

Presentation Text

Community Food Security and Community Economic Development

2012 Spring Community Development Studio

Edward J. Bloustein School Planning and Public Policy

Rutgers University

Max Azzarello, Anthony Capece, Michael Cassidy, Laura Chamberlain, Benjamin Faust, Sarah Franklin, Josh Jensen, Emily Joiner, Benjamin Logue, Jaclyn McFarlane, Brandon McKoy, Matthew Sarsycki, Darius Scott, Charlene Sharpe, Carolyn Worstell

Instructor: Kathe Newman, Associate Professor of Urban Planning and Director, Ralph W. Voorhees Center for Civic Engagement

Slide: Introduction

The Spring 2012 Community Development Studio worked with Elijah's Promise, the Rutgers Food Innovation Center, and New Jersey Community Capital to increase food-related community development and improve food security. **[Slide: High Tunnels Title Slide]** We start with high tunnels, shift to food processing, and conclude with a discussion of food hubs.

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HIGH TUNNELS

Slide: Urban Ag

We sought to identify ways to incorporate urban agriculture in New Brunswick. Historically, the economy of food shaped our cities. Looking at the world's older cities, like New York and London, we can trace how food flowed through the city. Since then, we've moved towards a more industrialized system of larger farms far from the city. So, why bring agriculture back into the city? Food security, or a lack of access to healthy affordable food, is a major social issue facing low- and moderate-income neighborhoods. Nationally one out of six, and in New Jersey, one out of five, people lack food security. Growing food in a city can help to address this and can contribute to community economic development. From food carts in Portland to community investment in culinary institutes in Philadelphia, there has been a shift towards businesses and services centered around local food. Urban agriculture also offers environmental benefits. A recent study by Columbia University found that urban agriculture mitigates storm water runoff, facilitates air purification, and saves energy. These benefits in food security, community economic development, and the environment give urban agriculture a triple bottom line.

Slide: Growing and Growable Places in New Brunswick

Here you can see a map from last semester that identifies the existing and potential places to grow food in New Brunswick. We focus here on two sites as potential locations because they were vacant and are located near other food-related activities. There is a privately owned lot on Nielsen Street that is part of the city's redevelopment effort and another lot on Jones Avenue that is owned by Rutgers University. It is the home of the New Brunswick Farm Market, raised community beds, and Nurture Through Nature, a youth community gardening program.

Slide: High Tunnels

Last semester's studio team reviewed ways to grow in the city and identified high tunnels as a productive urban growing strategy. We decided to look at what it would take to put high tunnels on both of these lots. High tunnels are green houses that are more flexible and efficient than their glass counterparts. They do not have a solid foundation, can fit into small lots, and can be erected at a fraction of the cost. Most high tunnels are semi-permanent and can be easily moved. This is

important because urban land uses can change frequently. Because of the greenhouse effect of the tunnels, crop seasons are extended approximately six weeks before and after a typical growing season. The enclosed nature of the high tunnel allows for more specialization in what is grown because a farmer can control the conditions for a variety of crops. The barrier also prevents the spread of contaminants and pathogens. In short, farmers can grow more crops, quicker, and at a lower cost compared with more traditional means. If the outcome is to produce food to improve food security, high tunnels are an important part of the urban agricultural effort. With that in mind, our group set off to figure out if it was possible to develop a high tunnel growing system in New Brunswick.

Slide: Community Partners

We met with the New Brunswick Community Garden Coalition, a committee of the New Brunswick Food Alliance. This is a relatively new organization that brings together local growers from community groups, Rutgers, religious institutions, Elijah's Promise, Unity Square Partnership, Rutgers Against Hunger, and the New Brunswick Farm Market. We also reached out to the New Jersey Agricultural Experiment Station or NJAES. With a wide array of specialists including farmers, agricultural economists, horticulturalists, and engineers, NJAES is an invaluable resource for planning urban food systems. With these partnerships, we were now in contact with different entities that had the potential to develop and grow in high tunnels in the city.

Slide: Transitioning Urban Ag

Currently, many of the individuals and community groups growing in New Brunswick do so in private backyards and small raised beds. Due to the scale of these facilities, planning approvals and construction permits are typically not required. Unfortunately, also due to scale, these facilities limit production, education and partnership opportunities. If one of our goals is to expand urban agriculture in New Brunswick, then it is important for us to establish a facility and site that supports agriculture as the principal operation. Establishing a large-scale facility, such as a high tunnel, requires local approvals. From this perspective, the process for constructing a high tunnel can be thought of as transitioning New Brunswick urban agriculture from a less formal,

limited use, to a larger, formally approved use.

