

Catskill Mountainkeeper

Western Catskill Region Foodshed Research & Analysis

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Introduction

As part of its mission to promote sustainable economic growth and protect the natural resources essential to healthy communities, **Catskill Mountainkeeper** is evaluating the opportunity to establish the Western Catskill region (comprising Delaware, Sullivan and Ulster counties) as a foodshed for the New York City metropolitan area. Relevant to the creation of a foodshed, research consultant Becky Hoffman was retained to review and analyze existing research, and consolidate the results. Her report will serve as the baseline resource for the Stakeholder Group tasked with establishing a Western Catskill region foodshed.

The mission of the Stakeholder Group is:

To create sustainable economic growth in the Western Catskills by measurably increasing its agricultural output, developing a consistent and dependable supply for the New York metro market as well as the local market and connect farmers more directly to the market thus providing them with a fair price for their output.

To support the efforts of the Stakeholder Group in meeting its mission, this project was focused on the following areas:

Agricultural production (dairy, livestock, produce) in the Western Catskills.

Research includes change over time in the number of farms, farmland acres, size of farms, product mix, market value of products, production expenses and net income.

The New York City metropolitan area market. Research includes estimates of market size, demographics and general consumer interest in local foods, as well as channels of distribution (farmers' markets, retail, and wholesale to restaurants and/or institutions). Where possible, outline the supply chain for local foods (e.g. how food currently moves from farm to table).

Case Studies. Research includes how other regions have worked to establish themselves as foodsheds for a metropolitan area, as well as studies focused on key components of a foodshed (e.g. a local food processor or a distributor specializing in moving locally grown food to market).¹

Catskill Mountainkeeper and its partners and stakeholders provided articles, reports, studies and leads to organizations in the focus areas outlined above. Ms. Hoffman also conducted additional research in these areas and reviewed all materials in order to prepare this document.

This report presents the best available data for the Western Catskill region and the New York City marketplace, with some significant caveats. For example, the Census of Agriculture may overstate the number of farmers (the definition was broadened in 2002 to include more horse farms and Christmas tree farms); the Census numbers also include some "retirement" or "lifestyle" farms whose owners may be seeking preferential tax treatment. For sales of local

¹ The research reveals that many "foodshed" endeavors are in their initial stages and, as such, have not progressed far enough to form a true case study. Nevertheless, many lessons and pointers can be culled from the efforts to date and these are covered in the Case Study section.

foods, all outlets are not captured and results may be skewed by how “local” is defined. Regardless, the data provide a valuable indicator of trends in a still nascent local foods industry.

The goals of this report are to create a common knowledgebase about the Western Catskills for the Stakeholder Group, provide insight into the market, apply the lessons learned by those who have already started down this path, and serve as a platform for the Group’s thoughtful discussion on how best to focus its efforts to fulfill its mission.

Terms and Caveats

- **Foodshed.** The term “foodshed” was coined in 1929 by Walter Hedden in his book *How Great Cities Are Fed* to describe a geographic area that supplies, distributes, processes, and sells food to feed a given population. It is akin to the concept of a “watershed” – both are areas protected for their ability to provide a natural resource – but unlike a “watershed”, a foodshed’s boundaries are not an exact science. The term is little known by the general public. In this report and in most of the foodshed studies conducted for other metropolitan areas (Philadelphia, San Francisco, Chicago), the term refers to a region that endeavors to supply, as much as possible, its own food needs and those of an urban community—in this case, the New York City metropolitan area.
- **Local food.** There are as many different definitions of local food and local food systems as there are publications on the topic. According to the definition used by certain USDA Rural Development Agency loan programs, a “locally produced agricultural food product” is “*Any agricultural food product that is raised, produced, and distributed in – (1) the locality or region in which the final product is marketed, so that the total distance the product is transported is less than 400 miles from the origin of the product or (2) the State in which the product is produced.*”² The USDA’s version is a much broader geographic definition than others in common use, such as one that defines “local” as originating within 50-100 miles of a population center. Other definitions vary across locations and among consumers and products. In addition, the term “local food” often connotes product that is fresh and minimally processed, including fruits or vegetables and sometimes meat or dairy, sold directly from the producer to the consumer or retailer and, typically, not in large volume.³ In this report, unless otherwise noted, we will use a generic definition that embraces a geographic element and the connotations of local food. The Stakeholder group will need to determine its own definition.
- **Regional food.** Similar to local food. The definition varies: it can include an area like the Northeast or New York State, sub-regions like the Western Catskills or Hudson Valley, or areas that produce specific items (like Vidalia onions).
- **Census of Agriculture data**⁴. In 2002, the Census definition of a “farm” was expanded to include more horse farms and Christmas tree farms, increasing the farm numbers and farmland acreage totals (compared to 1997 Census). The number of farms may be further inflated by the inclusion of “retirement” or “lifestyle” farms (the minimal criteria to be counted as a farm in the Census is \$1,000 or more in sales or potential sales). Many people may seek to benefit from a preferential farmland tax assessment by operating a farm.⁵

² Robert P. King et al., *Comparing the Structure, Size and Performance of Local and Mainstream Food Supply Chains* (U.S. Dept of Agriculture, Economic Research Service, June 2010), 2, www.ers.usda.gov/publications/err99/.

