

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

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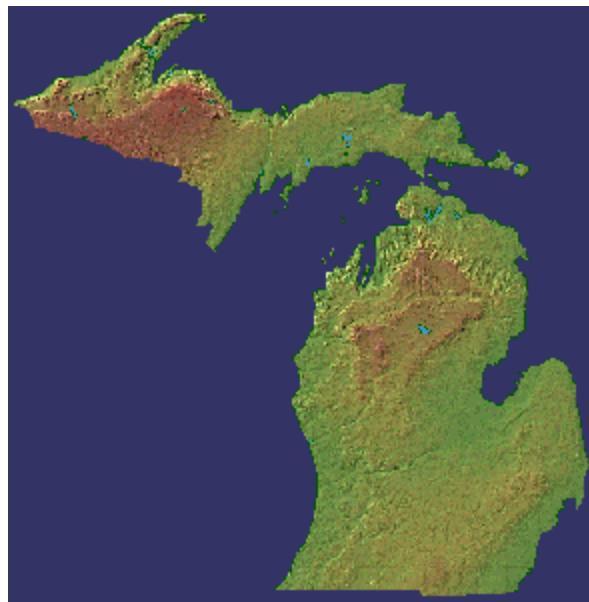


- **REGIONAL ATTRIBUTES**
- **DRIVERS**
- **REGIONAL RESEARCH EXAMPLE**
- **SOME OPEN QUESTIONS**



# Defining "Region"

Not as simple as we would think



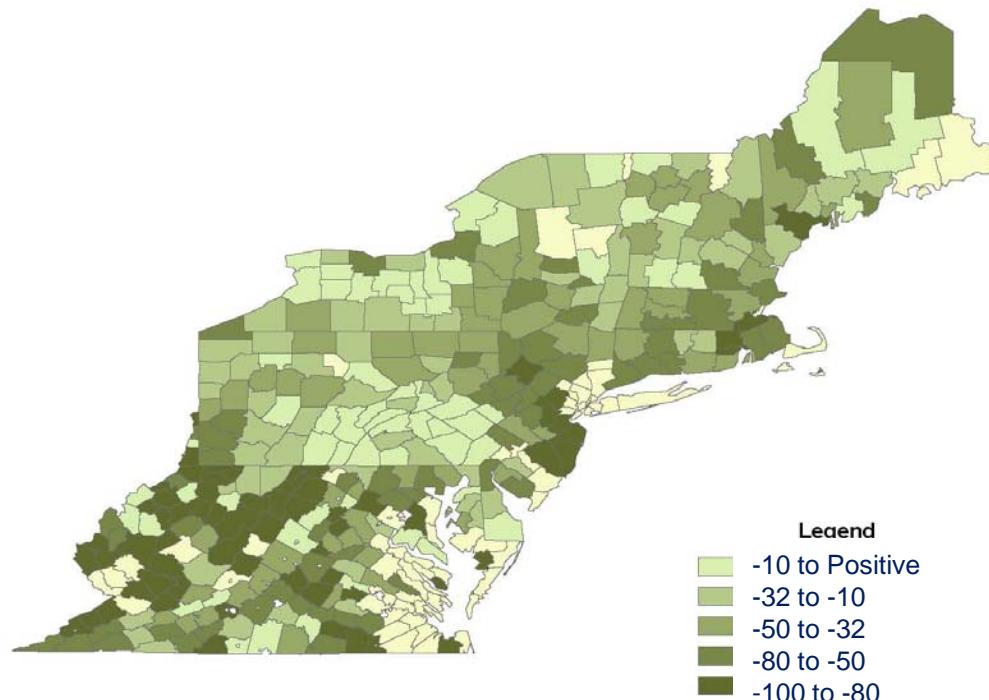
# Urbanized, High Density (in general)



[http://www.nasa.gov/images/content/49261main\\_usa\\_nightm.jpg](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