Slide: Choosing a Site

The process for constructing a high tunnel begins with choosing a location. The Fall 2011 Studio started this process by identifying two potential locations for high tunnels - 15 Nielson Street, a privately owned lot, and 178 Jones Avenue, a lot owned by Rutgers. The vacant lot at Nielson Street is across the street from Elijah's Promise Shiloh Community Garden and around the corner from the Community Soup Kitchen. The lot at Jones Avenue is home to the New Brunswick Community Farm Market and presents an opportunity to complement the existing community gardens. Our team began the semester by exploring the procedure for constructing a high tunnel at Nielson Street. Through correspondence with the New Brunswick Planning Office we learned that 15 Nielson Street is located in a residential zone that does not permit agriculture as a principal use. Constructing a high tunnel at this location would require a use variance. To apply for a use variance, the applicant – Elijah's Promise, would be required to own the property or have a lease agreement that supported the application. Since the lot at 15 Nielson Street is owned by The Community Builders, we opted to record the process to help the Food Policy Alliance in future efforts and we turned our attention to the Rutgers owned lot. Through correspondence with the Rutgers Office of Facilities and Capital Planning, we learned that improvements at Jones Avenue are exempt from city approvals. In lieu of city approvals, Rutgers would complete an internal review to make certain the high tunnel was structurally safe and suitable for the site.

Slide: Putting Plans into Action

Many of the materials for constructing high tunnels are simple but designing the structure to support wind and snow loads requires expertise. We completed a web search and found XS Smith, a vendor with experience designing and constructing high tunnels in New Jersey. We contacted them to discuss our objective and request an itemized quote. After receiving the quote, we realized there were a number of unfamiliar material components. To make sure we purchased suitable materials, we reviewed the quote with NJAES personnel. They assisted us in working through considerations for door sizes, ventilation systems, and plastic covering. We met with

NJAES and the Program Coordinator for New Brunswick Community Farm Market at the garden site. During our site visit, NJAES helped us understand the optimal position for wind and sunlight. Ultimately, we requested a revised quote for two 26' by 40' high tunnels.

As mentioned earlier, the Rutgers Office of Facilities and Capital Planning will review the proposal to construct high tunnels at Jones Avenue. The final quote from XS Smith is greater than \$5,000 (approximately \$15,000), and therefore requires Rutgers to administer a bid. To facilitate this process, we prepared a concept layout and material specifications. These documents can be used by Facilities and Capital Planning to solicit bids from vendors. We submitted the completed documents to the Program Coordinator at the New Brunswick Community Farmers Market and are waiting to hear.

Slide: Concept Layout

As shown, the New Brunswick Community Farm Market has multiple raised beds and a central wooden pavilion. The proposed high tunnels are shown in red. Adding high tunnels to this location will expand the site's growing area. Residents and students can learn about the potential to use high tunnels in urban agriculture and the New Brunswick Community Gardening Coalition can grow food for sale at the farm market.

Slide: Hoopla

In terms of next steps, if facilities approves the plan, the RU Purchasing department will issue a request for proposal, and vendors will give their bids. Once a vendor has been chosen, the high tunnels can be constructed. We plan to build one ourselves to learn how to do it and then build the second at a "hoopla," which we see as a community university event to raise the high tunnel, much as a community might raise a barn. The event could also include workshops showing community members how to build high tunnels of their own for home gardens. We hope to invite local decision makers so that everyone can learn about high tunnels to consider whether they might be useful in other parts of the city. The lot is situated between the Latino, African American, and university communities. It is important that there is an open partnership between the community and the university. The university can supply many of the resources it has at its disposal like knowledge, training, finances and the community supplies knowledge. Many NB

residents come from areas in Mexico that grow crops that are uncommon in New Jersey. These crops could be grown in the tunnels and community members can educate others about these culturally relevant plants.

