Food Systems Assessments

Theory and Background Information

As food systems planning field has budded, practitioners are developing tools to assist in the assessment and process of building strong food systems. Practitioners are increasingly utilizing Food Systems Assessments (FSAs) to evaluate the food systems cycle from inputs to production, distribution, processing, consumption, and waste management. This evaluation tool, which has taken many forms, is typically used to measure the assets and needs in communities, municipalities and regions with regard to food security, productive capacity of the land, and economic development. FSAs can be valuable tools for better understanding of the social, economic, regulatory and political context of the food system and can point to opportunities for improving the food system with community intervention through policy making. FSAs can be useful in creating a common understanding of the food system and a shared vision and plan for developing a more sustainable food system.

Practical Visionaries and Food System Assessments: The Practical Visionaries Field Project team considered the range and capabilities of different types of food systems assessments in an effort to 1) contribute to the growing body of research of the Greater Boston food system and 2) develop tools that will increase the capacity of our Steering Committee partners to engage their constituents in discussion regarding the local food economy. The project team will map key features of the food economy in several Boston neighborhoods in order to evaluate the existing and future opportunities for local food business and jobs generation. These maps are also parts of a popular education workshop intended to guide community discussion towards creating a dynamic Community Food Asset Map. These activities, based in food system assessment techniques, will catalyze collaboration and action towards building a resilient local food economy.

Major Criticisms

Food Systems Assessments have emerged through the resurgence of interest in local food systems and the inclusion of food systems planning in urban planning. As practitioners utilize this tool as a means to evaluate and plan for the food system, there has been great variation in research approaches, scope and goals of FSAs; while some are comprehensive, others concentrate on specific aspects of measurement within the food system.

At this point there is no typology that differentiates FSAs from one another. Ken Meter, an expert in food systems assessments from the Crossroads institute, along

1 Freedgood, Pierce-Quinonez, and Meter (2011)
2 Pierce-Quinones (2012) and Raja, Born, and Russel (2008)
3 Freedgood, Pierce-Quinonez, and Meter (2011)
4 Dunning, Creamer, Massey Lelekacs, O’Sullivan, Thraves and Wymore (2012)
5 Freedgood, Pierce-Quinonez, and Meter (2011)
with Mari Pierce-Quiñonez and Julia Freedgood have made valuable contributions to examining the different forms of FSAs and categorizing the different iterations with regard to their scope and purpose. Based on this collaborative evaluation, they've identified eight (8) different types of FSAs (discussed in more detail below) that they hope will allow practitioners to more clearly define their food systems assessments and will enable better research, evaluation, impact assessment going forward.

Freedgood, Meter and Pierce-Quinonez suggest that FSAs represent one part of the process of examining and improving food systems, and that to be most impactful a FSA should also include or be followed up with a comprehensive strategy to work towards goals and evaluate change with regard to policy-making and community programming.

*Types of Community Food Assessments:*

Freedgood, Meter and Quinonez have defined the current iterations of Food Systems Assessments in the publications, "Emerging assessment tools to inform food system planning" and "Are We Planning for Sustainable Food Systems? An Evaluation of the Goals and Vision of Food System Assessments and their Usefulness to Planning." Following is a brief description of the purpose, methodology and limitations of the eight types of assessments as interpreted from these authors' works.

**Foodshed Assessment:** The purpose of the Foodshed Assessment is to 1) evaluate the existing and future potential for local food procurement within a geographic area and 2) measure the needs for feeding a given population. This is more of a conceptual assessment and focuses predominantly on the productive capacity of the land, measuring soil quality, land use and production averages. It is a limited model in that it evaluates inputs, production and consumption of the food systems but does not evaluate distribution, processing or waste management.

**Comprehensive Food Systems Assessment:** This food system assessment typology is a multidimensional evaluation of the food system. Such an assessment considers qualitative and quantitative food systems data with regard to its social, economic and ecological components. A comprehensive food systems assessment might, for example, include information on the productive capacity of arable land as well as data collected from community stakeholders in order to represent multiple food system components. Not only will such an assessment evaluate and analyze the data, but it will also provide recommendations for action and a proposed strategy and timeline for reaching goals. Comprehensive Food Systems Assessments are visionary and practical in many respects, but can be very expensive to conduct and may be perceived as too complex to be useful.

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6 Freedgood, Pierce-Quinonez, and Meter (2011)
7 Pierce-Quinonez (2012)
**Community Food Security Assessment**: A Community Food Security Assessment measures the extent to which communities have adequate access to affordable, healthy food. It typically evaluates health indicators in low-income communities and the need and opportunities for developing infrastructure and programming that would increase healthy food access and affordability. While the results of such an assessment will likely demonstrate need for healthy food retail options, information is often lacking with regard to whether or not such areas have the purchasing capacity to support a food business.

**Community Food Asset Mapping**: This participatory model engages community members in charting the assets in their food system in the form of a map. Through workshops and focus groups, community members evaluate the positive assets within their food system, and identify opportunities for future collaboration that will further strengthen the food system – food business owners, food sector workers, and consumers could work together to create better options for food sourcing and consumption. For example, the owner of a convenience store learns that his neighborhood wants fresh produce and he begins carrying local tomatoes – he knows that demand from the community will guarantee that this perishable item sells. This participatory exercise can catalyze community engagement, and skillful facilitators can encourage this. Because the exercise is community-created, one of its limitations is that a community food asset map may not evaluate the food system comprehensively.

