

# Local and Regional Food Systems: An Overview of Research Initiatives & Opportunities

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# Today's Presentation

- NERCRD
- Webinar Series Overview
- Local & Regional Food Systems Research Base
  - NERCRD Local and Regional Foods Conference
  - NESAWG/NERCRD Survey
  - Your Experience
- Opportunities to Further this Conversation



# Logistical Details

- Webinar Registrants
- Presentation Format
- Participation Instructions





# QUESTIONS



# NERCRD and Local & Regional Food Systems

- Center Overview
- Local & Regional Foods Interest & Activities
- Webinar Goals



# The Northeast Regional Center for Rural Development

- **Mission:** Enhance the capacity of Land Grant Universities to foster rural development and regional prosperity.
- **Approach:**
  - Research, Extension (Training & Educational Materials), Technical Support
  - Facilitation of shared learning, peer support, and collaborative efforts
- **Partners:**
  - Land Grant Universities
  - Community & Economic Development Agencies and Organizations
  - Sister Centers
- **Funding:** USDA National Institute of Food and Agriculture
- **Learn More:** [www.nercrd.psu.edu](http://www.nercrd.psu.edu)



# NERCRD's Interests & Activities

## Interests

- Immense interest
- Crosses several of our priority focus areas:
  - Balanced use of natural resources
  - Economic development & entrepreneurship
  - Community capacity building
- Overall potential contributions to rural communities

## Activities

- What Works! Conference 2005
- May 2009 Conference
- Listserv
- Research
- What Works Conference 2009



# Webinar Series

- Goals
  - Increase awareness
  - Facilitate shared learning & peer support
  - Spur research & extension
  - Further development goals
- Approach
  - Recap of research base
  - Delve into topics of interest





# Webinar Series

**April 9, 2010: Local and Regional Food Systems – An Overview of Research Initiatives and Opportunities**

**May 14, 2010: Local and Regional Food Systems – What’s the Difference and Why is it Important?**

\*Kate Clancy, Minnesota Institute for Sustainable Agriculture, University of Minnesota

\*Kathy Ruhf, Northeast Sustainable Agriculture Working Group

**June 11, 2010: Local and Regional Food Systems – Strategies for Food Systems Development**

\*Rich Pirog, Leopold Center, Iowa State

\*TBD





# QUESTIONS



# Research Overview: Initiatives and Opportunities

- May 2009 Conference  
<http://nercrd.psu.edu/LocalFoods/Conference.html>
  - Popular Claims
  - Social Science Research
- **10 Reasons Why You Want to Buy Local Foods**
- **Why Buy Local Foods?**
- **10 Reasons to Buy Local Produce**
- ***Top 10 Reasons to Eat Local***
- **10 Reasons to Eat Local Food**



# Common Popular Claims

<http://www.uvm.edu/vtvegandberry/factsheets/buylocal.html>

## Ten Reasons to Buy Local Food (Vern Grubinger, UVM)

1. Tastes and looks better
2. Better for you
3. Preserves genetic diversity
4. Is safe
5. Supports local families
6. Builds community
7. Preserves open space
8. Keeps taxes down
9. Benefits the environment & wildlife
10. Is an investment in the future



# Framing the Claims

- Benefits for:
  - Consumers
    - Nutrition, Safety, Appearance & Taste, Satisfaction
  - Producers
    - Higher prices, Direct feedback, Consumer support, Social connections
  - Communities
    - Supports local economy (jobs & lower taxes), Builds community, Maintains rural character, Strengthens ecological health (soil, water, habitat, biodiversity)



# The Research Within the Frame

## Conference Presentation Summaries

- **Local v. Regional** – Kate Clancy, Institute for Sustainable Agriculture, University of Minnesota
- **Community Impacts** – Clare Hinrichs, Rural Sociology, Penn State University
- **Consumer Perceptions** – Dawn Thilmany, Agriculture & Resource Economics, Colorado State University
- **Farm to School** – Mike Hamm, Michigan State University
- **Food Systems Infrastructure** – Rich Pirog, Leopold Center, Iowa State University