DRIVERS  
IN THE  
NORTHEAST

# Continued Rapid Growth in Local Food



<http://www.fns.usda.gov/wic/images/FMNPfa2.jpg>

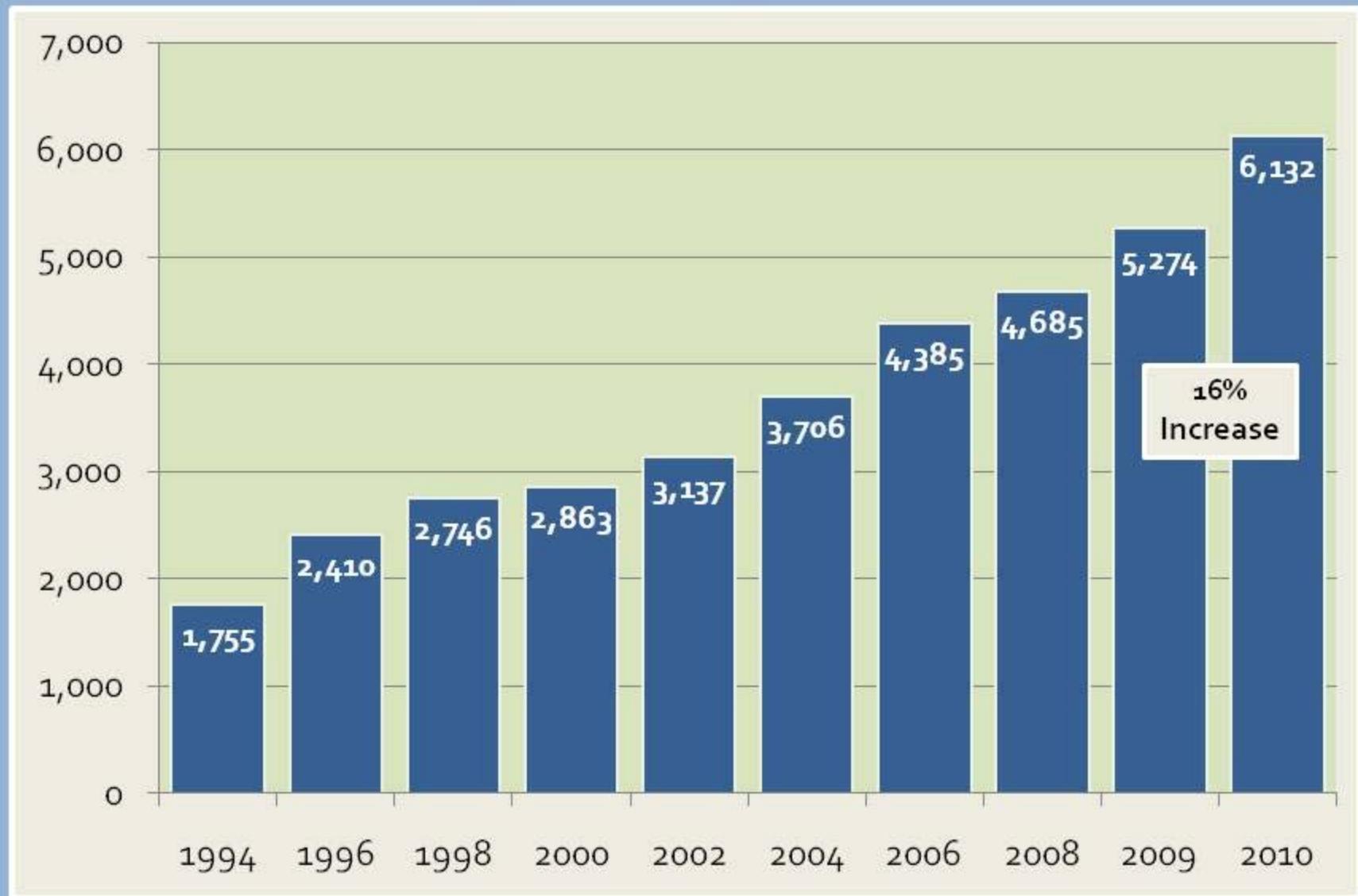


<http://washington.ifas.ufl.edu/images/ChipleyFarmersMarket2008005.jpg>



[http://www.fnec.cornell.edu/Uploads/FMNP/barrels\\_of\\_peppers.jpg](http://www.fnec.cornell.edu/Uploads/FMNP/barrels_of_peppers.jpg)

