Smith’s Journey into the Local Food System: Identifying the Bottlenecks

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Abstract

This study focused on the question: What are the barriers in bringing more local food to Smith College and in identifying the impediments, how can we overcome them and form a strong local food system? To understand the purchasing capacity and needs of the college the director of dining services was the first contact. Gathering information from this source helped us to establish the parameters to define outside sources to contact. Those contacts included producers, processing, and distribution. The inquiry of each contact was based on the initial question and brought attention to a layer of issues.

Currently, Smith College has strong relationships with local farms in providing produce, so the part of the study discussed in this paper focuses primarily on beef. The director of dining services was very receptive in supporting this project. A connection was made between the director and a distributor of local beef that show a promising relationship in the future. The local producers and the processor of beef were interested in the prospect of supplying their products to Smith College, but saw land, money, and infrastructure as the main issues.

The immediate result is awareness to the barriers hindering a strong local food system and identifying the players who are willing to overcome these obstacles. In the bigger picture the farmers need a local distributor to help connect them as vendors to institutions and the processors need change in legislation to have access to more capital from government funding to expand and grow.
Introduction

The food system in general consists of the processes and infrastructure needed to support a population. This takes into account the growing, harvesting, processing, and packaging of food along with the transporting, consumption, and disposal of these provisions. In the last two hundred years the United States has gone through a dramatic transformation within these practices and the farms that implement them. As Orr (1994) affirms, of the 6.7 million farms in existence in 1935, less than 2 million have survived. In addition to this change the physical and organizational structures in place to sustain previous farming methods were modified as well. McNeill (2000) states, the farm labor force, nearly half the population in 1920, plummeted to 2 to 3 percent by 1990. The resulting conversion has shifted traditional farming into industrial agriculture and consequently local food systems were marginalized and the conventional food system gained supremacy.

Traditional farming is based on a sustainable method that essentially maintains a symbiotic relationship with the land being farmed and the surrounding ecological habitat. The efforts put forth in sustainable agriculture involve no-till farming to reduce soil erosion, maintaining soil nutrients by crop rotation and composting, and biological pest control. In the early 1800’s the purpose of farming was for the needs of the family who worked the land and the food life span, which is the origin of the food to the plate, traveled no further than possibly the neighboring farm for an exchange of goods. In traditional farming communities, information [was] passed from generation to generation and woven into the culture of the region (Orr 1994). Survival in this manner was dependent on an intimate and respectful relationship with the biota associated with their region. In 1900, farming around the world generally involved the same
basic procedures as a thousand years before… something like 70 to 90 percent of people worked in this low-technology, labor-intensive agrarian world. By the 1990s farmers in…North America… accounted for less than 10 percent of the population. Farming practices now utilize huge amounts of fossil fuels, control pests with chemicals, specialize in a single crop, and buy many of their inputs from factories (McNeill 2000). With the mechanization of agriculture moving from humans and animals into gas powered tractors, harvesting machines, chemical fertilizers, and government subsidies, the skill and expertise of the established traditional farmer became diminutive in the ominous shadow of industrialization, urbanization, and industrial agriculture.

Industrial agriculture is based on increasing output of product for the lowest cost possible: economies of scale. According to Bensel (2004) industrial agriculture is linear; based on maximizing the output of species [plant and animal] and ultimately unsustainable because it is based on capital depletion [environmental and financial] and massive additions of external inputs (energy, water, chemicals). The factory farming infrastructure is designed to confine livestock at high stocking density in order to reduce land costs and management costs and produce meat, milk, and eggs for increased returns. The issues surrounding factory farming begin with inhumane treatment of the animals, the antibiotics used to promote livestock growth by warding off intestinal bacteria and the pesticides employed to reduce pestilence. The problem then evolves in the environmental degradation that occurs due to excessive chemical fertilizer and pesticides used to produce large monocrops of feed to sustain the livestock. Additionally, the use of limited resources, the pollution that comes with the imminent animal waste and long-distance transportation to consumers contributes to increased greenhouse gases and places a great
strain on the health of our biosphere. The same issues are faced with the expanse of monocrops, excluding the animal aspect.

