

**Rethinking Food Security through a Local and Regional  
Governance Model**

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# Rethinking Food Security through a Local and Regional Governance Model

**Abstract:** Unlike other regions of the world that are starting to view agriculture as a multifunctional commodity that impacts much more than merely food production, the US government controls the quantity and quality of our food through the Farm Bill, with little concern for its impact on health, local economic development, environmental sustainability, or national security. This paper evaluates the role of food in the above mentioned issues and argues the US government should devolve some food policy decisions to state and local governments, who are already starting to approach food systems policy holistically. I use food hubs, food policy councils, and a regional food organization as case studies to demonstrate local organizations and governments are making concerted efforts to increase food security. I end with a call to rethink the Farm Bill to acknowledge the multifunctionality of agriculture and homeland security policies to address the impact of climate change on our vital natural resources.

## Introduction:

Over the last decade, there has been a surge in demand for locally produced food. From the recent inundation of farmers markets and community supported agriculture programs to the enhanced awareness of local food production's link to sustainability, security, health, and economic development, much attention is paid to the local food economy. However, there are many political and structural obstacles standing in the way of forming a holistic food policy that takes the issue-areas above into consideration. Less than one percent of food consumed in the United States is locally sourced (Martinez et al 2010, iv), and federal control over our food supply ensures most of what we eat comes from agri-business producers and processors. For example, despite the increased demand for local foods, it is difficult for small-scale farmers and producers to

satiate this demand due to a lack of appropriately scaled infrastructure. Further, while states and localities have many policing powers over food, such as land-use decisions, choosing to remove soda machines from schools or banning fast food outlets in certain neighborhoods (see Mair et.al. 2005), the federal government controls the food system through the Farm Bill<sup>1</sup>. This omnibus piece of legislation is passed every five years and covers everything from supplemental nutrition programs (previously known as food stamps) to subsidies for top commodity crops. Given the federal government justifies its control over food and agriculture through the commerce clause (see McCabe 2010 and Schneider 2010), it views food as an economic “commodity,” with less attention to health impacts, local economic development, homeland security, and environmental concerns.

This disconnect between federal control over US food systems and local concerns with economic development, environment, health, and regional security creates a fragile US food system. Ironically, local concerns are, seemingly, more closely tied with national security than federal government priorities. By “security” I mean both food security, or having access to enough food to meet dietary requirements (Pinstrup 2009, 5), but also food security as part of national security more broadly . Our centralized food system is susceptible to terrorist attacks and has been at the center of massive disease outbreaks. Further, the future effects of climate change on agricultural zones and fossil fuel prices will impact natural resource availability and food production in the United States. Given the majority of US agriculture is monoculture grain crops<sup>2</sup>, the United States could be facing

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<sup>1</sup> See the Agricultural Act of 2014. Pub L. No. 113-79 <http://www.gpo.gov/fdsys/pkg/BILLS-113hr2642enr/pdf/BILLS-113hr2642enr.pdf>

<sup>2</sup> According to the EPA, out of \$143billion in U.S, crop sales, \$135.3Billion was from grain crops (95%) (See EPA <http://www.epa.gov/agriculture/ag101/cropmajor.html>)

crisis-like conditions if there are major hiccups in the national or global supply-chain given our limited production of fruits and vegetables. I argue we need to embrace a more multifunctional<sup>3</sup> approach to agriculture and food policy, which can only be truly created by increasing local and regional agency in food systems decision-making.

In this paper I draw on my participant observation and research interviewing New England food hub managers, food consultants, and local policy-makers to argue that food policy needs to be addressed holistically to address health, security, and local economic development. Since the federal government largely views food as “commerce,” I argue we can achieve a more multifunctional view of agriculture by devolving some power over food policy back to the local, state, and regional levels of governance. I begin with a brief history of the U.S. food system and demonstrate how it ignores many citizen, and even federal government, priorities such as security, health, and economic growth. Then I discuss my methods and follow with a brief review outlining common criticisms of our centralized food system. I use three case studies; food hubs, food policy councils, and a regional network;<sup>4</sup> to demonstrate there are already organizations and policy tools working on strengthening local food systems. I conclude with a call to rework the next Farm Bill to include an acknowledgement of the role of food systems in national security and to provide more agency and flexibility to local and regional decision-makers to create a more secure food system.

## Background

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<sup>3</sup> The recognition that agriculture serves multiple functions – only one of which is its commodity value

<sup>4</sup> These cases were at the heart of my interview and participant observation data

The federal government's control over the food system rested on the notion that states could not be trusted to regulate and provide food to their populations (see McCabe 2010, 153). Indeed, much like energy, food is too important to national security to allow states and free markets full control over decisions. Food *shouldn't* be treated as a common commodity like a pen or a book. However, over the course of the last sixty years, the focus on controlling a resource vital to the wellbeing of our country through the federal Farm Bill slowly became the tool of big agribusiness; directly and indirectly making decisions influencing health, environment, and food sovereignty; that benefitted from big government. While I do not argue the federal government should give up all control over our food system, I do argue that the original, and justified, rationales for federal control have slowly been coopted over time, putting our national security at risk.