Slide: Rendering Slides

The Farm Market site presents some opportunities to build on the partnerships and food work on that site, to expand community partnerships, and to expand an existing educational center. Perhaps the Master Urban Gardener Program could host classes here. Maybe community residents could teach Rutgers students, faculty and chefs about different herbs and plants and how they are used culturally for food, health, and celebration. It is also possible that the community gardening coalition could grow food in the high tunnels for sale at the New Brunswick Community Farm Market. **[SLIDE]** These ideas are not mutually exclusive and could all be coordinated in conjunction with one another to create an urban ecological training center. From here, other community organizations can take this model, or implement their own throughout the city. This is the first major step in creating a local, sustainable, food production culture, which flourishes on education, community, and sharing knowledge.

This project is an example of how a local production system (in this case a high tunnel) fits into the overall food system. Now, we will jump to a study of the Rutgers Food Innovation Center to think about food processing, food security, and community economic development.

RUTGERS FOOD INNOVATION CENTER

Slide: Title Slide

The Spring 2012 Community Development Studio conducted a community economic development study of the Rutgers Food Innovation Center (FIC), the only food-related business incubator in NJ.

Slide: Introduction

The FIC provides food manufacturing services including business development, market testing, product development, networking, regulatory assistance, quality control, and food safety assistance. Since 2000, the FIC has supported more than 1,200 entrepreneurs and businesses including farmers, start-up, small, and mid-sized food companies and retail food establishments. And it has helped companies develop about 40 new value added products (Rutgers Food Innovation Center, 2010). A dozen full-time and more than 30 part-time staff work at the Center's 23,000 square foot facility in Bridgeton (personal communication with Sho Islam, February 17, 2012). The FIC is also enhancing community economic development by increasing business and job opportunities for disinvested communities and expanding opportunities for farmers and food business owners to enhance New Jersey's food economy while improving food security. The FIC is doing this by training the workforce, recreating networks between producers and consumers, branding and marketing value added NJ production, and creating peer-to-peer business networks.

Slide: History

During the first half of the 20th Century, "The Garden State" grew and processed food at rates higher than the national average (Adelaja et al, 1996). South Jersey thrived as the home of national processed food brands like Campbell's Soup in Camden, Seabrook Farms in Bridgeton, and Welch's Grape Juice in Vineland. But over time, New Jersey found it difficult to compete with farmers in states like California and Iowa, given its small physical space and shorter growing season. As food manufacturing moved to areas with less expensive land and labor, New Jersey's food manufacturing base declined (Sidorick, 2009). Farming and processing continue,

but many NJ farms are small and often find it hard to compete with large growers. The declining in processing capacity means that some food companies leave the state to process food because of a lack of facilities.

Slide: Rutgers Responds

Concerned about these trends, in 1996 the chair of the New Jersey Agricultural Experiment Station conducted a comprehensive study of New Jersey's agricultural and food industry, and subsequently launched the effort to develop the Food Innovation Center. They sought to use agricultural biotechnology and food processing advancements to enhance the capacity of New Jersey's farmers. A national team of experts conducted a feasibility study for a food incubator and selected Bridgeton, which had suffered as food manufacturing declined, as the location. Many of the people who worked in the processing industry remained, making it an area rich in human capital.

Slide: Planning A Food Incubator in South Jersey

Bridgeton and its surrounding communities welcomed the FIC, with hopes that it would contribute to their economic development efforts. Government and food entrepreneurs partnered and provided support. The FIC began small. It focused on learning about the communities and businesses and building the relationships and infrastructure that would prove invaluable in years to come. The FIC provided business assistance for eight years, during which time it developed expertise, services, and relationships that made it possible to raise the \$8 million to build the processing center. The long lead up ensured that they had a pipeline of companies prepared to use it.

Slide: FIC Core Services - Service to Farmers and Food Entrepreneurs

The FIC provides technical business planning, food science know-how, and marketing assistance to farmers and food entrepreneurs to create innovative and commercially viable food products. The FIC helps farmers create value-added products to extend the economic benefits of their harvests. Circle M Farms, a peach farm, produces a peach cider. The Flaim family farm in Vineland created a prepackaged eggplant parmesan cutlet dish that has helped the farm turn a

profit on their produce in the off-season. The FIC also helps emerging and well-established businesses develop new and modify existing products for different markets. First Field, a new company that sells ketchup and has benefited from the FIC's food science staff's 30-plus years of tomato experience. Companies that want to expand into new markets often cannot dedicate a whole production line to try out a new product. Schar, an international company that produces gluten-free foods spent time at the FIC when it considered entering the U.S market.

