Southeastern Massachusetts Food System Assessment
Executive Summary

The Southeastern Massachusetts Food Security Network (the Network) is a coalition of food pantries, farms, foundations, and social service agencies working together to promote local food security: "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice."

The goals for this Food System Assessment, which covers Bristol, Norfolk, and Plymouth Counties, with some special focus on the cities of New Bedford and Fall River, are to:

1. Provide the community with key baseline data on, and initial evaluation of, each element of the food system in Southeastern Massachusetts.
2. Assess the potential for increasing both the production and consumption of local foods by residents of the region.
3. Provide initial identification of gaps, barriers, and needs.

In addition, this Assessment is intended to help inform and connect Southeastern Massachusetts to current statewide and New England food system planning work.

Food Production

In the Southeastern Massachusetts counties of Bristol, Norfolk, and Plymouth, there are over 1700 farms and over 108,000 acres of land in farms. The amount of land in farms increased by 7.8% since the last USDA Census of Agriculture, outpacing the state overall, though the number of farms decreased by 7.6%, suggesting some level of farm consolidation.

Overall, the market value of the region's agricultural products increased by 16%, from $136,000,000 in 2007 to $157,222,000 in 2012. The top market value category for the region is Fruit, Tree Nuts, and Berries, which brought in 59% of total market value, primarily from the cranberry industry; followed by Nursery, Greenhouse, Floriculture, and Sod at 19% of market value; Livestock, Poultry and their Products at 12%; and Vegetables, Potatoes, and Melons Harvested for Sale at 9%.

From a food security perspective, the prevalence of the cranberry and nursery industries in the region has mixed implications. These categories provide a relatively limited amount of food to the region—only 5% of Massachusetts cranberries are sold as fresh fruit, much of the rest is consumed as juice, and over 30% of the crop is exported, while less than 1% of Nursery category sales are generated by edible greenhouse vegetables. However, these sectors provide critical mass and essential agricultural infrastructure that benefits many types of growers.

Nearly 3000 acres were devoted to vegetables in 2012, representing about 9% of the region's cropland. Sweet corn accounts for 42% of vegetable acreage; other top vegetable crops are squash, pumpkins, tomatoes, snap beans, lettuce, cucumbers, peppers, and potatoes. The number of farms raising vegetables increased by 34% to 250 farms between 2007 and 2012, suggesting that local farmers perceive a growing demand for these crops.

In the Livestock category, the surprising top subcategory was Aquaculture in 2012, with $6,918,000 generated by 44 operations, a 75% jump from the category's 2007 value. Dairy farms still generate over $3.7 million in sales, though only 15 remain, while nearly 300 farms in the region raise poultry and eggs.

Direct market sales (sales from farmers' markets, farm stands, and Community Supported Agriculture farms) increased by 64% between 2007 and 2012 to $8,705,000, with Bristol County's sales more than doubling. However, direct market sales still account for only 5.5% of regional market value and only $5.02 in spending per person per year for the region.

Fisheries are a critical component of the local food system: the Port of New Bedford is the top-grossing port in the nation, with over 143 million pounds and $411 million worth of fish and shellfish landed in 2012. However, as much as 80% of this may be exported.

Looking at the people who grow our food locally:

- Women make up 37% of the region's farm operators.
- 96% of all operators in our region are White.
- Only about half of principal operators list farming as their primary occupation.
- From 2007 to 2012, the number of farms hiring labor increased to 695, the number of workers increased to 3,371, and wages paid increased by 33% to $40,729,000.
- The average age of principal farm operators for the region is 58.3 in 2012, up from 56.5 in 2007 and 54.8 in 2002. Although the number of young farmers has increased slightly in recent years, there is still a major need to support and encourage young farmers if the region is to sustain its food production capacity.

To increase food production and food security in the region, options include:

- Use all available idle cropland. Over 2000 acres were classified as "Cropland idle or used for cover crops or soil improvement" in the 2012 Ag Census. Though cover crops are important strategies for building soil fertility, land in this category that is truly "idle" represents an important short-term opportunity to increase food production.
- Find, conserve, and utilize new parcels of agricultural land through open space conservation, urban agriculture, or community gardens. Such efforts are already underway by a broad network of state and local land trusts.
- Increase the production of greenhouse-grown vegetables and the use of other indoor, hydroponic, and intensive production systems, especially in urban areas.
- Increase non-commercial production through backyard and community gardens. Southeastern Massachusetts currently has over 35 community gardens, which have the potential to increase access to, culturally appropriate fresh foods and grow more crops specifically for donation to food pantries, expanding on models like the YMCA Sharing the Harvest Farm.
- Expand local marketing and consumption of aquaculture and fisheries products.
- Longer-term, as described in A New England Food Vision, reconversion of recently regrown woodlands could be an option for increasing available farmland.