The original Farm Bill was part of the New Deal policies meant to pull the United States out of the Great Depression and was a means to protect farmers from growing too much food; there is a delicate balance between providing enough food to feed citizens and ensuring over production does not deflate the price of commodity crops to the point it will hurt US farmers. The government originally did this by establishing a target price based on the cost of production for storable commodities like corn and wheat. When the market price dropped below the target price, farmers were asked to store their grain crops until the prices stabilized. The government accomplished this by offering farmers a loan, using their stored crops as collateral until the price increased. If the prices stayed low, the farmers could opt to keep the loan money and pay the government back with their stored crop which would be stored in the "Ever Normal Granary." The Farm Bill also included clauses to encourage farmers to conserve sensitive land prone to erosion. This system

worked well for the farmers and for US food security, but it didn't work well for food processors and grain exporters who were forced to pay a target price – they wanted cheap grain (for a full review of farm bill history see Pollen 2007, 41-56, Dimitri et al 2005, 1-13).

Grain exporters and food processors jumped at their window of opportunity to change Farm Bill policies during the Nixon Administration. We sold millions of tons of grains to Russia in the hopes of raising prices for farmers in the U.S. However, this was coupled with a bad crop year which led to historically high crop prices and food protests in the streets. The Nixon Administration needed to drive down food prices and accomplished this by abolishing the Ever Normal Granary in 1973, replacing the old system with direct payments to farmers. The US Department of Agriculture told farmers to grow as much as they could and the government would guarantee to make up the price of grain if it fell below the target price<sup>5</sup>. This encouraged the consolidation of farms and intensive monoculture production of the five subsidized crops (corn, wheat, soy, cotton, and rice), but paid little attention to nutritional needs through fruit and vegetable production, deemed “specialty crops.” The 1970s mark the shift from a Farm Bill meant to protect farmers to a Farm Bill meant to protect agribusiness’ profit. In fact, this surge in cheap grains led to the rise in cheap processed foods, also associated with current US health problems (for a great overview of this phenomenon see Pollen 2006 and 2008). The Farm Bill subsidies on crops remain much the same today<sup>6</sup> and are often criticized for this “commodity” approach to food. This is not to say that the Farm Bill ignores hunger. In fact, the large majority of Farm Bill money funds supplemental nutrition programs, such as WIC

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<sup>5</sup> It should be noted that the target price has reduced over time, giving less and less profit to the farmers

<sup>6</sup> In the 2014 Agriculture act, direct payments were replaced with “crop insurance”, but the results are very similar.

vouchers and electronic benefit transfer (EBT) cards, while seeming to ignore “nutrition” and “health,” as some of the same people receiving these benefits often use their money to purchase cheap, processed foods. Further, the Farm Bill does not address food sovereignty, the ability for us to feed ourselves in times of crisis, nor the impact of food policies on local communities and the environment.<sup>7</sup> Given the federal government’s authority to regulate food is based in the commerce clause (see McCabe 2010 and Schneider 2010), this historical economic approach is not surprising. However, with US obesity and disease levels soaring and the threat of the rising cost of fossil fuels and agricultural shifts due to climate change, the Farm Bill needs to start approaching food as a security concern that must be solved holistically through food-systems, not commodity markets.

## Methods

I began my research on current policy tools, structural reforms, and food organizations trying to re-claim food systems at the local level by interviewing a diversity of food system experts in New England. I began by contacting all 33 food hubs in New England listed by the USDA. I emailed the contact person for each food hub and followed up with a second email and then a phone call. I traveled around New England for two months, and interviewed 23 food hub managers, representing 16 food hubs, and a handful of New England bureaucrats and food experts working on local agriculture and food system issues. The interviews were semi-structured, with emphasis placed on asking questions regarding current challenges and opportunities in local food systems, food access, food hub structure, distribution, farmer viability and local food policy. These interviews lasted anywhere from

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<sup>7</sup> While the Farm Bill does address the need for land conservation, it does not address excessive pesticide/fertilizer use or the effect of climate change on our food system.

1 to 2 hours. I transcribed all of the interviews and coded them into 21 categories in NVivo, such as structure, food justice, distribution, viability, policy, barriers, and opportunities. I then took these 21 “nodes” further divided them into “sub-nodes.” For example, I subdivided “food justice” into “policy,” “urban access,” and “rural access” and subdivided “policy” into “state,” “local,” and “federal.” This gave me a more nuanced understanding of common narratives throughout the region.