# Local v. Regional - Kate Clancy

- 35 years since “local foods” has entered discourse
- Projects started in 70’s; Literature started in 80’s
- Food Systems has multiple meanings
  - Global, country, region, local
  - Aspirational, descriptive, not specific or common meaning; means nothing with general public
- Local and Regional
  - Treated identically
  - No agreed up definition for either
  - No distinction in working definition
  - Used ad hoc



# Local v. Regional - Kate Clancy

## ...continued

- Why Local v. Regional is Important
  - Certain sized farms may be optimal for certain food systems
  
- Conflation of both terms w/ other terms
  - Environmental Sustainability
  - Direct Marketing





# Local v. Regional - Kate Clancy

## Research Needs

- Definition of local v. regional
- What farm sizes are optimum for what kinds of foods?
- What is the land base needed for what kinds of systems
- The role of local decision making in securing the land
- Ecosystem relationships (water, climate, wildlife)
- Infrastructure requirements (energy, capital)
- Systems research is needed
- Best practices re: solutions



# Community Impacts - Claire Hinrichs

- Focus of this research is at local level and nature/results of direct market exchanges (CSAs & Farmers Markets)
- Civic Agriculture – community as driver and outcome for this type of agriculture; presumes
  - Biological necessity = opportunity for interaction
  - Through interaction, community will be built
  - Through community building, lost social connections and cultural meaning will be restored
  - Timely given that research shows core non-family confidants significantly decreased between 1985 & 2004



# Community Impacts - Claire Hinrichs

- Three groups of community impacts
  - Social Connections
    - Consumers value social connections from CSA experience
    - Producers see relationships as valuable; see selves as being more involved in community
    - BUT – community building appears more conceptual than actual; producers carry the burden of community building but also economic motivations involved
    - Family relations
    - Gender relations
  - Learning & Behavioral Adaptation
    - Seen as learning experience for children but not assessed
    - FM customers say interaction more important than learning
    - Some settings (we: University of Montana) more of a learning experience than others
  - Social Justice & Equity Issues
    - CSAs & Farmers Markets mostly serving advantaged populations
      - Reasons for exclusions
      - Responses to exclusions but default to economic imperative



# Community Impacts - Claire Hinrichs

## Research Limitations & Opportunities

- Evidence for each category is mixed
- Largely based on single methods: surveys OR focus groups OR interviews; a combination would be better
- Research tends to be initiative specific; we need to look at an array of initiatives in settings
- Case study evaluations are helpful for individual cases but are not consistent or useful for comparisons & aggregating results; we need consistency in indicators & methods to build body of cumulative knowledge.



# Consumer Perceptions - Dawn Thilmany

## Overview of Research

- Multi-disciplinary work at Colorado State focused on Consumer Perceptions for these reasons:
  - Movement has been very consumer driven
  - Evidence for conscientious/civic minded consumers
    - Sets research agenda for understanding these perceptions, clarifying & educating
    - If consumers are willing to make these investments, what other currently underfunded public goods might they support that can be incorporated into policy



# Consumer Perceptions - Dawn Thilmany

## Overview of Research

- Used national survey data to look at:
  - Consumer motivators for paying a premium on certain types of food (e.g. fresh produce via direct market & organic production practices)
  - How people are defining local (a lot of different ways but most within county or <100 miles)
  - Extent to which consumers feel their purchasing behavior helps solve societal problems (eg. Carbon footprint, climate change, local economy, etc.)



# Consumer Perceptions - Dawn Thilmany

## Conclusions

- Diverse set of consumer perspectives; we need to help farmers develop diverse marketing materials
- Some people ok with certification for quality assurance others want direct connections to source
- Need to explore how to meet direct quality assurances on more regional scale markets



# Consumer Perceptions - Dawn Thilmany

## Areas for Further Research

- Mixed public good (mitigating food miles, carbon footprint reduction, support for local economy) and private good (safety and quality) aspects of food products for different consumers
- The role of market venues in the food supply chain (as markets scale up, do community-based organizations become the direct connection? Do farmers still stay in touch?)
- How do we use state, regional, federal marketing & certification programs to leverage consumer perceptions?