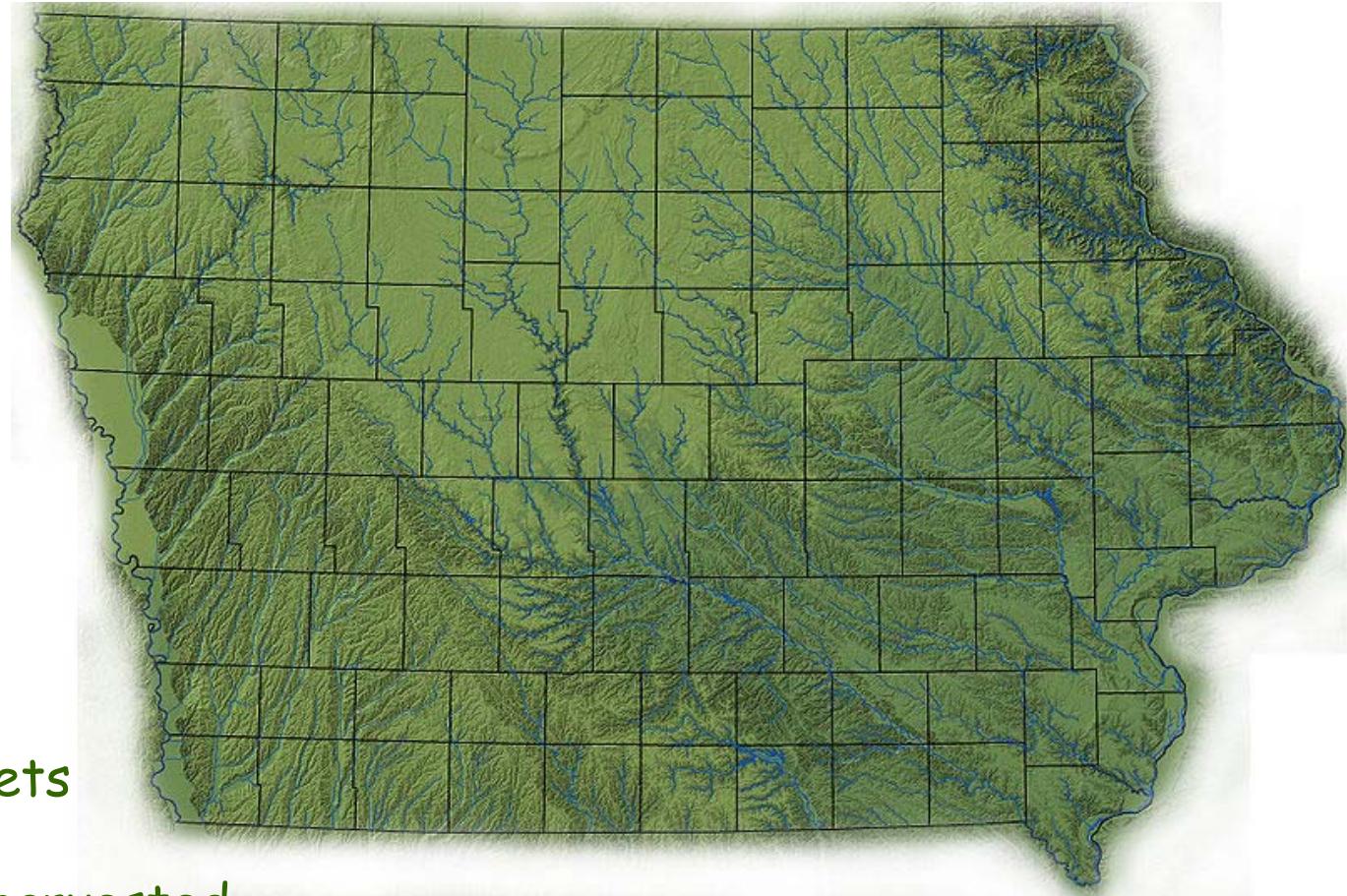
# Number of Operating Farmers Markets



Source: USDA-AMS-Marketing Services Division

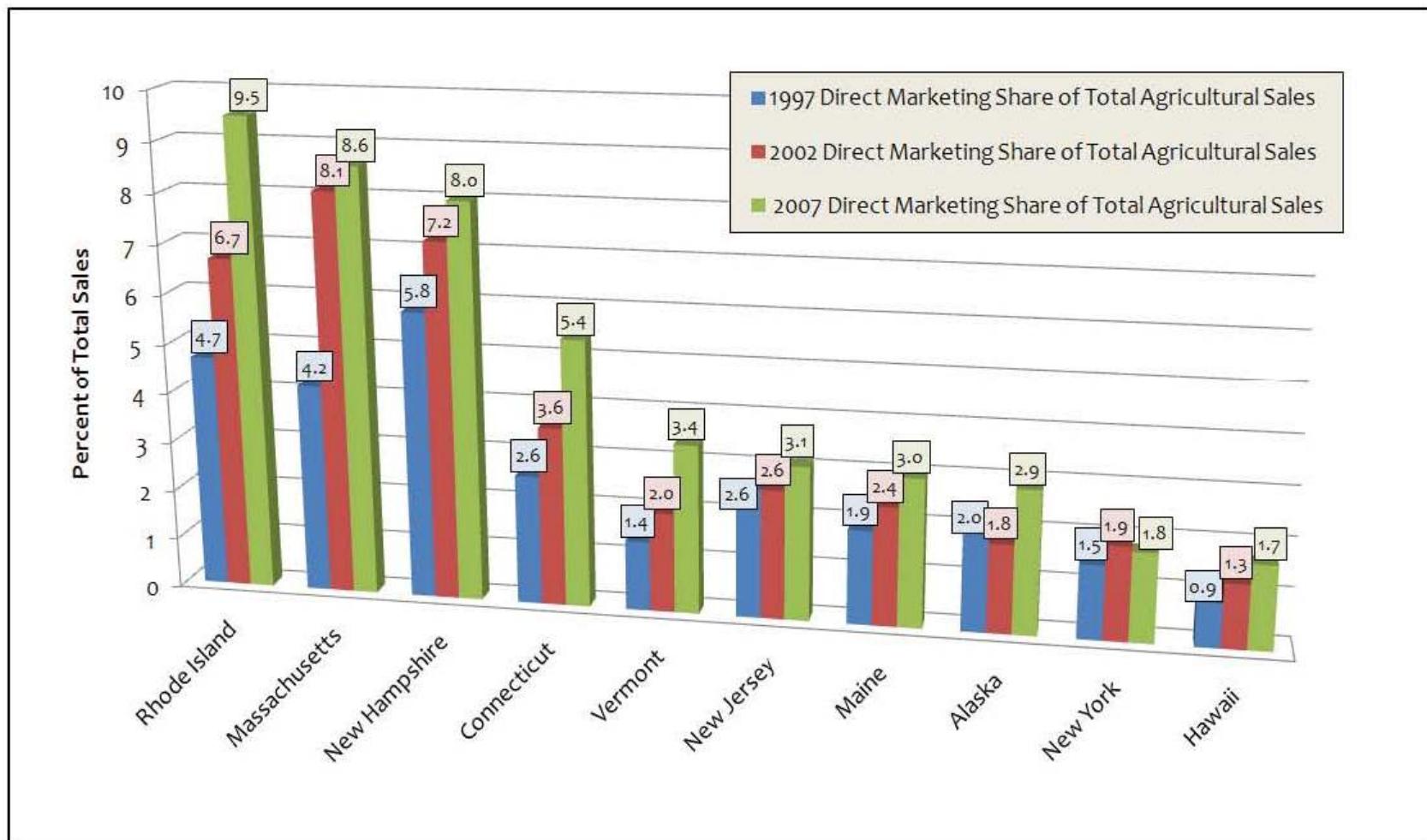


249 Farmers' Markets  