In addition to my interview and coding analysis, I attended two conferences specifically related to local food systems – the Vermont Farm Viability Conference in September 2013 and the Food Hub Conference (Raleigh, North Carolina) in March of 2014. Since both conferences were national, my attendance and networking gave me a more holistic understanding of local food systems and food hub models beyond the New England region. In addition to the qualitative analysis, I worked with a research assistant to map food hub users with GIS software based on the USDA’s census tract information. The USDA recently (May of 2013) released their new rural/urban coding continuum which codes counties and census tracts on a 1-10 scale (1 completely urban and 10 completely rural). This is of particular relevance to the study since small rural farmers often have the most difficulty accessing urban markets (Fischer et al 2014, 10), We found that, in New England, rural producers were certainly using regional food hubs as a distribution channel (see Graph 1 for an example map). In addition, I have an insider’s view on local food politics in action by serving on the Rhode Island Food Policy Council and the Food Sustainability Working Group for the City of Providence. My interviews and participant observations led to the selection of my three case studies in this piece. Further, my research identifies gaps in the food system that federal policy addresses poorly.



## What the Farm Bill Does Not Address

This section evaluates the different camps arguing for more local involvement with the food system. While many argue food systems should be viewed holistically, they usually break food policy into separate issue-areas such as: access to healthy food, environment sustainability, regional economic development, and local/national security. While none of the issues are mutually exclusive, we often treat them very separately at all levels of politics. Local health agencies often set nutritional goals for schools while state departments of environmental management, and some counties, may have control over land conservation. Further, city offices choose how to use municipal land and make important zoning decisions for urban agriculture. This is similar at the national level where the farm bill is divided into sections by topic: commodity programs, conservation, trade, nutrition, credit, rural development, research, horticulture, energy, as well as a few others (Johnson and Monke 2012, 2), but “ag as commodity” remains as the dominant narrative underlying all of these programs. Nutrition, for example, is solely viewed as funding for the food welfare system, but it doesn’t address actual nutritional intake. In order to view agriculture more multi-functionally, it is first important to evaluate what the Farm Bill could be addressing. My fieldwork interviewing food hub managers in New England found their top concerns are strengthening economic viability of a local food system and economic viability for farmers.

### *Food and Economic Development*

As mentioned at the beginning of this piece, while local food purchasing is minimal in the United States, demand for local food is increasing significantly (Martinez et al 2010).

This is creating a market opportunity for many communities who want to strengthen local food production, local food and livestock processing, and the value-added economy.<sup>8</sup> More importantly, states and cities understand that local purchases usually mean that more money will stay in the local economy, as local vendors are likely to purchase their services, such as printing and accounting, locally. This phenomenon is known as the local multiplier effect, where \$1 spent at a local vendor could mean \$1.5-\$3 is spent in the local economy as a whole (Shuman 2012, 18-21). In fact, in his recent book looking into local purchasing strategies and campaigns throughout the United States, Michael Shuman states that communities should first increase local purchasing of non-durable goods, especially food, due to both demand and the fact that these products are often of higher quality and are much more likely to compete with the global market than the durable goods sector (like computers and pens).

Farmers are forming cooperatives to increase their scope and purchasing power and also looking into product aggregation for larger markets and distributors (see food hub case study below). Concurrently, cities and charitable organizations are investing in local food infrastructure to encourage more local food production, such as incubator kitchens meant to serve as certified commercial kitchen space where start-food entrepreneurs and caterers can purchase for hourly use. Finally, many interviewees mentioned the higher price point farmers receive when involved in direct market sales like farmers markets or weekly vegetable shares. Locally grown food fetches a much higher price point than food that enters via the global supply chain. This can make small and mid-scale farming more viable at a time when farms are becoming more consolidated in the hands of a few. The

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<sup>8</sup> Like condiments, breads, cheeses, and salsas

average size of a US farm is 434 acres, up from around 150 just after the Great Depression, but this number is even more telling in that there has been an increase in small farms<sup>9</sup> nationwide, but the mid-sized “family farms” (usually 100-500 acres) are being squeezed out (US Agriculture Census 2012). Equally disturbing, the average age of the US farmer is 56 and the percentage of young farmers (under 35) is only about 6% of the total principle farm operators (US Agriculture Census 2012). Certainly local decision-makers view food as a mechanism for economic growth, and the decades old trend of farm consolidation for grain crops could be partially reversed by the draw of direct to consumer sales. However, this increase in demand that fetches higher price points, can work against increasing access to healthy food for more marginalized populations.

### *Health, Nutrition, and Access*

While a large majority of the Farm Bill spending is dedicated to “health and nutrition” services<sup>10</sup>, this is predominantly in the form of supplemental nutrition funding, or checks and vouchers sent to those who are food insecure. While these programs keep food in the bellies of 1 out of 7 Americans (2011 SNAP), obesity, heart disease and other nutrition related diseases are disproportionally affecting low-income populations. While studies conflict about any correlation between SNAP recipients and likelihood to be obese<sup>11</sup> (for a full review see Dinour et.al 200), the link between low income communities and diet-related diseases is well-researched. Americans living in the poorest counties are more

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<sup>9</sup> Usually those who have gross cash farm income less than \$250,000 (USDA)

<sup>10</sup> Roughly 77% of total Farm Bill Spending (Johnson and Monke 2012).