Food Processing and Distribution

The food processing and distribution sector is one of the most important elements of the region's food system, but also one of the most difficult to assess. Because the great majority of businesses in this sector are private, most details about sales volumes, product sources and destinations, trucking routes, and the like are not publicly available.

Some data indicate that the 12 food distributors headquartered in Southeastern Massachusetts generate total sales of well over $2 billion. At least 15 additional distributors headquartered elsewhere also serve Southeastern Massachusetts, in addition to several institutional food service providers. One of the region's best assets for both understanding and expanding the distribution of local produce is the nonprofit organization Red Tomato.

Nearly all vegetable crops grown in the region are harvested for the fresh market, with only 2% of vegetable acreage harvested for processing. Expansion of both on-farm and off-farm processing capacity could help increase year-round food security.

For many local meat producers, the lack of meat processing facilities in the region is a barrier to expansion and more diversified marketing of their products. The Southeastern MA Livestock Association (SEMALA) is working to bring a local USDA-certified slaughterhouse to the region.

To better understand the processing and distribution sector of the food system, interviews with individuals, companies, and nonprofits working in this sector are needed. The Rhode Island Food Assessment offers an important perspective: "Increasingly, restaurants that support 'local' and farmers themselves are celebrated while the businesses that slice, freeze, pack, store, and ship these foods (local or not) are rarely supported as part of the local food system . . . Their expertise could be better utilized to bring locally grown and locally processed foods to consumers of all income levels."

Food Access and Consumption

When viewed as a whole, poverty levels for the three-county Southeastern Massachusetts region appear comparable to the statewide level of 11%. However, this level of analysis masks pockets of much greater poverty in the region, especially in the cities of New Bedford and Fall River in Bristol County, with 2012 overall poverty rates of

21.6% and 23.2% respectively. Childhood poverty levels are even higher, at 17.8% in Bristol County, 8.7% in Norfolk County, 9.8% in Plymouth County, 31.1% in New Bedford, and 36% in Fall River.

These poverty levels contribute to high levels of food insecurity, a situation in which "Food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food."

According to Feeding America's "Map the Meal Gap," the average regional food insecurity rate was 9.9% overall and 14% for children. As with poverty, Bristol County exceeds the other two counties and the statewide average, with overall and child-hood food insecurity rates of 12.3% and 18.2% respectively. This means that nearly 1 in 5 children in Bristol County experiences food insecurity, compared with a U.S. rate of 1 in 7 households and a Massachusetts rate of 1 in 9 households. Nearly 50% of food-insecure children in the region are likely ineligible for federal nutrition assistance due to program income limits, which often penalize the working poor.

As in other areas of the country, high levels of poverty and food insecurity correlate locally with high levels of obesity. In the three-county Southeastern Massachusetts region in 2010, between 19.8% and 29.1% of adults were obese. Over the years 2009-2011, low-income pre-school obesity rates ranged from 12.1%-16.4% across the region. Using 2010 public schools data for older children, 17.4% of children in Fall River and 19.2% of children in New Bedford were obese, compared with a statewide average of 16.3%.

The term "food access" refers to people's ability to find and afford food. The USDA's Food Environment Atlas indicates that 31% of people in Bristol County, 35% in Norfolk County, and 45% in Plymouth County had low access to a supermarket or large grocery store. USDA mapping tools indicate pockets of "food deserts" within our region, especially in Fall River and New Bedford, which merit further investigation despite recent critiques of this concept.

Two key tools for increasing food access and food security are the federal SNAP and WIC programs. The SNAP program has become increasingly important to families in Southeastern Massachusetts in recent years. In 2010, the most recent county-level data available for SNAP participation, over 168,500 people in the region participated in SNAP, each receiving approximately $130 per month, for a three-county annual total of over $262.3 million in federal dollars flowing into and multiplying within the region.

However, 2014 cuts to the SNAP program in the federal farm bill are expected to have a significant negative impact on these benefits. Sources estimate these cuts would equal approximately $90 per month per household.

