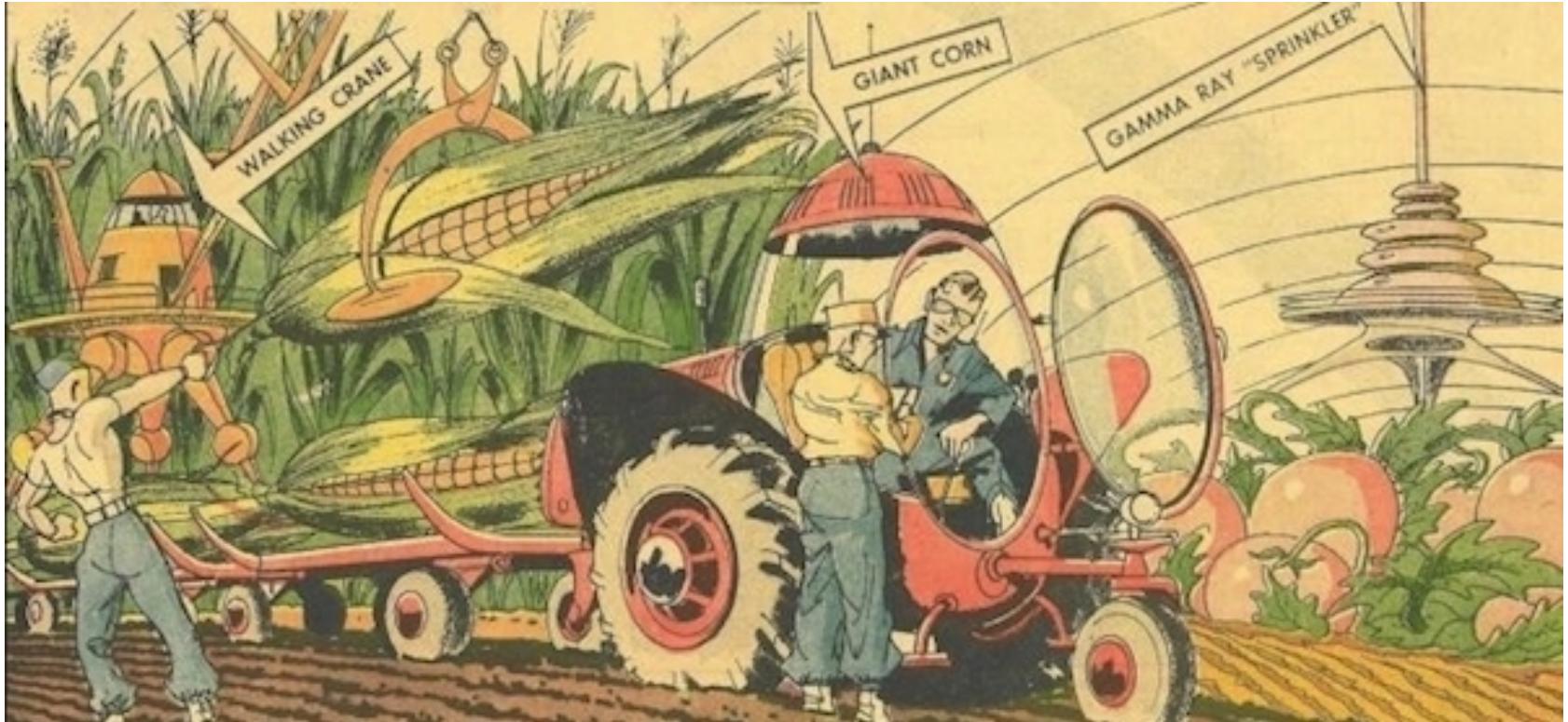


Food System Solutions to Address Food Security and Local Economic Development: the Case of Food Hubs in Northeastern US



Cesare Cascella

cesare.cascella@unirc.it

MArch, PhD in Urban Regeneration and Economic Development
@ University "Mediterranea" of Reggio Calabria (Italy)

Conventional Food System: Social Costs

Food Gap



Environment Degradation



e.g.

Disease disparity
Food deserts

e.g.