Slide: From Concept to Commercialization

The FIC guides farmers and food entrepreneurs “from concept to commercialization” which requires more than learning how to cook, freeze, wash and package their produce. FIC staff require potential clients to take a “Food Business Basics” course and attendees receive one hour of consultation time with the FIC staff who explain all of what taking a product to market entails. Three quarters of clients who take the course do not return. For those who do, FIC staff provide a suite of services. To ensure food products are safe and ready for production, businesses must have their food supplies arrive at least one week before processing. The FIC staff inspects the product for quality, safety, and accuracy of delivery. The product is then crafted on one of the Center's processing lines. If the product needs to be cooked, bottled, canned, or flash frozen and sealed, it is produced on the hot processing line. Baked or dehydrated goods are made on the dry processing line, and Frozen or chilled products are made on the cold line. The FIC staff helps perfect recipes using food science and focus group product testing. To facilitate entry into the market, they help develop marketing and distribution plans, packaging, labeling, marketing design, and pricing. Goods are then prepared for commercial delivery and shipped to schools, supermarkets, and vendors.

Slide: Making Markets

FIC staff members are also rebuilding the networks between producers and consumers. In particular, they have been helping to re-establish connections between farmers and large institutions. **Slide: Farm to School** The FIC has been working with New Jersey's Farm to School program, which is part of a federal initiative to link farms to schools to provide healthy school lunch, while increasing demand for local produce. These programs deliver fresh produce

to schools but most NJ produce is ready for harvest when schools aren't in session, and many schools are no longer able to make meals using raw ingredients. The FIC was uniquely poised to develop prepackaged healthy school lunch menu items using New Jersey produce. It helped to develop products such as a yogurt and granola parfait that cleverly includes beets. The Flaim brother's eggplant was integrated into a cutlet dish and an eggplant rollatone for the Vineland School District. The FIC taste tested the products with local children to ensure products appealed to kids. These efforts help increase return on investment for producers while improving food security for consumers.

Slide: NJ Fresh Labels on Processed Food

The FIC also helps create a market for NJ products by applying and marketing the Jersey Fresh label for processed food. The New Jersey Department of Agriculture (NJDA) created the "Jersey Fresh" label in 1974 to emphasize traceability and encourage people to purchase Jersey-grown produce. As local farmers invested in value-added production, a demand grew to label processed foods that use Jersey produce. The Flaim farm's eggplant dishes and Circle M Farm's peach cider products bear the "Made With Jersey Fresh" label. The FIC works with NJDA to support the Jersey Fresh label at the National Association of Specialty Food Trade Show (Fancy Food Show) (Personal communication with Diane Holtaway, April 3, 2012). The Made with Jersey Fresh label has enabled farmers to expand their business opportunities and the Flaim brothers say it has been crucial to improving product sales (Conaboy, 2010).

Slide: Improving Profitability and Quality of Agricultural Industry

The FIC has also been working energetically to support the expansion of New Jersey's food economy by building support networks for themselves and their business partners. Reviving local food economies requires rebuilding business networks, reconnecting firms, identifying opportunities for business products and services that are missing, and drawing in the existing physical and human capital. Peer to peer learning and support within the food industry are necessary for expansion.

Slide: Building Business Networks

To that end, the FIC has created business organizations that foster relationships vital to its success. The FIC started the Business Association Mentor Program (BAM) to help individuals and organizations learn about programs that serve rural areas. BAM is a regional association that equips communities with the knowledge to support their local food economies through marketing and advertising, product research, sponsor acquisition, public relations campaigns, creating organizational literature, and getting products to market. Members of the association support each others' business interests and collaborate to achieve mutual goals.

Slide: Networks

In 2002, the FIC built the national Food Business Incubation Network (FoodBIN) which is a virtual association that shares services, funding sources, relationships, and programs that can positively impact food and agricultural businesses. FoodBIN has held national conferences and it advances the needs and initiatives of food innovation entities. The FIC hosted the 2008 FoodBIN Conference. The Food Entrepreneurs Network, also created by the FIC, allows farmers, food entrepreneurs, and food manufacturers to communicate with one another. It creates opportunities for clients to receive assistance from other businesses with similar problems. This peer to peer collaboration is central to improving the industry.

Slide: Making Processed Foods Available

Additionally, the FIC participates in the National and New Jersey Food Processors Association, an organization of food related suppliers and manufacturers that share information about best practices in the food industry. Participation expands the FIC's network and allows it to stay abreast of innovations.