Looking at food access more broadly, the three-county region is served by:

- 282 grocery stores.
- 700 convenience stores. Mass in Motion's Healthy Markets Initiative is one opportunity for increasing regional food security.
- 1066 SNAP- and WIC-authorized retailers (includes other types of stores).
- 1082 fast food restaurants.
- 1410 full service restaurants.
- 55 farmers' markets, an increase of 57.1% since 2009. This includes 6 wintertime farmers' markets. However, only 17% of local farmers' markets currently accept SNAP benefits, compared to 33.8% statewide.
- Many institutions, such as schools and hospitals, with significant purchasing power. A pilot by SEMAP and the University of Massachusetts Dartmouth's food service provider, Chartwells, offers possibilities for expansion of this market channel.

According to a 2012 Gallup poll, American families spend an average of $151 a week on food. Applying this number to the 2012 population of the three-county Southeastern Massachusetts region gives an estimated regional weekly household food spending of almost $98 million. If each household spent just $10 a week on local food, almost $6.5 million per week would flow into the region's local food system.

However, annually that would be over twice the region's agricultural market value–strengthening the local food system requires building demand and supply together.

As with the food processing and distribution sector, it is difficult to track sales of local food to retail and institutional outlets. Interviews with local supermarkets, convenience stores, restaurants, institutions, and farms would be very helpful in gaining a better picture of the scale of local food sales through retail channels and the potential for expansion.

Despite support from federal nutrition programs, many individuals and families in the region still must depend on emergency food providers to meet their food needs at certain times. The Southeastern Massachusetts Food Security Network website includes a comprehensive list and map of over 50 local food pantries and community meal programs: www.smfsn.org/findfood.

The Food Pantry Subcommittee of the Network is working to increase communication among its members, in order to increase healthy foods in pantries and food security in the region overall.

Food Waste Reduction, Recovery, and Recycling

According to a 2012 report, 40% of food in United States goes uneaten—the equivalent of throwing out $165 billion each year. This uneaten food decomposes in landfills, accounting for 23% of U.S. emissions of methane, a greenhouse gas 20 times more potent than CO_2 as a contributor to climate change. Furthermore, reducing food losses by just 15% nationally would save enough food to feed more than 25 million Americans every year. Reducing food waste and increasing edible food recovery is a key opportunity for Southeastern Massachusetts.

One of the main goals of the Southeastern Massachusetts Food Security Network is to strengthen the informal food recovery network in the region and help food banks and pantries communicate with each other and arrange transportation and storage when surplus food is available. Several state and national organizations exist that could provide helpful models.

Once food has been discarded, there is still ample opportunity to use this resource. Massachusetts recently implemented a new regulation, set to go into effect on October 1, 2014, that will ban large food waste generators from sending food waste to landfills and incinerators. This regulation has already sparked the construction of two new anaerobic digestion (AD) facilities in the region, which produce energy from food waste and offer additional potential for "closing the loop" of the food system. The ban should also provide an incentive for local food businesses to recover and donate more edible food to emergency food providers.

Regulations and Policy

Food and agriculture are highly regulated industries in our country. Therefore, wider participation by a range of food system organizations in public policy-making is of the utmost importance in creating a more just and sustainable food system.

Local entities focused on food system-related policy and regulations include town Agricultural Commissions and Food Policy Councils. Increasing the number of AgComs in the region could help to support both existing and new farms in the region. The Advocacy and Education Subcommittee of the Network has begun exploring avenues for collective advocacy, which could evolve or tie into Food Policy Council work regionally or statewide.

Key areas of policy and regulation affecting Southeastern Massachusetts' food system include:

- Land conservation policy, including recent updates to the Massachusetts Agricultural Preservation Restriction program.
- The Food Safety Modernization Act, passed in 2011 and currently the source of much debate over its implementation and impacts on small farms.
- Local Board of Health regulations, especially related to food safety.
- Procurement policy that requires large institutions to preferentially purchase local foods.
- Food waste reduction policies, including tax deductions for smaller businesses that donate unused food to emergency food providers.

The Network will use this report as a basis for developing an implementation plan for the region. We will revisit this process at upcoming quarterly meetings and at 1-, 2-, and 5-year intervals.

In summary, as noted in A New England Food Vision: "Rising demand by those who can afford the best-quality food can only go so far to boost regional food production; deliberate efforts towards achieving a larger, shared vision of a better food system for everyone to enjoy are critical as well."

To view the Executive Summary with citations and the full Assessment, please visit www.smfsn.org