7,691 Farms  
0.154 million acres harvested



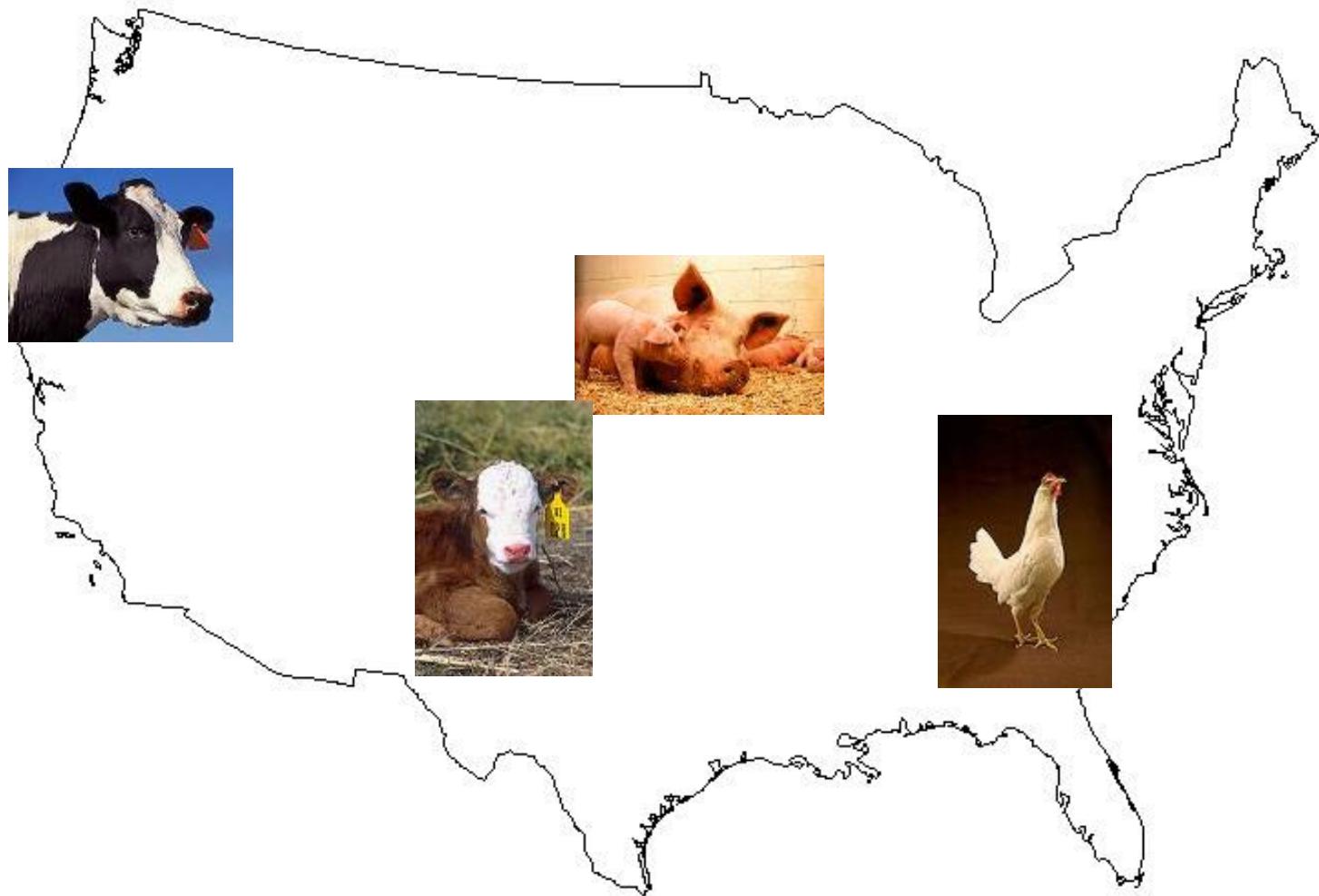
239 Farmers' Markets  
92,900 Farms  
23.7 million acres harvested

**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

# Concentration and Consolidation in Food System



*Geographic Concentration of production more susceptible to biological, abiotic, or political stresses*