While industrial agriculture continues to spread and corporate interests control the conventional food system this makes it increasingly more difficult for small to mid-size farms to compete on an institutional level. The challenges faced in supplying in bulk capacity are the production, processing and distribution of the local farmer’s wares. The objective of the research project is focused on the feasibility of accessing local meat, dairy, and eggs for campus housing at Smith College, identifying the bottlenecks, and ways to breach these barriers. As my project partner Ali Zipparo defined, “Smith College feeds over two thousand students, three times daily throughout the academic year. It is important that Smith takes advantage of being situated in the middle of a local food hub and considering the environmental benefits of a strong local food system, it is all the more important to address.” My focal point for the project specifically centered on the possibility of accessing meat, specifically beef, from local farmers and becoming informed of their obstacles on a more intimate level. While the heart of this project is directed at enhancing connections of our local community on campus with the surrounding farming community, it is also driven by the hope that Smith College becomes a leader in creating global change for traditional agriculture. We can create an environmental, ecological, and economical sustainable local food system. By leading the way in purchasing the majority of Smith’s food locally, reducing the food life span, and reducing are ecological foot print on campus, it can then flourish and become a pilot for global communities facing the same dilemma: a failed food system.
**Methods**

*Smith College*

Preliminary contact with the director of dining services was made through email to gather data on how much meat is purchased for consumption in Smith College house kitchens for the academic year. As the project developed consistent contact was made with the director to relay information, exchange ideas and seek guidance in maintaining boundaries with current vendors as options were explored.

*Farms*

Four local farms were contacted: Crabapple Farm, Chesterfield, MA; Misty Brook Farm, Barre, MA; Moon in the Pond Farm, Sheffield, MA; Chestnut Farm, Hardwick, MA. These farms were located using NOFA- Northeast Organic Farming Association and then identified as producers of meat: beef, pork, chicken as well as eggs and vegetables (excluding Chestnut Farm, they are strictly a meat CSA-Community Supported Agriculture). In making contact with the farmers and making an introduction as to the purpose of the call or email, the initial question was asked “What do you see as a bottleneck in supplying local meat to an institution like Smith College?” This produced a myriad of thoughts, ideas, and suggestions.

*Distributor*

One distributor was contacted: Hardwick Beef, Hardwick, MA. The connection with this distributor was facilitated through a discussion with the owner of Chestnut Farm. Communication with the president of this company originally took place through a phone conversation. The preliminary question was asked, “What do you see in your business as an obstacle to distribute to an institution such as Smith College?” After a beneficial conversation of
experience and ideas with the president of Hardwick Beef, a series of emails were exchanged exploring various ways to connect Hardwick Beef to Smith College.

**Processor**

One processor was researched: Westminster Meats, Westminster, VT. Westminster Meats was discovered by project partner, Ali Zipparro. We embarked on a field trip to Westminster Meats, where an in-depth tour of the facility was given with time at the end for an interview with the owner. The probing question asked, “What is the bottleneck in your business that prevents enough processing of local meat that could supply an institutional such as Smith College?” This resulted to a lively conversation surrounding a multitude of diverse issues.

**Results**

*Smith College*

Smith College dining services purchases approximately 4,804 pounds of meat per semester for all campus houses, minus vegan/vegetarian. Slightly more than 42% is poultry, nearly 28.5% is pork, and almost 30% is beef. Along with the statistical information given by Kathy Zieja, director of dining services, she was very open to exploring the idea of purchasing locally raised meat for possibly one or two house kitchens as a pilot to assess the possibility of a continuous supply in the future.