GHG emissions
Soil and water pollution

Alternative Food System: Limitations

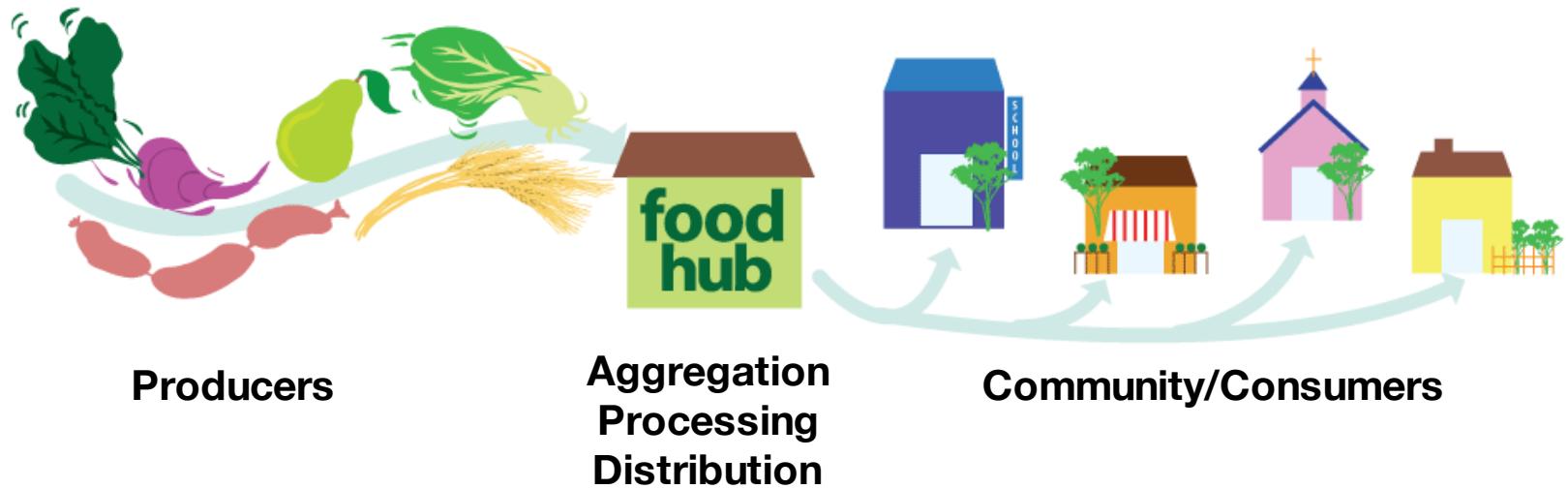
Idyllic vision of the past



Productive Potential

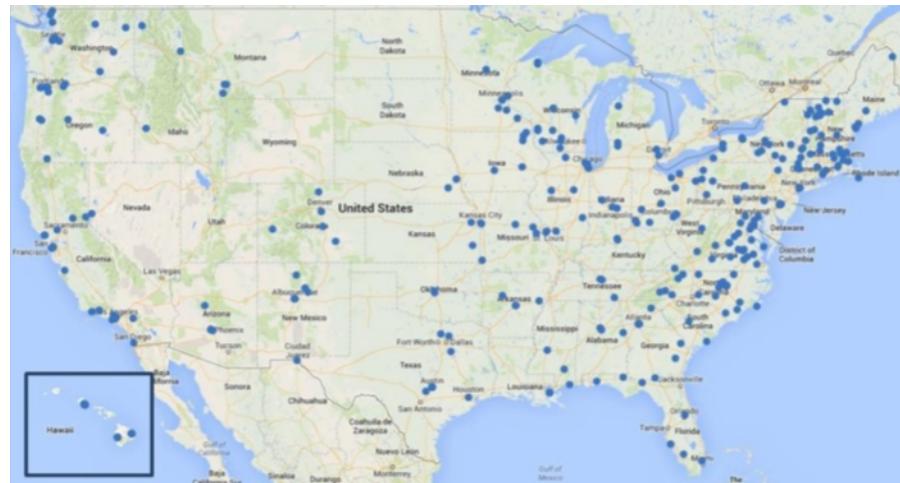


Research Problem



Only a few empirical studies investigated the Food Hubs' contribution to the intertwined key issues of food security and local economic development

Case Selection



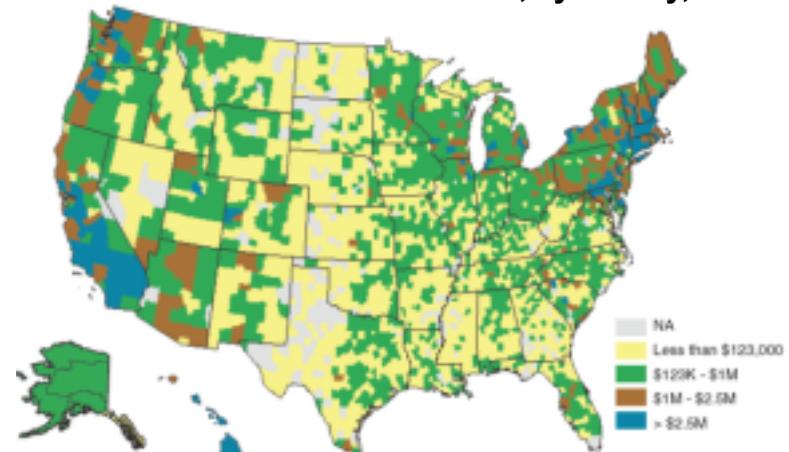
USDA Food Hub Directory database

Food Hubs localization. Regional Breakdown

Region	Number	Percentage
Northeast	41	24%
North Central	40	24%
Southeast	26	16%
Mid-Atlantic	24	14%
Far West	22	13%
Rocky Mountain	10	6%
Southwest	5	3%