# Farm to School - Mike Hamm

## The Context for this Work

- **Challenges**
  - Nutrition is sadly lacking overall
  - Population is increasing
  - Land & water is threatened
- **Values: Sustainable Development**
  - Personal Health & Well-being
  - Vibrant Economies
  - Ecosystem health & enhancement
- **Opportunities**
  - Increase access to healthy food supply
  - Build individual businesses & economy
  - Stabilize land base, protect water systems
  - Strengthen ag and rural communities



# Farm to School - Mike Hamm

- Their approach – explore how meeting health goals can lead to economic development
  - Looked at what increasing consumption of Michigan grown fresh fruits & veges would do
    - Increased need for land, farms, & farmers
    - Increased income for farmers & related enterprises
- How to meet those needs
  - Training programs for farmers
  - Land link programs
  - Business skill development programs
  - Capital programs (Ag IDAs)
  - Season extension & link to food insecure families (hoop houses w/ farmers near high EBT use communities)



# Farm to School - Mike Hamm

- Given this interest how do we overcome barriers:
  - Geographic preference (policy)
  - Ag & Education Dept (collaboration)
  - Farmers & School Food Service speak different languages (guides to help them talk with each other)
  - Economic dev funds funneled through School Food Service for purchase of Michigan Foods
- Outcome: Simultaneously improving health & economic vitality



# Farm to School - Mike Hamm

- Farm to School within this Context
  - Surveyed School Food Service Directors re: interest in Michigan grown products – strong
  - Qualitative Study of farmers, school food service, & distributors why they participate in farm to school
    - Children's diet & preference
    - Economic benefit
    - Support for Community



# Food Systems Infrastructure - Rich Pirog

- Focus = Midwest but similar to NE
  - Notable success, BUT
  - Extensive challenges
- They started experimenting with a systems approach: The Value Chain Partners Initiative
  - Partners: farmers, processors, distributors, & eaters
  - Technical assistance, capital, policy



# Food Systems Infrastructure - Rich Pirog

- Tracking Outcomes:
  - Community & state support for business incentives
  - Different types of research & development
  - Technical & Financial assistance coupled
  - New collaborations between: NGOs, farmers, communities, state & federal govts., & businesses



# Food Systems Infrastructure - Rich Pirog

- Based in research:
  - Successful Networks
  - Trust Level Theory
  - Successful Business Development Models
  - Tacit Knowledge (knowledge has to be thought about to be shared & is recreated in the moment)



# Food Systems Infrastructure - Rich Pirog

- “Core Competencies” of Initiative
  - Research partners “info hubs”
  - Catalysts for cooperation
  - Magnets for attracting funding
  - Scouting for next thing to do (proactive)
- Ways it is different
  - Partners collaborate v. compete
  - Focus for success = network v. organization
  - Behavior: Grow funding, share knowledge, dispense leadership v. compete for funding, protect knowledge, hoard leadership
  - Structure = Decentralized v. Centralized





# Areas for Further Research -

Duncan Hilchey, Kathy Ruhf, Jennifer Wilkins

- Local v. Regional – what is the role of optimal scales & optimal geographies?
- What part food & farming system are we talking about at both levels? (food v. non food farms must be part of the conversation)
- How we talk about “food systems” needs to be considered – not meaningful to general populace
- What do we know about farmers in the context of local v. regional?
- How do we re-engage disenfranchised consumers & ensure security?
- What skills do consumers need to be take advantage of local and regional food systems?
- Need tools to help communities monitor & track their agriculture & food systems development
- Research should better understand & inform policy



# Areas for Further Research

## Important Considerations

- Need consistent & replicable indicators
- Research should be developed with researcher/practitioner partnerships
- Multi-disciplinary work is important





# QUESTIONS



# The Research Within the Frame

## Other Research - NE and Nationally

- Health & Nutrition
- Food Systems Analyses
- Producer Impacts -
- Environmental Impact
- Land Preservation & Use



# Health & Nutrition

- Is Local Produce More Nutritious? – Jennifer Wilkins, Division of Nutritional Sciences, Cornell University
  - Depends on: climate, environmental factors (light, temperature, rainfall, season, location, altitude, soil fertility), crop maturity, varieties, handling, transportation, storage & distribution practices.