<sup>11</sup> A 2008 study conducted by the Economic Research Service at the USDA found little correlation between the two when accounting for obesity trends to those with similar income levels (Ver Ploeg and Ralston 2008) while a 2010 study completed by the Harvard School of Public Health found that obesity rates among SNAP participants were 28% higher than among non-participants, when adjusted for socio-demographic characteristics (Leung and Villamor 2010).

prone to obesity (Low et al 2009; Levine 2011 ) and low-income Americans are more likely to develop Type 2 diabetes (Levine 2011). Rates of diet-related diseases, such as Type 2 diabetes and cardiovascular disease could triple by 2030, costing more than a trillion dollars annually (Heidenreich et.al. 2011; Bittman 2012). Given the increasing rates of preventable diseases in the U.S., especially among low-income populations, the top-down approach of handing out money for food is not working as well as it could.

There are many theories as to why this trend is increasing. Some argue the emergence of “food deserts” in poor neighborhoods, which have more access to fast food and convenience stores than nutritious food (Allen 2012, Winne 2008, 13-14). Others argue environmental toxins that may lead to weight gain in poor neighborhoods (Guthman 2013), and, indeed some scientists believe there may be a correlation between consumption of non-organic meat<sup>12</sup> and human weight gain (Pagen 2014). A more popular notion insists the Farm Bill has created a food system where highly processed foods high in sugar, fat, calories, and salt are cheaper than fruits and vegetables and more convenient to eat than meals that need more preparation (Okrent and Alston 2012, Pollen 2008). Regardless of the reasons for poor nutrition, we know that the federal government and states have an implicit role in citizens’ health, especially for low-income populations dependent on government subsidies and funding.

Currently, states and cities have policing power over public health programs while the federal government has control over subsidized commodity crops, with no regard for nutritional value (McCabe 2010, 156). This creates a system where the federal

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<sup>12</sup> Due to the use of antibiotics

government, through the National School Lunch Program (NSLP)<sup>13</sup>, is dumping surplus commodity products into public institutions, such as schools, to guarantee markets and stabilize prices (Dillard 2009). Amy Dillard argues the NSLP is captured by agribusiness and favors commerce and lobby interests over school nutritional needs (2009). She looks at one case study attempting to reverse this pattern of commodity dumping on students in her study on the Berkeley School system in California. While it demonstrates a successful local solution to address a health problem, it required external funding. Further, cities have the power to regulate health policies, such as New York City banning trans- fats in restaurants or portions of Los Angeles banning new fast food restaurants (Nordahl 2009, 37-38; McCabe 2010, 159), but this does not influence public meal programs. While not all state and local governments will prioritize health over other pressing issues, it should be noted that they have the power to do so, but, in many cases, with little federal government support. A restructuring of the Farm Bill to allow for more state and local flexibility on nutrition program spending could be a first step in addressing our chronic nutritional problems in the United States. The federal government controls many powers of the purse when it comes to the quality and cost of food in the U.S. and who has access to nutritious food, but shifting some food nutrition decision-making power to sub-national actors may be facilitated by the policing powers already granted to these agencies. Local actors have less policing power, however, when it comes to the food system's role in national security.

### *National Security*

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<sup>13</sup> National School Lunch Act, Pub Law No. 79-396 (1946) amended in 2008.

*I, for the life of me, cannot understand why the terrorists have not attacked our food supply, because it is so easy to do.*<sup>14</sup> – Tommy Thomson Secretary of Health and Human Services 2004

The Department of Homeland Security (DHS) has the mission to “ensure a homeland that is safe, secure, and resilient against terrorism and other hazards” (dhs.gov), yet nowhere does the department oversee the security and resiliency of our natural resources –including resources critical for survival such as food and water. The oft quoted sentence above demonstrates not only the fragility of our food system but also its link to national security. However, there is no need for a terrorist attack to witness the public safety concerns associated with a highly centralized food system. From e-coli outbreaks in lettuce to salmonella contaminated peanuts, thousands have fallen ill and hundreds have died in the past handful of years due to untraceable cross-contaminated produce from the same manufacturing facility. From 2010-2014 alone, the Center for Disease Control (CDC) posted 42 different reports on large salmonella outbreaks (cdc.gov). While there is no evidence small-scale and regional agriculture is any more protected from bacterial outbreaks, it is much easier to link to a region and less likely to affect nearly as many people. For cross-contamination reasons alone, the government should have a vested interest in strengthening regional agricultural systems.