Slide: Workforce Development

The FIC is attracting existing food economy workers, training new workers, and encouraging students to pursue food economy jobs. By locating in South Jersey and drawing on the region's human capital, the FIC is tapping into old food economy resources to enhance the new food economy. The FIC also draws talented employees to South Jersey who volunteer on local boards and participate in civic activities. They train local residents in food service so they can work at

the Center and in other food economy jobs. Forty residents have worked on FIC production lines, and some have gone on to work at other facilities. The Center provided training for 106 unemployed residents from 2009 to 2011. The FIC further enhances human capital through continuing education. From 2009 to 2011 the Center certified 1,000 food industry workers in food safety, and it developed an internship program with the local high school to foster the next generation of food economy workers. FIC staff also host and participate in career fairs.

Slide: Community and Civic Engagement

The FIC facility has stimulated other economic development. It generates jobs and a demand for business that did not previously exist, including catering companies to provide food and refreshments for events held at the FIC, and cleaning crews that sanitize the food processing area at the end of the day. Former clients also benefit from the facility's proximity for the support of future products. The FIC worked with government actors to ensure that Schar would locate its US manufacturing plant near the facility. Schar now has easy physical access to FIC's food science infrastructure that helps them craft and test new products. And Schar hired several of the students trained at the FIC. The FIC hopes to continue these community economic development benefits by encouraging other food economy businesses to locate near the center bringing more jobs to Bridgeton.

Finally, the FIC has become a central meeting point to work on food production and food security issues. Groups frequently meet there to network, plan ways to grow the state's food economy, consider how to improve food security and public health, and to brainstorm ways to connect farmers and consumers. Locally, the FIC allows non-profit groups to use the space for free, and it has become the de facto meeting space for Bridgeton residents and other community groups.

Slide: Sowing Seeds for the Future

The FIC provides the services we might expect from a business incubator, and it engages in many other activities that are expanding New Jersey's food economy. The Center is developing the workforce, building networks among food economy actors, providing links to government entities, creating markets through labeling and branding, and pursuing a statewide initiative of

food-related economic development. And they are doing this with an eye to improving the quality of food in institutions like schools and prisons, thinking about ways to get better local food into New Jersey communities, strengthening farmers, and increasing jobs and creating career ladders in communities that have struggled with disinvestment. The FIC is more than a business incubator. It is a food economy incubator, doing some activities that have become associated with food hubs. We turn now to the next team who will tell us more about food hubs, and how we might build on our existing infrastructure to grow a food hub in the future.

A FOOD HUB IN NEW BRUNSWICK?

Slide: Title Slide

Slide: Outline

Our team explored the potential to create a food hub in New Brunswick. We sought to learn what food hubs are, what services they provide, and to think about what a food hub might look like in NB.

Slide: Definition of Food Hub

The USDA defines a Food Hub as “a centrally located facility with a business management structure that facilitates the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products.” The USDA has identified over 170 food hubs, in 34 states. Each food hub looks slightly different depending on the context in which it emerged. While there are many variations in practice, the idea is to help small and medium-sized farmers reach local wholesale and/ or retail customers and to increase access to locally grown food.

Slide: Core Functions

The USDA has identified three main food hub components: active coordination, aggregation and distribution, and permanent facilities. Food hubs coordinate food supply chains to more directly move food from field to table. Food hubs can facilitate the connection between producers and buyers by aggregating produce, cleaning, sorting, and packaging it, providing local branding, ensuring traceability, and marketing it to large institutional buyers like universities, public school systems, hospitals, restaurants, and retail consumers. Larger, more established food hubs like The Stop Community Food Center in Toronto, provide permanent facilities for aggregation and distribution, storage, processing and preparing food for sale, education and meetings.

Slide: Community Food Hub

Some food hubs emphasize community economic development and community food security. The “community” aspect of a food hub depends on its mission. Some, like Detroit’s Eastern

Market, concentrate on business incubation, education and training in the food economy, and community outreach with nutrition classes. Others, such as Just Food in Ottawa, develop ways to get healthy affordable food into communities through farmers' markets, partnerships with corner stores and networks to move healthy food through the emergency food system. Community food hubs often make their space available for residents for meetings, small business development, markets, and even locally run CSAs.