*Farms*

Rachel Robertson-Goldberg from Crabapple Farm, when asked the question, “What do you see as a bottleneck in supplying local meat to an institution like Smith College?” Rachel’s reply had many facets. One aspect focused on her farm, if she was going to provide a large
supply of local meat to Smith College, the farm has more than enough pasture to increase livestock in order to increase supply. Currently the farm raises, beef, lamb, broilers, and laying hens in addition to heirloom vegetables. However, she pointed out that raising more livestock would require more housing for the animals, a cost the farm could not manage. Rachel further indicated that even if the farm could afford to build housing for more livestock, the next barrier is the processing of the animal. Currently the small amount of meat the farm has processed for local farmers markets is often done at a slaughterhouse as far away as Sharon, Vermont. This is due to the lack of availability of appointments at Adams Farm Slaughterhouse in Athol, MA. This is a large expense incurred by the farm when it comes to the transportation of the animal to the slaughterhouse. I learned from Rachel that when the farm hauls the animals to the slaughterhouse, it is a two week procedure to process beef. If the farm uses the slaughterhouse in Sharon, Vermont it is 120 miles one way, which means by the time the farmer brings the packaged meat back to the farm for sale, 480 miles have been traveled. Rachel saw the University of Massachusetts (UMass) as a possible answer to this dilemma. She felt the fact that UMass is a land grant university they could invest in a processing facility on campus as part of their animal science program bringing students and local farmers together.

Misty Brook Farm’s owner, Katia Clemmer responded through email to the question “What do you see as a bottleneck in supplying local meat to an institution like Smith College?” From Katia’s perspective, she felt the biggest bottleneck for her farm is access to land. Currently the farm consists of 185 acres where pork, beef, veal, broilers, laying hens, and milk jersey cows are raised, along with a variety of vegetable, herbs, and fruits. The 185 acres is fractured into four towns up to twenty miles between properties with thirteen different landlords. This hinders expansion due to cost, transportation, and lack of large tracts of land.
Moon in the Pond Farm raises pork, chicken, veal, turkey, beef, laying hens and an assortment of heirloom vegetables. The owner Dominic Palumbo had a brief response to the question “What do you see as a bottleneck in supplying local meat to an institution like Smith College?” Right to the point, Dominic expressed that the scale of local farms is an issue. Local farms are small and lack the infrastructure to deliver to institutions. The farms would benefit to find a food distributor to represent them and in order to connect them to a purchaser like Smith College. He also felt that institutions are so reliant on the corporate food system due to bulk purchasing and price it would take a big shift to see a lasting change take place.

When Kim Denney at Chestnut Farm was called and asked the question “What do you see as a bottleneck in supplying local meat to an institution like Smith College?” Kim’s immediate response was “You need to contact Michael Gourlay at Hardwick Beef!”

Distributor

In contacting Michael Gourlay from Hardwick Beef and presenting him with the same question proposed to the farmer’s, but on a distribution level, his response was honest and open. Michael said delivering meat to institutions does not come up as a request in his distribution company due to the relationship between institutions and corporate suppliers. Institutions generally buy bulk, cheap, efficient food. Further along in the conversation he articulated that his company is already pushed to its limit in supplying to markets like River Valley Market in Northampton and various restaurants that purchase grass fed, hormone and antibiotic free beef. A large portion of their business is in Connecticut, New York and as far south as Pennsylvania and the ability to expand the company is not feasible at this time. The discussion continued to take place through various emails surrounding the possibility of providing enough meat to one kitchen on Smith Campus. Through an exchange of thoughts and ideas Michael said he could
definitely supply “one cow” which equals four hundred pounds of beef in five pound cryovac bags to Smith College.

_Processor_

In meeting with Dan Mandrich owner of Westminster Meats in Vermont it was surprising to learn about the amount of personal capital that is needed to run a processing plant. Dan explained the cost involved in buying the machines to process the meat. For a piece of equipment that makes hamburger patties or sausage the cost is $25,000 per machine and other assortments of machinery to prepare chickens and pigs for packaging after slaughter range from $50,000 to $250,000. In order to expand his operation to accommodate an increase of processing animals for local farmers, Dan would need a large amount of capital. According to Dan currently there is no federal money for small to medium slaughterhouses or the funding available is given as a refund, where the owner still has to have the capital up front to spend.