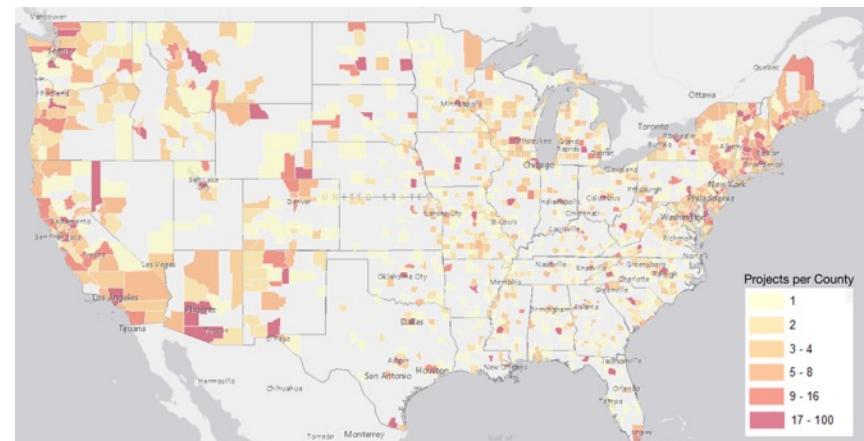
Source: Barham et al. (2012)

Total direct-to-consumer sales, by county, 2012



Trends in U.S. Local and Regional Food System (Low et al 2015)

USDA and other federal investments in local food

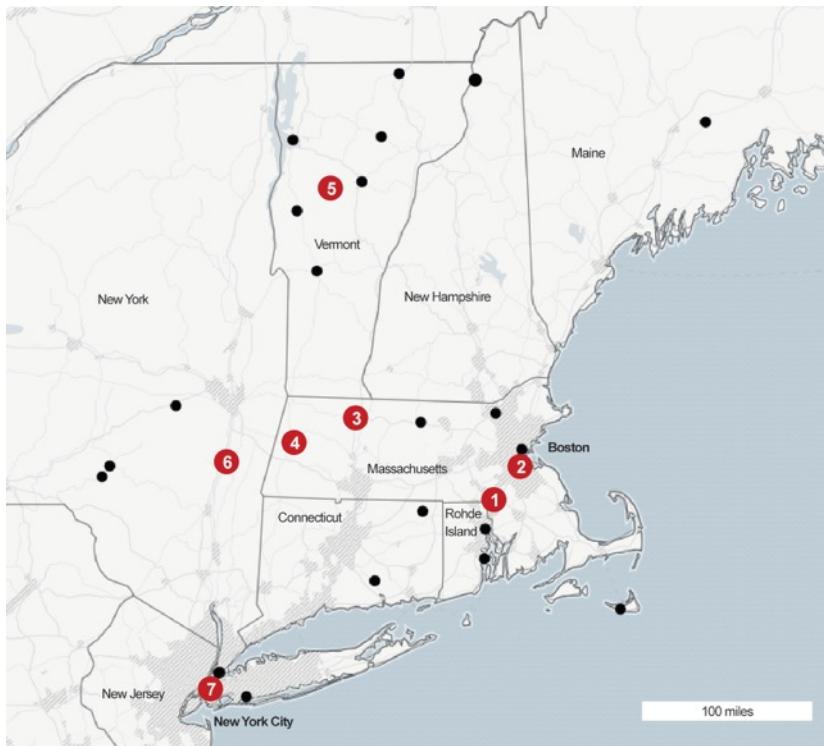


No. of funded projects per county, since 2009

Local Food Compass Map [<https://www.ams.usda.gov/local-food-sector/compass-map>] [Accessed Dec 2017]

Case Selection (cont'd)

Surveyed Food Hub location



- (1) Red Tomato
- (2) Common Wealth Kitchen
- (3) Western Massachusetts Food Processing Center
- (4) Berkshire Organics
- (5) Mad River Food Hub
- (6) Field Goods
- (7) Happy Valley Meat Company