# Concentration and Consolidation in Food System

- Geographic Concentration
- Corporate Consolidation



Ken Hammond, USDA

# Concentration and Consolidation in Food System

- Geographic Concentration
- Corporate Consolidation
- Processing Consolidation



# *Scale as a Driver*



Photo by Eric Brennan



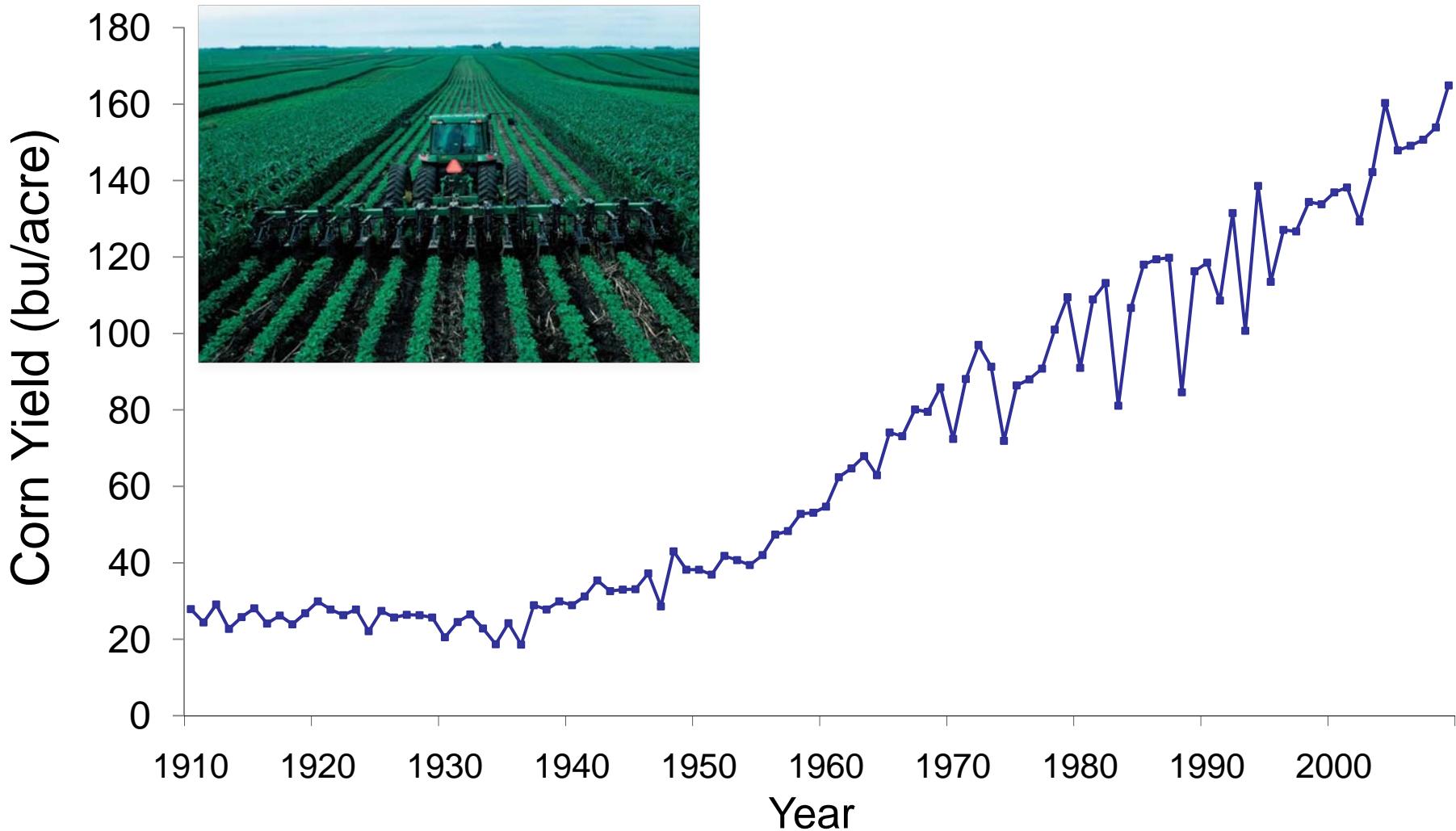
# Environmental Risk



# Policy Conflicts: Internal and External



# Science and Policy focus on Yield



# Enhancing Food Security through Regional Food Systems

A Regional Research Collaboration



United States  
Department of  
Agriculture

National Institute  
of Food  
and Agriculture

Agriculture and Food Research Initiative Competitive Grant no. 2011-68004-30057  
from the USDA National Institute of Food and Agriculture

# 7 Million Food-Insecure Consumers: A Day-to-Day Concern



# Increasing Reliance on Food from Outside the Region (or Country)



# Inequalities in Food Access



The Basic Question is this:

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



Access in Communities

# 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.



## Processing/Distribution

- 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



Farm-level Production

# 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!