_Discussion_

In this study the data gather confirmed the dominance of industrial agriculture and the deleterious impact it has inflicted upon small to midsize farmers. Not only has industrial agriculture caused harm to farmers who practice traditional farming, it is damaging our environment. The currently dominant system of industrial agriculture – which voters and taxpayers have unknowingly promoted and subsidized through ill-considered government food and farm policy choices – impacts the environment in many ways. It uses huge amounts of water, energy, and chemicals, often with little regard to long-term adverse effects (UCS 2008).

While it is daunting to look at the state of affairs industrial agriculture has caused there is a silver lining. With an institution like Smith College and the noble efforts of the director of
dining services and her team who are willing to explore viable options of more local food on
 campus generates hope. An optimistic connection was made between Kathy Zieja, the director of
dining services and Michael Gourlay, the president of Hardwick Beef. As an aggregator of beef,
Michael Gourlay connects with farmers who raise grass fed, hormone and antibiotic free cattle
and distributes the beef to organic markets and restaurants. While it is an overwhelming
prospect, the thought of supplying enough product to a college with over two thousand students,
as with any new venture it can begin with small steps. By the fall semester of 2011 there is the
strong possibility that at minimum of two house kitchens on Smith campus will serve locally
raised meat.

As far as Hardwick Beef working with the local farms contacted in this study it is
unlikely as the company is at a climax with its distribution capacity and the farms they already
work with. What this presents is a niche within the distribution sector of western Massachusetts.
Crabapple Farm, Misty Brook Farm, Moon in the Pond Farm, as well as Chestnut Farm would be
pleased to provide their grass fed beef to Smith College; they need the absent aggregator to fulfill
this desire. A relationship such as this would strengthen the local food system and the local
economy. It would also stimulate and strengthen the benefits of traditional farming practices that
these farms are operating with. Misty Book Farm for example utilizes composting and rotation of
crops and pasture grazing to maintain soil fertility and use their pigs as rototillers. The crops are
the breathing of the farm and the animals are the heartbeat (Misty Brook Farm 2011). It is not
only important to make these local connections to support the farmers, eat healthy food, and
boost the local economy; it will benefit the sustainability of the local environment too.
Traditional farming is cyclical, it is based on achieving a diversity of species [plant and animal],
and is designed to “live off the interest” (Bensel 2004). As the traditional farmer invests in using
ecological and biological principles that create harmony within the land they cultivate their food from they essentially compensate the environment by using mindful practices while extracting the asset of healthy food.

When it comes to Westminster Meats that is another aspect of industrial agriculture that highlights the politics that influence agriculture and how government funding is allocated. In order for a small USDA slaughterhouse, like the one Dan Mandrich owns, for him to gain the funding needed to expand his business a major overhaul of the Farm Bill is desperately needed. The bill is an inglorious piece of work tailored to the needs of big agriculture and championed by not only the usual bipartisan farm state legislators but also the Democratic leaders… (New York Times 2008).

The goal of this project was to bring fresh, healthy, local food to the campus. The challenge is not in locating farmers with the products we need, it is in helping them become a part of the vendor process. While this is still a work in progress, this project helped to develop a working list (Appendix) for dining services and future students to utilize in maintaining the purpose of this endeavor. Along with the many insights gained along this journey the vision is a creative network between farmers and the five-college system supported by a grower coop marketing system focused on those farmers who raise livestock for meat. In the larger context, I hope to see a paradigm shift take place within all communities and that people begin to recognize they are in fact a sister and brother to every other living entity on earth, whether it is plant or animal, or a part of a microenvironment or the immense unknown of the oceans. We need to see ourselves and our actions as an intricate link within the fabric of the biosphere rather than the arrogant master of it. As Meadows (2009) accurately affirms, “You have to work hard at it, whether that means rigorously analyzing a system or rigorously casting off your own paradigms
and throwing yourself into the humility of not-knowing. In the end, it seems that mastery has less to do with pushing leverage points than it does with strategically, profoundly, madly, letting go”.

My recommendation in conclusion of this project is for Smith College to design an internship for students to work with the Center for the Environment, Ecological Design, and Sustainability (CEEDS), Smith Dining Services, and the contacts listed in the attached appendix. Relationships already established need to be nurtured and strengthened along with new associations and ideas.

Bibliography