Even larger threats to the resiliency of our food system are climate change and our food systems reliance on fossil fuels. From the gasoline needed to run our mechanized farming system to the massive amounts of fossil-fuel based pesticides and fertilizers needed to grow our monoculture crops, food is inextricably linked to oil, a nonrenewable

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<sup>14</sup> As quoted in Pollan’s “farmer in chief” 2008

resources that will continue to increase in price until we find a replacement (Kirschenmann 2009; Kunsler 2006). The severity of this link between food and fossil fuels was made strikingly clear when the USSR cut off Cuban petroleum imports, causing a massive national crisis and a major reduction in caloric intake – dropping Cuba from the 11<sup>th</sup> rated quality of life in the world in 1989 to falling just ahead of Haiti for worst malnutrition in Latin America in 1993 (Rossett and Benjamin 1994). While our government highly regulates energy distribution for the sake of national security, it does not view food in this same light. Certainly the rising cost of food will impact everyone, but more so for low-income populations who are already food insecure in the US, perhaps multiplying the health problems mentioned above. More importantly, is what the continual usage of fossil fuels means for our climate security (IPCC 2013). The future impacts of climate change will reap havoc on agricultural systems worldwide. In fact, the USDA acknowledges this concern and recently announced the formation of eight federal climate hubs to help farmers adapt to climate change, but these are meant to help farmers adapt, not food systems (Upton 2014). Further, a recent Oxfam report warns that there is a major gap between what governments are doing and what they should be doing to protect our food system. The report cites the most recent IPCC findings that warn climate change could cause declines in global agriculture 2% each decade as populations continue to grow (Oxfam 2014). While much of the agricultural decrease will be due to extreme weather in the most vulnerable countries, the United State is not immune from climate-change related natural disasters.

In a popular journalistic report investigating the food system in the United Kingdom, Rosie Boycott framed the term “nine meals to anarchy” (Boycott 2008). She was alluding to the fact that grocery stores in the UK and in the US carry only a 3 day supply of most foods.

Any disturbance in transportation, such as a strike or a natural disaster, can cut off an urban center from food – the food value chain is vulnerable (Thorpe and fennel 2012). While the DHS claims to be responsible for making the US more “resilient” against hazards, they approach resilience as readiness to respond to a natural disaster, not adaptation to prepare for climate change. With California, our bread basket for fruits and vegetables, experiencing one of the worst droughts in recent history and super storms and hurricanes increasing in number and intensity in the South and East, our food supply chain is being attacked from multiple fronts. It is obvious our globalized food system dependent on the decisions of just a few corporate players is fragile. While I do not argue for the end of the globalized food system, I do argue that the US should be making earnest attempts to diversify our food production and distribution. A major tool to increasing food sovereignty; the right for everyone to have access to safe, nutritious, and culturally appropriate food with community rights to food and food production, over trade concerns (see Ziegler 2008 for expanded definition); will be strengthening our local and regional food system, which means putting some agency back in the hands of local and regional communities.

### *Increased agency for individuals*

Devolving some food system decision-making power to state, local, and regional governments are important in that these levels of governments are already working on food security issues from a holistic food-systems lens. As the case studies below will demonstrate, there is much being done with little regulatory and/or financial power. Indeed, cities are even taking it upon themselves to plant “public produce” on municipal grounds (see Nordahl 2009). Beyond the policing powers and better understanding of



local nuances, localized decision-making often places power in the hands of more individuals, including concerned citizens not holding public office. It gets us one step closer to what Frances Moore Lappé calls a “living democracy” that goes beyond voting and shopping (Lappé 2010). To create truly resilient communities, there must be inclusion and accountability from many – not just our interactions with government, but with all of our community interactions. The following case studies demonstrate how non-political actors are increasing their agency through building organizations and impacting local food policy decisions.

## Case Studies –Tools for Implementation

Certainly, granting more authority to local, state, and regional governments could change the narrative surrounding food governance by allowing for a more holistic approach to food systems that stretches well beyond economics and commerce. While the diffusion of federal power to states and localities may be a long process, there are already organizations solving food security issues from the ground up. In this section, I focus on three organizations that are becoming more prevalent actors in state and local food decisions, slowly changing how we govern food by bringing more voices to the table and advocating for strengthened local food systems. I begin by discussing the role of food hubs in the United States. Most still in their infancy, these “hubs” are growing exponentially in the US with close to 300 representing all but one state. These organizations aggregate food from small farmers to allow them to be market-competitive with agri-business. Next, I discuss the role of Food Policy Councils, organizations that make policy suggestions to lawmakers and include a diverse set of engaged citizens representing many sectors of the

food system. Finally, I discuss one specific organization that is beginning to tackle food governance as a region – Food Solutions New England. Together, these institutions reflect possible governance tools to refocus our understating of food from an economic to a “foodshed” perspective.

### *Food Hubs*

*“Skyrocketing consumer demand for local and regional food is an economic opportunity for America's farmers and ranchers. Food hubs facilitate access to these markets by offering critical **aggregation, marketing, distribution and other services** to farmers and ranchers. By serving as a link between the farm or ranch and regional buyers, food hubs keep more of the retail food dollar circulating in the local economy. In effect, the success of regional food hubs comes from entrepreneurship, sound business sense and a desire for social impact.”*

*–USDA Secretary Tom Vilsack, May 2013*

According to the USDA, “A Regional Food Hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand” (USDA 2011: 4). Only a handful of these institutions existed a decade ago, but there are close to 300 in the United State today. While food hubs all have a common mission to manage source-identified food products, there are many diverse approaches to accomplish this goal. Food hubs range from multi-billion dollar for-profit food distributors who emphasize buying locally when possible, to small farmer cooperatives consisting of 5-6 members offering Community Supported Agriculture (CSA), weekly produce boxes, shares. Some food hubs are for-profit (LLC), some non-profit, and some cooperative. Further they provide varying services, some just focus on selling food while others are much more involved with low-income food access

and regional marketing and serve different markets such as food to institution<sup>15</sup> or food to consumer<sup>16</sup> (for a full list of services and structures see Barham et al 2012).

