The Northeast Food System

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The Northeast Region
(you are in it, obviously)

- Maine to West Virginia
- Multiple markets
  - Direct to consumer
  - Supply chains
- Past, current and future capacity in the region
Dense Urban Markets
Relationship Markets


http://www.fnec.cornell.edu/Uploads/FMNP/barrels_of_peppers.jpg
Direct to Consumer Sale of Food: Top 10 States

Payments Received from Conservation Reserve, Wetlands Reserve, Farmable Wetlands and Conservation Reserve Reserve Enhancement Programs: 2007

1 Dot = $250,000

United States Total $1,756,226,000
Changes in Northeast Ag since 1930
Cropland loss ranges from 0 to 75% across the 12 states in the Northeast.

Three cycles of land retirement at national level.
Current Capacity in the NE
Enhancing Food Security of Underserved Populations in the Northeast through Sustainable Regional Food Systems

A Regional Research Collaboration

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

- **Estimation conducted at state level**
- **Some aggregation to larger areas**
- **Goal: 10-yr time-series of Output**
- **Data Gaps are a significant issue, especially for Fruit and Vegetable crops**
## Land and Land Use in NE

<table>
<thead>
<tr>
<th></th>
<th>Northeast</th>
<th>U.S.</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land in Farms</td>
<td>26.1</td>
<td>922.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Cropland</td>
<td>10.7</td>
<td>309.6</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Northeast regional mean agricultural land area, 2001-2010

Forages and field and grass seeds (animal feed)

Other land in farms (not in production)

Field crops (animal feed)

Pasture land (grazed)

% of total agricultural land in the Northeast
Crop Diversity in the Northeast

More than 300 different crops grown (includes feed, food, non-food, "other")
<table>
<thead>
<tr>
<th>Category</th>
<th>Sufficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>14</td>
</tr>
<tr>
<td>Proteins</td>
<td>7</td>
</tr>
<tr>
<td>Vegetables</td>
<td>28</td>
</tr>
<tr>
<td>Fruit</td>
<td>19</td>
</tr>
</tbody>
</table>

Sufficiency = (regional production / regional consumption) * 100
<table>
<thead>
<tr>
<th>Vegetable Group</th>
<th>Sufficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark Green</td>
<td>12</td>
</tr>
<tr>
<td>Starchy</td>
<td>44</td>
</tr>
<tr>
<td>Red and Orange</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
</tr>
</tbody>
</table>

Sufficiency = \( \frac{\text{regional production}}{\text{regional consumption}} \) * 100
<table>
<thead>
<tr>
<th>Fruit Group</th>
<th>Sufficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Commonly Eaten”</td>
<td>17</td>
</tr>
<tr>
<td>Berries</td>
<td>54</td>
</tr>
<tr>
<td>Melons</td>
<td>13</td>
</tr>
</tbody>
</table>

Sufficiency = (regional production / regional consumption) * 100
Northeast Regional Production from Meat Animals (mean, 2001-2010)

- **Seafood**: 448 million pounds (44%)
- **Beef**: 664 million pounds (17%)
- **Pork**: 891 million pounds (30%)
- **Chicken**: 1,478 million pounds (41%)
On a fluid milk equivalent basis, the region is about 75% self sufficient.

Also about 71% self sufficient in egg production.
Subsequent Questions:

If we were to grow more food within the region, where would that occur?

How would such shifts be impacted by drivers like climate change, dietary shifts, etc.?

How are production and consumption changes likely to be affected by policy?
A Team Effort

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