Black dots indicate the other food hubs contacted to join the survey

Surveyed Food Hubs by Legal Structure and National average

FH Legal Status	Percentage (obs. 151)	Case Studies
For Profit	38%	(no. 4) Berkshire Organics, Field Goods, Happy Valley Meat Company, Mad River FH
Non Profit	36%	(no. 3) Commonwealth kitchen, Red Tomato, Western MA Food Processing Center
Cooperative	19%	-
Publicly owned	3%	-
Other	4%	-

Source: 2015 FHs National Survey (Hardy et al 2016)

Surveyed Food Hubs by Business Model and National average

Market Model	Percentage (obs. 151)	Case Studies
Farm to business or institution (F2B)	28%	(no. 5) Happy Valley Meat Company, Mad River FH, Commonwealth kitchen, Red Tomato, Western MA Food Processing Center
Farm to consumer (F2C)	20%	Berkshire Organics
Hybrid (both F2B and F2C)	52%	Field Goods

Source: 2015 FHs National Survey (Hardy et al 2016)

Survey

The screenshot shows a web browser window titled "Food System Works". The main content area displays the project's purpose: "Food System solutions to address Food Security and Local Economic Development". It states that the purpose is to utilize the experiences of local and regional food supply chain intermediaries and coordinators to identify best practices useful to achieve the intertwined goals of Food Security and Local Economic Development.

A central box titled "Join the survey" offers three options:

- Interview**: having a meeting. Includes a "TAKE AN APPOINTMENT" button.
- Online form**: filling out the online version. Includes a "START" button.
- Download form**: filling out using a word processor. Includes a "DOWNLOAD" button.

Structure of the Survey

The survey consists of three sections:

1. General Information

This part of the survey aims to provide a broad picture about participants' businesses/organizations which are joining the survey. This includes information about staff, services, products, and finances.

2. Food Security

In this section participants are asked to describe the contribution that their businesses are giving to the goal of food security. With this purpose, the four dimensions of food security are taken into account: availability, access, utilization, and stability.

3. Local Economic Development

The last section of the survey frames participants activities within the framework for community wealth building, consisting in six drivers: place, ownership, multipliers, collaboration, inclusion, and system.

Your participation of this survey is highly appreciated whether you decide to answer to all of the questions or just to a portion of them.

About us

The survey is conducted by Cesare Cascella, Ph.D. candidate in Urban Regeneration and Economic Development, under the supervision of Alan W. Dyer, professor of economics at Northeastern University of Boston.

Use of information

The information and findings obtained will be shared in a dissertation thesis to be defended at University "Mediterranea" of Reggio Calabria (Italy) during 2018. In addition, they may be used in seminars, conference presentations and research publications.

Confidentiality

The information provided by participants will not be disclosed. Participant's name, address and other personal data are not asked, however, if provided, they will be removed from the questionnaire and not known to others. The answers s/he gives will be only used for research purposes and for writing a report. Care will be taken to report information so as to minimize the readers' ability to identify the role and hence identity of the source of information.



International Doctorate Program
in Urban Regeneration and Economic Development (URED)
University "Mediterranea" of Reggio Calabria
Northeastern University of Boston

<http://foodsystemworks.org>

Research in brief

Topic

The broad research topic addressed by this study is the **socio-economic and environmental performances of local food system initiatives**, as they are opposed to the conventional and global-oriented ones. Within this area, the specific line of research that the study pushes forward is the one analyzing the **benefits and limitations of food hubs in pursuing societal goals**.

Problem

Even if from a policy stand point food hubs are seen as a panacea to increase food security and generate economic development, **little empirical research exists on whether and how they are capable to achieve these goals**. Moreover, it is necessarily to empirically verify how food hubs are performing their social-oriented activities by confronting them against a **solid conceptual framework framing food security and local economic development**.

Purpose

The purpose of this study is to **explore the contribution to food security and local economic development of food hub initiatives** located in the Northeastern region of the United States.

Methods

Qualitative case study analysis developed through a semi-structured survey. The survey reflects the conceptual framework adopted that is based on the 4 dimensions of food security and the 7 drivers of community wealth building.

Conceptual Framework / Research Questions

1. How are FHs working to increase Food Security?

- **Availability**
- **Access**
- **Utilization**
- **Stability**

2. How are FHs contributing to Local Economic Development?

- **Ownership**
- **Place**
- **Multipliers**
- **Collaboration**
- **Inclusion**
- **Workforce**
- **System**

Results (1/3)

Impact on Food Security

Availability

Are FHs increasing the amount of food produced in the region?