Food hubs are increasing the economic viability of small and mid-size farmers as well as increasing access to locally produced food to consumers. Findings from my data analysis reveal the top barriers food hubs face are scaling-up, acquiring more business skills, and finding enough local food. All problems demonstrating there is an increase in demand without support/funding for infrastructure and training. Many interviewees stressed the need to differentiate in the marketplace and the need to get more business-oriented employees with experience in supply-chain management. Given the relatively newness of these intuitions, it is not surprising food hubs face many similar challenges as other start-up businesses, however, a handful are demonstrating their strength in the marketplace and are starting to scale up (see Cantrell and Heuer 2014). One such food hub is Farm Fresh Rhode Island – a leader in the food hub movement.

Farm Fresh Rhode Island (FFRI) began in 2004 as a humble student project that identified gaps in the local food system. The student started a couple of farmers markets to increase local food access, created a local food guide as an educational tool, and started an annual Local Food Forum to connect sellers with institutional purchasers. By 2007 FFRI opened an indoor winter farmers market, started coordinating with schools for a farm to school program, and initiated a “fresh bucks” program that increases the purchasing power of WIC/SNAP consumers. By 2009 they invested in a refrigerated truck to start making high-end deliveries to local restaurants and designed a software program allowing chefs to

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<sup>15</sup> Such as farm to school programs or sales to hospitals

<sup>16</sup> More marketing, packaging, mobile delivery, farmers market management

order from specific local farms weekly. This venture allowed them to begin the Veggie Box program in 2011 which is a CSA that delivers weekly produce baskets to over 50 drop-off sites for \$25 per box. At this same time, FFRI ventured into their Harvest Kitchen Program, a 15 week culinary and job readiness program for youth in conjunction w/ juvenile corrections. This program introduces the students to jobs opportunities in the food industry, weights, herbs and spices, ordering, nutrition, sales, knife skills, and food safety. They then try to place each student in a local internship after graduation. While FFRI is not representative of most food hubs due to their scope and size, they do demonstrate what a dynamic food hub can contribute to a local food system, both economically and socially, and are often touted as a model by the USDA (for example see Barham et al 2012; Fischer et al 2013).

Food hubs are beginning to break down one barrier in creating a more localized food system by creating local market places that are often removed from the globalized food system. Further, these hubs are looking to scale up (see Cantrell and Heuer 2014) by working with traditional food distributors to expand their reach into retail outlets and institutions. Just recently, even Walmart made a \$3M donation to the Wallace Center<sup>17</sup>, a food hub think tank. In addition, more traditional institutional distributors such as Sodexo and Chartwells are looking to form relationships with regional food hubs to meet consumer demands for more local products. Given the dominance of the globalized food system over the past 50 years, the market-entry progress made by food hubs in the last 5-10 years is quite impressive. The USDA is beginning to see food hubs as important supply-chain actors,

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<sup>17</sup> Walmart's outreach to food hubs is an attempt to streamline their "buying local" campaign. Some praise their efforts while others are highly critical of Walmart and claim they are using the partnerships to define "local" (ie as a geographic/commercial region) without actual ties to the communities or farmers (see Jackson and Perrett 2014)

but the food hub model still fits squarely under their definition of food as “commerce.” While food hubs do not make food policy at the local level, they are influencing it, both through market creation and by representing themselves on food policy councils, newer organizations giving more voice to individuals concerned with food policy and security.

### *Food Policy Councils*

While food policy councils (FPCs) vary dramatically in terms of size and scope, they generally consist of a diversity of stakeholders in a regionally-defined food system, from local to state and regional levels, representing sectors such as production, access, environment, consumption/demand, and economic development (see Harper et.al 2009; Hodgson 2011). These councils serve as forums for discussing food issues, foster coordination between actors in the food system, evaluate and influence policy, and launch programs and services that address local needs (Harper et al 2009, 2). They are usually non-profit or quasi-governmental organizations, often with a goal of establishing a formal relationship with public officials, and members are usually volunteers that are either appointed or self-selected. Certainly there is not a “one size fits all” model of these councils, but they all try to address food issues systematically and many have their roots in addressing local food access and hunger issues from a holistic perspective. From 2010 to 2012, the number of FPC’s in North America increased from 111 to 196 (Winne 2013). Certainly these organizations are becoming critical actors in local food system decision-making processes.

