

Capturing the systems nature of EFSNE Project

Roles of regional production in a global food system

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First Level Slide



The concept

What is the role of Northeast products in the U.S. food system?

This paper will present a typology that helps to categorize (and to explain) where regional agricultural production and distribution fits within the larger food system.



Backstory

- Emerged in Y2 – development of scenarios
- Idea drew from early EFSNE work
 - Market basket
 - Self-reliance analysis
 - Supply chain studies
- Reinforced by ongoing EFSNE work



Data begged the question

Self-reliance category	Mean regional production	Mean regional consumption	Mean regional self-reliance
	(10 ⁶ kg farm weight)	(10 ⁶ kg farm weight)	(%)
Dairy ^b	13,043	17,297	75
Eggs ^c	692	954	72
Shellfish	169	375	45
Chicken	1,549	3,869	40
Turkey	187	626	30
Fish	224	997	22
Lamb	12	68	17
Beef	696	4,437	16
Pork	390	2,565	15

Derived from Griffin et al. (2014)

Regional is the dominant scale

Fluid milk

- Ubiquitous product, available everywhere
- Processing infrastructure well-developed
- Regional distribution appears to be economically efficient for fluid dairy products
- Large agricultural land foodprint
- Northeast is nearly self-sufficient in fluid milk



National production center

Apples (fresh market)

- Popular fresh fruit
- Strong postharvest infrastructure
- Distributed beyond the Northeast
- Includes 2nd largest apple producing state
- Distant 2nd to WA, the nation's largest producer
- Region is both an exporter and importer of apples because varieties are important



Seasonally important producer

Cabbage, fresh market

- Commonly consumed, nutritionally important
- Region includes production centers – NY and NJ
- NY accounts for 30-40% of national shipments at in late summer through early fall
- Supply is very seasonal, supplied from southern U.S. in the spring
- Other foods may play similar roles (blueberries, broccoli, snap beans, and watermelon)



List of potential roles

1. National production center
2. Regional production is predominant scale
3. Seasonally important
4. Co-product of another food industry
5. Suited to available resources
6. Locally-differentiated production
7. Important to regional food consumption



Weaving a story

For market basket items

- Consumer intercept and scanner data
- Supply chain case studies
- Supply chain models

For all foods

- Regional self reliance analyses
- Partial equilibrium model of fresh produce
- Augment with secondary data on shipments



Why does it matter?

In thinking about alternative systems, important to have a firm grasp of the roles the system serves in its current form.