- FHs supply from local and regional farmers (approximately within 200 miles).
- Growers run already established farms and are selling their produce throughout various marketing channels.
- Access to market, value-add processing, and technical assistance to meet certification standards allow farmers to increase their profit margin.
- Sharing facilities, business, financial and technical assistance to meet food safety requirements help start-up food processors.

Access

Are FHs improving food access for underserved social groups?

- None of them is actively involved in any programs to increase access in food deserts.
- Their priority is to keep their sales revenue high enough to stay in business and to subsidize other services that are not generating income
- The activities perceived by FHs as important to increase food access are providing SNAP redemptions/advocacy and joining farm-to-school programs.

Utilization

Are FHs improving the utilization of available food?

- Producer-oriented FHs assist them in meeting food safety requirements.
- For-profit consumer-oriented FHs provide educational activities such as cooking demonstrations, farm tours, and events sponsorship

Stability

Do FHs provide stability overtime of the food services they provide?

- All FHs have been witnessing constant growth in their financial performances since their first establishment. Non-Profits are all close to a 50/50 split between market revenue and external funding.
- FHs consider a higher financial support from the governmental agencies very important to increase the social benefits of their operations.
- They address the issue of food seasonality by processing food and supplying from growers in a larger geographical area

Results (2/3)

Impact on Community Wealth

Ownership

Are FHs locally owned and controlled initiatives?

- 3 out of 7 organizations function as non-for-profit corporations with a broad-based structure. One of them is directly managed by a Community Economic Development Corporation.
 - The remaining 4 out of 7 FHs are for-profit businesses with voluntarily stated social missions
-

Place

Do FHs develop under-utilized assets to benefit local residents and businesses?

- Human. Producer-oriented FHs provide tech. assistance, workshop, job training to farmers and aspiring entrepreneurs.
 - Financial. FHs provide financial assistance to start-up and, in some cases, directly fund them.
 - Physical. All surveyed FHs are developing new or under-utilized infrastructures to make them available to producers and to connect them to consumers
 - Natural. FHs don't seem aware of the environmental impact of the broad range of their economic activities such as such as processing, packaging, transportation
 - Social. Non-for-profit FHs have shown examples of innovative solutions in providing existing services by leveraging on social networks.
-

Multipliers

Do FHs implement buy-local strategies to keep money circulating locally?

- Two out of 7 surveyed FHs are already involved in farm-to-institution programs, other two are planning to enter this market. Nonetheless, just in one of those cases the institutional demand currently represents the main marketing channel
- The principal demand comes from large retails such as Whole Foods and Trader Joe, and from individual consumers both online and in FH's own retail.

Results (3/3)

Impact on Community Wealth

Collaboration

Do they actively partner with other organizations which are involved in collaborative activities aiming to bring community development outcome?

- Non-Profit FHs are actively involved collaboratively with other organizations in order to develop several community development initiatives.

Inclusion

Do FHs provide services to open up economic opportunities for marginalized social group?

- Among the two non-profit business incubators, one supports entrepreneurship in minority social groups, and the other offers access to capital to aspiring entrepreneurs who cannot access private bank loans.

Workforce

Do FHs link training to employment and focusing on jobs for those with barriers to employment?

- The two non-profit business incubators actively collaborate with CBOs in order to implement these workforce development initiatives.

System

Do FHs contribute to create a better climate for growth relatively to the local food economy?

- Non-Profit FHs advocates to better leverage on the purchasing power of anchor institutions
- FHs pointed out two barriers in the legal/regulatory environment:
 1. Subsidies imbalance between the conventional food system and the alternative one, benefitting the first.
 2. Food safety regulations are too complex for small food start-ups.

Conclusions

Local Economic Development

Ownership

FHs are and support locally own businesses

Place

FHs have an asset-based approach that cultivate community capitals.

Multipliers

FHs mainly selling to large supermarkets loose the opportunity to make more money circulating locally.

Collaboration

FHs are active in designing and implementing local food plan and strategies (e.g. farm-to-school).

Inclusion

Shared used kitchen are largely used as economic development strategies in inner city neighborhoods as well as in depressed rural town.

Workforce

FHs can team up with CBOs to link training to employment

System

Some FHs promote a system change in the local food sector

Food Security

Availability

FHs provide growers and producers market access and business development opportunities to make them grow

Access

FHs activities have a minimal contribution to increase access for underserved populations

Utilization

FHs can help small producers meeting food safety requirements

Stability

FHs tend to be financially viable businesses.

Thanks

**Food System Solutions to Address
Food Security and Local Economic Development:
the Case of Food Hubs in Northeastern US**

Cesare Cascella
cesare.cascella@unirc.it