In their report on lessons learned for food policy councils, Harper and others discuss the impact of the Connecticut Food Policy Council - the first state food policy

council created in 1996. The Connecticut Legislature created the council to “develop, coordinate, and implement, a food system policy linking economic development, environmental protection, and preservation with farming and urban issues.” In ten years, the Connecticut Food Policy Council has helped pass statutes on getting soda machines out of schools, appropriated money to protect farmland, brought EBT machines to farmers markets, organized the states nutrition education campaigns, addressed the lack of livestock slaughtering and processing infrastructure, increased the state’s purchasing of local foods, increased public transportation to supermarkets, and prepared an official state road map identifying 300 locations where local food can be purchased. The Rhode Island Food Policy Council (RIFPC) formed in 2011 from a more bottom-up design after Southside Community Land Trust received two private grants. This year alone, the RIFPC has presented official positions on state policy hearings concerning on-farm brewery licensing for hops growers, tip theft in the state, a state-wide composting initiative, and food bank funding (to name a few). Further, they worked with the Harvard Food Law and Policy Clinic to develop a document on land-linking programs for new-entry farmers and coordinated many community events and conferences. While the state-level councils have more political influence, most FPCs operate at the city/regional level, and the most dynamic of these, such as Detroit and Los Angeles, are in conjunction with city councils or mayor’s offices. While all FPC’s differ in origin and funding (28% of the local-level FPCs receive no funding), they all have common goals to bring diverse stakeholders to the table to solve food system issues.

Food policy councils give individuals and stakeholder agency where they once had little to no influence on decision-making. While often still mainly composed of elite actors

in the food system (such as city and state officials, business leaders, and researchers), it is important to note that FPCs often make purposive efforts to bring in previously silenced voices in the food system debate, such as leaders in low-income and underserved communities. Indeed, many councils began with a mission statement, at least partially, dedicated to increasing accesses of healthy, culturally relevant food to all residents. In the RIFPC there is representation from the Farm Bureau, urban agriculture farmers, the health department, the department of environmental management, economic growth organizations, immigrant farming communities, food hubs, small and large food processors, and food system and welfare researchers. Even the opportunity for such a myriad of actors to come together to discuss strategies and influence policy is an example of bringing a “living democracy” back to food politics. This being said, the federal government, while sometimes providing grants to help FPCs get off the ground, has done little to support these organizations. In fact, in 2012, the Community Food Security Organization, a private-umbrella organization for FPC information and networking, closed its doors due to a lack of funding. Further, these organizations are limited by their political boundaries – when food system issues can often be regional in scope.

### *Food Solutions New England*

Food systems do not automatically stop at political borders, much like other environmental issues like water flow and air pollution. Instead, like watersheds, we live in foodsheds, loosely defined as a regional food systems comprised of alternative production and distribution models (see Kloppenburg et.al. 1996, 34). Regionalism, more concretely, is “a framework for economic, policy, and program development that 1) responds to

regional differences and needs; and 2) encourages regional approaches and solutions” (Ruhf and Clancy 2012, 6). Approaching environmental problems collaboratively and regionally has proven successful in the past with forestry policy affecting multiple stakeholders and watershed management issues such as pollution reduction agreements in the Chesapeake Bay (for a review of collaborative governance see Ansell and Gash 2008). With regards to US foodsheds, food expert Mark Winne points out that New England may be the most vulnerable region as it is geographically the most distant from California; food in New England can be up to 10% more expensive than other parts of the country (Winne 2008, 14).

One organization trying to coordinate state efforts on food policies is Food Solutions New England. This is a regional body, funded by charitable donors, that is comprised of delegates from all six New England states (chosen either by state government officials or food policy councils) that meet yearly to discuss the regional food system. More importantly, they have focused work on the document *New England Food Vision* which is a report calling for the “region to build the capacity to produce at least 50% of clean, fair, just and accessible food for all New Englanders by 2060” and presents production scenarios and consumption habits that will make it feasible (Donahue et al 2013). To truly understand food security, it is important to understand states must work together at the regional level – this is especially true for smaller states or states with large rural or urban populations. For example, Maine has plenty of space for farmland with a small population while Rhode Island is densely populated with the most expensive farmland in the country. Food Solutions New England recognizes the interdependence of New England states and the precarious position of New England at the end of the supply chain.



The first report issued by A New England Food Vision lays out specific scenarios where food production in New England can increase to account for up to 35% of the regions' consumption based on potential yields of 6 million acres by 2060 (see Donahue et al 2013, 9-10). This is truly a holistic view of food production that is not bound by political cycles. Recommendations range from raising sheep instead of cows for meat, increasing intensive vegetable farming in urban areas, increasing chickens and egg production, and increasing production in what New England does best, such as apples, berries, and seafood. While all New England states send delegates to the conference, Food Solutions New England acts independently of states. The ability to look at food systems not only holistically, but also to look at them decades into the future is something that the federal government does not do. US Food security will depend on regional cooperation, either formal or informal, to distribute and produce food at the local level. Food Solutions New England is only one of many organizations beginning to investigate the viability of regional action to build a more resilient foodshed.