**Food Desert Assessment**: A Food Desert Assessment evaluates areas where there is inadequate access to supermarkets and grocery stores, typically presenting the data through maps. This form of food system assessment has been criticized both because it seeks to identify an ambiguous condition (there are several definitions of the term "food desert") and because the focus is on what is lacking in the food system, which can de-motivate communities rather than catalyze new collaborative conversations and actions.

**Land Inventory Food Assessment**: A Land Inventory Food Assessment is typically utilized for evaluation of urban land that is currently unused and suitable for urban agriculture. This assessment generally evaluates the productive potential of land and the extent to which the land, if made productive, can feed the community. As with foodshed assessments, land inventory assessments typically focus predominantly on the inputs, production and consumption of food and do not address the other aspects of the food system. Such assessments can also rely heavily on data collection and using technology to conduct the assessment and may fail to engage the community’s participation.

**Local Food Economy Assessment**: This model of food systems assessment evaluates all components of the food system with regard to the existing and possible local food businesses and infrastructure. It frames strengthening the food system as an economic development strategy that engages stakeholders on community and municipal levels. The economic potential of local food business can present compelling arguments for investment. However, such assessments are sometimes
criticized for overlooking the social and environmental assessment of local food economy development.

**Food Industry Assessment:** A Food Industry Assessment evaluates the key food industries in an area that are both locally and non-locally operated and owned. Such a model can help investors to identify promising markets or identify existing or potential industry clusters in the food sector. This model typically focuses primarily on the financial aspects of the food system and infrequently evaluates social and environmental aspects of the food system.

**In Practice/Cases:**

Food Systems Assessments are still in their early stages of development; only since roughly twenty years ago have municipalities, states and regions had access to guidelines to conduct such assessments. Nonetheless, the quality and quantity of FSAs has been growing over recent years and there are several examples that can serve as models for future assessments. Vermont’s “Farm to Plate Strategic Plan”\(^9\) and the Philadelphia area “Eating Here: Greater Philadelphia’s Food System Plan”\(^10\) are both exemplary Comprehensive Food Systems Assessments. “The Economy of Local Food in Vancouver”\(^11\) is a remarkable example of the local food economy evaluated on a citywide level and “Homegrown: The Economic Impact of Local Food Systems in New Hampshire”\(^12\) is a thorough evaluation of the existing food economy and possibilities for food business development on a statewide level. The strength of these assessments lies in their long-term and strategic goals for improvement in the food system with embedded methods for evaluating progress. In its post-inaugural year, Vermont’s plan already began an annual evaluation and report on food system progress and change.\(^13\)

**Examples in the Greater Boston Area:**

At this time the Greater Boston Area does not have a comprehensive food systems assessment and plan. Sans such a plan that coordinates food systems goals and efforts, on community and municipal levels within the Greater Boston area, practitioners and politicians are nonetheless engaged in sustainable food systems work. Scholars and practitioners are making valuable contributions through research to the growing body of information on the area food system that may eventually inform a comprehensive food systems assessment.

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\(^8\) Potthukuchi and Siendenburg (Eds) (2002)
\(^9\) Kahler et. al. (2011)
\(^10\) Delaware Valley Regional Planning Commission (DVRP). (2011)
\(^11\) Hild (2009)
\(^12\) Magnusson (2010)
\(^13\) Vermont Sustainable Jobs Fund website http://www.vsjf.org/project-details/5/farm-to-plate-initiative
There are notable efforts by practitioners on community, municipal and state levels towards strengthening food systems. Community organizations are developing on-the-ground programming in the form of community gardens, farmers markets, and food enterprise development. The City of Boston established the Office of Food Initiatives in 2010 to increase access to healthy food, expand local foods production, grow the local food economy and encourage partnerships in improving the local food system. The State of Massachusetts also established a food policy council in 2010 that seeks to improve the state’s food system and advise on shaping food policy.

Numerous scholars and practitioners have made research contributions to understanding and planning for the improvement of Greater Boston’s food system. While not an exhaustive representation, these contributions include: a Boston food security assessment (evaluates the extent to which residents have access to healthy and affordable food), a map of existing food sources and vacant lots of select neighborhoods in Boston, a local food policy toolkit (highlights policy that encourages local food systems development), and a toolkit that facilitates municipal and community collaboration around food systems.

The Practical Visionaries Field Project (PVFP) intends to contribute to the growing body of research of the Greater Boston food system and develop tools that will increase the capacity of our partners at Alternatives for Community and Environment (ACE), Dudley Street Neighborhood Initiative (DSNI) and Somerville Community Corporation (SCC) to engage their constituents in discussion regarding the local food economy.

14 Mayor’s Office of Food Initiatives website http://www.cityofboston.gov/food/
16 Unpublished Report of Boston Food Security Assessment authored by Jen Obadiah of the Boston Collaborative for Food and Fitness
17 Unpublished community mapping resources created for Alternatives for Community and Environment, by Tufts University students Joshua Peters, Valerie Oorthuys and Heidi Stucker