Slide: Processing

Many community food hubs include a processing facility and provide related job training. This could be cold line processing, which is the post-harvest handling of food, and includes food washing, grading and packaging that make food more marketable. Smaller farmers often need and value this assistance. But food hubs can also offer a value added processing facility that transforms raw produce into other products. This type of processing, such as what is done at the FIC, offers all of the benefits we discussed earlier. Tomatoes might be sold fresh over the summer but the season is limited. If farmers turn those tomatoes into sauces, salsa or ketchups, they extend the economic benefits of their growing season. These activities produce opportunities for increased revenue, jobs, job training and can improve community food security depending how that food is used and who gets to consume it.

Slide: Gleaning

Processing can extend produce life for use in the emergency food system. Nationally ninety-six billion pounds of food are left in the fields every year. Gleaning is the harvesting of leftover crops but it is often hard to get fresh food to consumers. Community food hubs can help to aggregate, distribute, and process gleaned produce. Leftover food at the aggregation center can be saved and transformed into healthy food for people to eat. If the hubs offer cold storage, the facility can help preserve gleaned food and can save food for food banks and soup kitchens.

Slide: Food Hub Components

What components community food hubs offer depends on their mission. Some concentrate on business incubation, food economy education and training, or community outreach. Some, like

Phat Beets Produce, offer only a few components depending on their mission and resources, while others such as GrowNYC are more expansive offering just about every option possible.

Slide: The Stop Community Food Centre – Toronto, Ontario, Canada

The Stop Community Food Centre in Toronto began as a food bank in 1982 and has expanded to focus on community development and food justice. Advocacy is a central activity and it teaches residents how to advocate for themselves. The Stop has created knowledge-sharing mechanisms to educate people about the benefits of food hubs. It offers on-site classes on nutrition, cooking and baking, and growing, and hosts an online “Learning Network” where it shares its experiences and ‘how-to’ models alongside blogs and public forums to encourage online community building. Community involvement is essential and local residents contribute by volunteering, cooking, gardening and working as program committee members.

Slide: The Eastern Market – Detroit, Michigan

Detroit’s Eastern Market is located in a disinvested Detroit neighborhood. It is currently expanding to create the Detroit Market Garden which will include office and storage space, a processing center, several green houses, and a field for growing fruits, vegetables and cut flowers. Eastern Market decentralizes their distribution model to neighborhoods. It runs a “Fresh Food Share” program in which patrons order produce boxes which are delivered to one of eighteen locations and it runs twelve local farm stands to ensure that all residents, even those who aren’t able to get to Eastern Market, can access healthy, fresh foods.

Slide: New Jersey Context

Thinking about the potential for a food hub here means we have to better understand the role of food in the state’s economy and how food moves around the state – from producers – to consumers. The state’s food industry, which includes agriculture, food & beverage manufacturing, wholesale, retail, and food service, made up nearly 9% of the state’s gross economic product in 2007 and supplied 17% of the state’s private sector employment. In 2010, agriculture received \$1 billion in cash receipts.

Slide: New Jersey Agriculture

Fruits and vegetables make up 37% of cash receipts, resulting in a combined total of \$382 million. The Jersey blueberry produced the most cash receipts, with \$63 million, while green peppers, the Jersey tomato, cranberries and peaches all had cash receipts in the \$30 million range. Some of these farmers have well established distribution links and do well in the existing system but other farmers, especially small and mid-sized farmers may struggle to get their products to consumers and to get income from these crops that ensures their survival.

Slide: Size of Farms

Indeed, most of NJ's farms are small. As we see here, the number of very small farms (those under 49 acres) increased between 1997 and 2007. Meanwhile, the number of small or mid-size farms decreased slightly. The larger farms above 500 acres remained about the same size over this period. Food hubs emerged to tackle the challenges these smaller farms face in getting their products to market. Based on its agricultural landscape, New Jersey may be the ideal home for a food hub.

Slide: Food Distribution

Typically, produce moves from the farm to a distribution or processing center and farmers markets, grocery stores, restaurants or individuals. These networks mean that farmers lose money as food travels and the food becomes more expensive for the end consumers.

Slide: Issues Facing Farmers

Smaller farms often find it difficult to compete with larger growers. Some small farms have turned to farmers markets to get produce directly to retail consumers but attending is time consuming and farmers may not move enough produce to warrant the costs. Smaller farmers may find challenges in preparing their food for sale, which includes cleaning, sorting, and packing for shipment. A food hub can aggregate the food, clean and package, build relationships to wholesale buyers, brand, market, and distribute it, and ensure traceability.

