprise Grant
  - Rural Business Opportunity Grant
  - Value Added Producer Grant
  - Business and Industry Guaranteed Loan Program
  - Community Facilities Program
  - Rural Economic Development Loan and Grant Program

- **National Institute of Food and Agriculture**
  - Community Food Projects Competitive Grant Program
  - Sustainable Agriculture Research and Education (SARE)
  - Organic Research and Extension Initiative

- **Agricultural Marketing Service**
  - Farmers’ Market Promotion Program
  - Federal-State Marketing Improvement Program

- **Farm Service Agency**
  - Farm Storage Facility Loan Program

- **Natural Resources Conservation Service**
  - Environmental Quality Incentives Program
  - Conservation Innovation Grant

- **Risk Management Agency**
  - Risk Management Education

2011-2012 – 76% of federal food hub $ came from Depts. of Commerce, Transportation, Treasury, HHS, and HUD.
Market Development and Applied Research

- **Colorado Dept of Ag Specialty Crops**
  - CSU Program for Smaller Projects

- **Rural Development:**
  - Value Added Producer Grants

- **Ag Marketing Service:**
  - Farmers Market Promotion Program
  - Federal State Marketing Improvement

- **NIFA**
  - Economic Viability of Small & Mid-sized Farms
  - SARE and WCRME regional grants
  - Community Food Projects
  - Beginning Farmer and Rancher Development