# Food Systems Analyses, Modeling & Policy Development

- New York City Regional Foodshed Analysis, Conard & Ackerman, Urban Design Lab, Columbia University
  - In depth analysis of NYC Metropolitan Region food production & distribution capacity w/ focus on developing policy recommendations for increasing this capacity
  - Focus on land use, soil type, transportation infrastructure, climatic conditions, & consumption data
- Maryland Food System Mapping Project – Amanda Behrens, Project Manager, [abehrens@jhsph.edu](mailto:abehrens@jhsph.edu)
  - A mapping resource tool to analyze Maryland's food system – food access, the state of production and production capacity, processing and distribution linkages – utilizing Geographic Information Systems (GIS) technology
  - Designed for public health, nutrition and agriculture communities who are developing research and program activities to strengthen the local food
- 





# Food Systems Analysis, Modeling & Policy Development

- The Food System Scenario Tool, University of New Hampshire, Amy L. Barr, Graduate Research Assistant
  - [Web-based, trend analysis & alternative outcomes](#)
  - [based on socio-demographic & food systems data](#)
  - <http://FoodSolutionsNE.sr.unh.edu/>
- New England Milkshed Study Tim Griffin, Tufts University, Cris Coffin, American Farmland Trust
  - Regional supply chain analysis of milk & dairy products

# Health & Nutrition

- Is Local Produce More Nutritious? – Jennifer Wilkins, Division of Nutritional Sciences, Cornell University
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# Producer/Supplier Concerns

- IT and Local Food Systems: Use and Impact of Information Technology in Geographically Embedded Markets (Butler, Ridings, & Pike, Katz Graduate School of Business, Pittsburg University)
- Northeast Regional Infrastructure Working Group (Eric DeLuca, NESAWG)
  - Addressing questions related to appropriately scaled, decentralized processing infrastructure in the NE
  - Inventorying processing infrastructure



# Producer/Supplier Concerns

- Hybrid Food Networks - Bloom & Hinrichs, Penn State MS Thesis
  - Qualitative research on goals, operation and outcomes when conventional food distributors become conduits for local foods
- Experiences & concerns regarding hired labor for small and medium vegetable & fruit growers in PA - Schwartzberg & Hinrichs – Penn State MS Thesis
- Building a Producer Organization for American Origin Products – Barham & Hinrichs, USDA Cooperative Grants Project
- Assessing the Future of Food Manufacturing in New York State – Schmitt, Cornell University



# Environmental Impacts

- Food Miles & Environmental Impact (Pirog)
- Production Practices & Green House Gases (Weber & Matthews, Carlsson-Kanyama)



# Land Preservation & Use


- Regional Food System Planning – Alison Hastings, Delaware Valley Regional Planning Commission
  - Goals
    - Understand (parts of PA, NY, NJ) region's food distribution system, use of regional transportation system, evaluate agricultural resources & farmland preservation efforts
    - Assess food supply, safety, & security
- Diet & Land Use (Peters, Wilkins & Fick)





# QUESTIONS





Other research –  
What have we missed?  
Let's hear from YOU



# Opportunities to Continue the Conversation & Develop Collaborations

- Existing
  - Be a part of this webinar series...
  - NERCRD's Local & Regional Foods listserv
  - NESAWG Research & Assessments Work Group
    - <http://www.nefood.org/>
- IF there is interest....
  - Share your contact information w/ webinar participants
  - eXtension Community of Practice
    - <http://www.extension.org/main/communities>





Other Opportunities to  
Further this Conversation  
Let's Hear YOUR  
Suggestions





# THANK YOU FOR JOINING US...

If you want to reach us....

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# Please Give Us Your Input...

<http://www.surveymonkey.com/s/8NS7S5X>