Slide: Issues Facing Communities

Retail and wholesale consumers, meanwhile, are increasingly concerned about food quality and affordability. While some communities have reoriented food markets to consume food closer to where it's grown, others have not. More than 23 million people in the United States live in communities that lack access to healthy affordable food and more than half of those people are low income. Lacking access to fresh affordable food can contribute to obesity, diabetes, and heart disease. The food hub could move excess food from farms to the people who need it. Farmers Against Hunger, a gleaning organization, collects food from 35 to 40 farmers annually and moves that food to community groups and into the emergency food security system. Farmers Against Hunger has two trucks that go to several farms, and can distribute over 10,000 pounds a day to four distribution sites. Neither of these trucks is refrigerated meaning FAH must harvest and distribute on the same day. Improving the gleaning operations and distribution systems and integrating cold and frozen storage within the emergency food system would reduce food loss to spoilage. A community food hub that includes processing and cold storage could help to preserve produce that can then be distributed through the emergency food system. And focusing farms on local produce offers other benefits. Market vegetables can yield up to 25 times more revenue per acre than typical commercial crops. This is particularly good in a dense state like New Jersey, with expensive land. Moreover, small farms circulate money locally nearly twice as much as large farms.

Slide: Agriculture Land Use Near New Brunswick

So how about New Brunswick as a food hub location? New Brunswick is known as the hub city given its location midway between Philadelphia and New York City. Historically, it played an important role for goods movement. It could reprise this role for locally produced food. Even without leaving the city, the potential for food consumption is enormous given the presence of universities and hospitals, vibrant restaurants, the Fresh grocery store, bodegas, and other local consumers. Rutgers Dining Services, for instance, serves about 130,000 meals per week (Tenore, 2011). Sure New Brunswick is a city, but it is a short drive from agricultural land, shown here on the map in green. The buffers in grey show 30 minutes, an hour, and 90-minute estimated driving time from New Brunswick. Clearly New Brunswick is well located to work with these farmers. A feasibility study is needed to determine whether or not a food hub would be useful to

these farmers. We need to know what they grow and whether local aggregation and distribution would be beneficial to them.

Slide: Existing Food Infrastructure

New Brunswick is already home to many of the components included in community food hubs which suggests a nice jumping off points to develop a community food hub. Elijah's Promise does food-economy related job training and business development. The New Brunswick High School's Culinary Arts Program provides youth training in state-of-the-art cooking facilities. Rutgers University provides education, training, and support in food science, agriculture, community planning and health. The Intersect Fund provides business assistance.

Slide: Potential Opportunities

What might this look like in New Brunswick? We can envision a regional center that aggregates food from small farmers who lack distribution networks. The hub could negotiate relationships with buyers such as the universities, hospitals, restaurants, and school systems and distribute food to them. The local food hub in Charlottesville, Virginia delivers local small-farm produce to the University of Virginia and the city's hospitals. Similar systems might provide a link from farmers to local restaurants, markets, and bodegas here. The hub could facilitate the movement of excess food into the emergency food system. A processing center could make it easier for small farmers to prep food for sale. The hub could become home to an expanded version of Elijah's Promise's culinary catering facility where food is prepped for public school systems. There's lots of demand for food in New Brunswick as we discussed earlier. We might link aging farmers to farm students through a formal apprenticeship program. Perhaps the high tunnel systems will expand in the city and the hub can provide a market for New Brunswick grown food and culturally relevant items. If we think about the ecological training center the high tunnel team described, we can see potential links to community education courses on urban agriculture and healthy eating. The hub could be a central aggregation and distribution for processed food with Jersey Fresh produce. And it could include a food processing facility like a community

kitchen and partner with the Intersect Fund to grow small food businesses (like the FIC but on a smaller scale. Really, what couldn't it do?

Slide: Next Steps

To figure out a path forward, we suggest that the New Brunswick Food Alliance partner with farmer groups and request that Rutgers conduct a feasibility study to better understand the needs of local farmers and the interests of community development food actors. A food hub in New Brunswick can potentially help rebuild New Jersey's food economy by supporting local farmers, growing small businesses, strengthening food security, creating energy efficient food networks, and providing healthy local food to all.

Slide: Thank Yous