## Conclusion

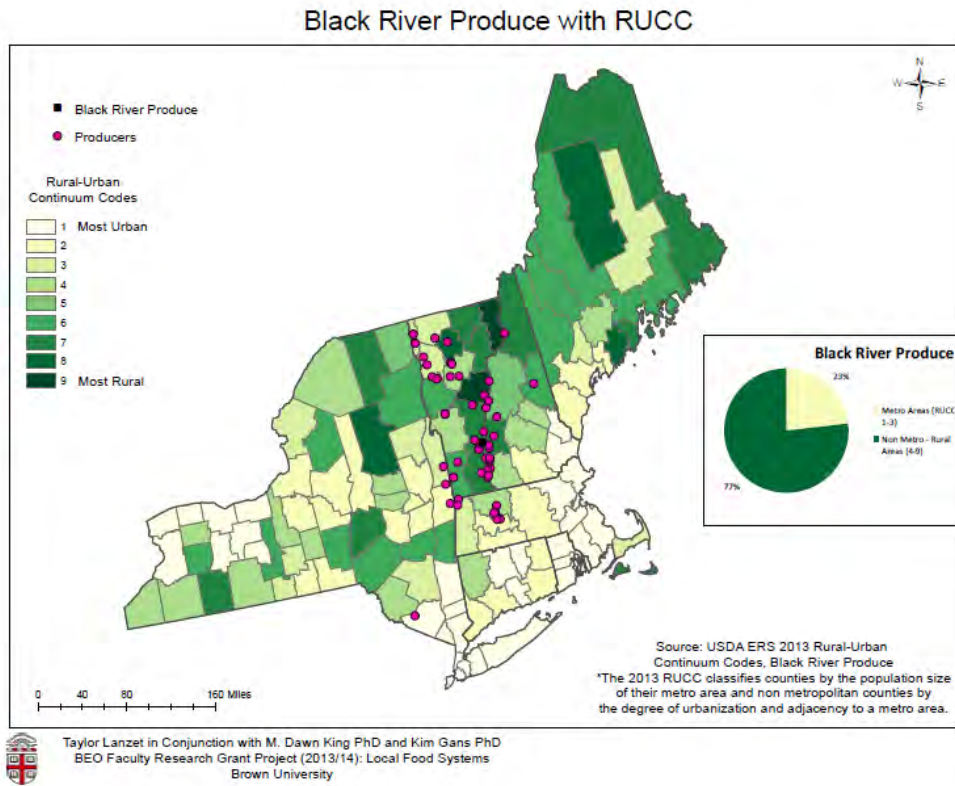
Given the food system has such an important impact on public health, the environmental, economic development, and national security, it is time we start viewing it more holistically through the Farm Bill. We can turn the Farm Bill into a true Food Bill by acknowledging the multifunctionality of agriculture in that it has both commodity and non-commodity outputs. The US government can accomplish this via three policy reforms. First, it can emulate some of the progressive agriculture policies found in the European Union. The EU slowly started to address agriculture as a multifunctional commodity in the

early 2000s. The Common Agricultural Policy (very similar to the Farm Bill) partially decoupled subsidies from production with the explicit recognition that agriculture provides services other than food. Their two-tier model keeps the traditional subsidized model for 75% of spending, but the other 25% is spent on rural development, young farmer training, conservation, preserving local *terrior* and quality, subsidizing domestic breeds, and helping farmers transition to organic practices (Van Huylenbroeck and Durand 2003). While this is not the focus of my paper, the US will have to make a concerted effort to recognize food beyond “commerce,” and the European Union gives us a model to do so.

Once there is recognition of multifunctionality, the US can implement the second policy reform – ceding more decision-making power to local and regional communities. As demonstrated in this piece, even without major federal support, actors and institutions are currently trying to strengthen local food systems in the name of health, environment, security, and economic viability. Certainly the federal government should retain its power to oversee the food system, but devolving at least some power of the purse to local decision-makers will strengthen local economies, and it is the only way to create a truly secure food system that will be more resilient to climate change and natural disasters. We currently have a Farm Bill that has morphed over the years to cater to large-scale agribusiness with little reform since the early 1970s, save minimal spending changes to support small farmers and buy local programs over the past decade. Our food needs, environmental concerns, and food demands have changed dramatically since that era. While this paper is by no means an all-encompassing view of our US food system, it does demonstrate a strong rationale for localizing some decision making power.

Climate change and our reliance on fossil fuels many very well dictate the next fifty years our energy and security policy in the US - it is time to start viewing our food system as a vital part of our national security. A third policy reform is needed not through the Farm Bill, but rather through the Department of Homeland Security. Given our dependence on all natural resources for our quality of life, the government needs to start addressing drought conditions, flooding, and the increase in natural disasters as threats to our national security that will continue to escalate due to climate change. Homeland Security needs to address these issues as much as they do potential terrorist attacks. We need a concerted effort to decrease our food systems' reliance on increasingly expensive fossil fuels in the name of combatting climate change and securing our food system. Further, we must be prepared for disturbances in food supply chains. One way to do this, through both national security and agriculture policy, is to start shifting power and resources to local communities dedicated to more sustainable food systems.

Graph 1: A Food Hub map with producers plotted out on the Rural-Urban Continuum



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