Regional Food Systems: A View from the Northeast U.S.

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• **Regional Attributes**
• **Drivers**
• **Regional research example**
• **Some open Questions**
Defining “Region”
Not as simple as we would think
Urbanized, High Density (in general)

http://www.nasa.gov/images/content/49261main_usa_nightm.jpg
Long-term agricultural challenges: Loss of farms, farmers, and infrastructure

Percent Change in Number of Cows

Legend
-10 to Positive
-32 to -10
-50 to -32
-80 to -50
-100 to -80
DRIVERS IN THE NORTHEAST
Continued Rapid Growth in Local Food
249 Farmers’ Markets
7,691 Farms
0.154 million acres harvested

239 Farmers’ Markets
92,900 Farms
23.7 million acres harvested
Chart 3: Top 10 States, Direct-to-Consumer Food Marketing as Share of Total Agricultural Sales, 2007

Source: Compiled by USDA Agricultural Marketing Service from 2007 Census of Agriculture data.

Geographic Concentration of production more susceptible to biological, abiotic, or political stresses
Concentration and Consolidation in Food System

• *Geographic Concentration*
• *Corporate Consolidation*
Concentration and Consolidation in Food System

- Geographic Concentration
- Corporate Consolidation
- Processing Consolidation
Scale as a Driver
Environmental Risk
Policy Conflicts: Internal and External
Science and Policy focus on Yield
Enhancing Food Security through Regional Food Systems

A Regional Research Collaboration

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7 Million Food-Insecure Consumers: A Day-to-Day Concern
Increasing Reliance on Food from Outside the Region (or Country)

http://www.usgcrp.gov/usgcrp/Library/nationalassessment/images/NE.jpg
Inequalities in Food Access
Can regional supply chains provide healthy foods to low-income consumers, at a price they can afford?
Market Basket Approach
Processing/Distribution

Access in Communities

Farm-level Production
Objective 1. Assess current and potential community-level constraints and opportunities for improving access to regionally produced healthy food for people in disadvantaged communities.
At 9 sites in Northeast:

- Assess food access
- Structural aspects to access
- Food basket comparison
- Consumer behavior
Sites Include:

- New York City
- Syracuse
- Baltimore
- Philadelphia,
- Pittsburgh
- Charleston, WV
- Essex Co. VT
- Sussex Co. DE
- Madison Co. NY
Objective 2. Identify and assess best food supply chain practices for underserved areas of the Northeast, compare site-specific, regional and global chains, and identify policy interventions.
• Case studies of regional supply chains
• Best practices for supply chains
• Foodshed and supply chain models
• Policy and scenario analysis
Objective 3. Quantify the current and potential capacity of the urban and rural Northeast to produce food that meets consumer needs.
• Baseline production
• *Capacity (GIS and modelling)*
• Where future production could occur
• *Climate change*
• Land use changes
Open Questions on Regional Food Systems

• Relationship between structural characteristics of food system and public health (not food choice or consumption)
• Land requirements for changing consumption patterns
• Benefits and costs of encouraging different scales of food system (from local to global)
Open Questions on Regional Food Systems

• Metrics of identifying optimal solutions in terms of scale
• Environmental liability of regional food systems
• Feasibility and logistics of regional supply chains to institutions (Farm to School, for example)
Thank you!