³ Kathryn Ruhf and Kate Clancy, “It Takes a Region...Exploring a Regional Food Systems Approach. A Working Paper” (Northeast Sustainable Agriculture Working Group, September 2010), 4, www.nefood.org.

⁴ “Census of Agriculture - 2007 Census Publications - State and County Profiles - New York,” http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/New_York/index.asp.

⁵ In New York State, to qualify for the tax credit, one must have at least 7 acres and \$10K in gross sales.

Executive Summary

AGRICULTURE IN THE WESTERN CATSKILLS

- **The Western Catskill region is losing farms and farm acreage more rapidly than the Hudson Valley and New York State as a whole.** According to the 2007 Census of Agriculture, between 2002 and 2007, the region lost 8% of its farms and 14% of its acreage. These figures are most likely understated owing to the broadening of the definition of “farm” in 2002 to include horse farms and Christmas tree farms.
- Despite the decrease in farms and farmland, agriculture sales in the region increased 33% to \$163 million in 2007. **The gross economic impact of farming in the region is \$300-\$400 million annually.** However, with their production expenses – including hired labor, feed, gasoline/fuel, and seeds/plants – outpacing sales, farms are being challenged to survive.
 - **Dairy products, fruits, tree nuts and berries, and poultry/eggs are the product categories with the highest sales in the region.** As a share of New York State’s agricultural sales, the region accounts for one-fifth of poultry and egg sales, 12% of fruit/tree nut/berry sales and 10% of aquaculture sales.
- **Farmers in the Western Catskills face unique pressures on their land and land use.** The region is a watershed for New York City which is allowed to purchase land to protect its water supply. The region falls within the Marcellus Shale layer and farmers are being enticed to sell or lease their land for gas drilling/hydrofracking. Owing to its natural beauty and proximity to the New York City metropolitan area, the region is popular with second home buyers.
- **Just over half of all farms in the Western Catskills are devoted to “retirement” or “lifestyle” farming.** Farming is the principal occupation for only 56% of farmers in the region.
- **Farmers in the Western Catskill region are very active in Community Supported Agriculture (CSA) endeavors,** accounting for 12% of CSAs in New York State in 2007.
- **As of 2007, at least 65 farm operations, representing about 2% of the acreage in the region, were certified as organic.** An unknown number of additional farms follow organic practice but choose not to seek organic certification.
- **The Western Catskill region has a weak agriculture infrastructure,** similar to other mostly small farm regions that are losing farms and farmland. The region has fewer equipment dealers and wholesalers, and not enough slaughterhouses and food processing services.
- Although well positioned to take advantage of its location less than 100 miles from the NYC metro market, **the Western Catskill region has developed more slowly as a supplier of local food for the market, well behind other adjacent areas such as the Hudson River Valley, The Berkshires and Southern New Jersey.**

- The **cost of appropriate land for farming in the Western Catskills tends to be lower** than in the adjacent areas cited above, potentially making the region a more attractive destination for new farmers.

THE MARKET

- **Some 20 million people in the New York City Metropolitan Statistical Area (MSA) and in the Western Catskill region spend an estimated \$77.4 billion per year on food (based on the national average for per capita spending on food).** Albeit rough, a best estimate of local food's share of this estimated total is \$1.5 to \$2.3 billion, or approximately 2-3% of sales annually.
- Despite the lack of concrete local food sales data, **many positive indicators of market demand exist.** Wholesale demand for produce, fruits/nuts/berries and dairy/eggs was estimated in 2005 to be \$741 million and, at the time, there was not enough supply to meet demand. The number of farmers markets in NYC/NY/CT has increased dramatically—to about 370 markets today. CSAs, farm-to-school programs and local food purchases with food stamps (SNAP) have increased exponentially. Almost all fine dining restaurants serve at least some locally grown food. Walmart, Whole Foods and most leading supermarkets have established “buy local” programs.

DISTRIBUTION PLAYERS

- A complex web of food distribution players—including manufacturers, wholesalers and distributors, store-owned distribution centers, specialty distributors, independent middlemen/jobbers, food brokers, and wholesale markets—meet the demands of a dizzying number of food retailers, restaurants, wholesalers, institutions and farmers markets.
- The following points are relevant to local food distribution:
 - **Suppliers are chosen for three main reasons: price, quality and convenience.** Buyers who are most focused on quality will shop at Hunts Point or specialty distributors (like Regional Access, United Natural Foods). Some restaurants have established relationships with vendors at farmers markets.
 - NYC's public schools, through SchoolFood, primarily use four distributors to move food to the individual schools based on their location. The NYC Department of Education has purchased about \$4.5 million in regional foods between 2006 and 2009. According to recent testimony, DoE has increased its purchase of products from New York State to \$20 million, including \$13 million of local milk.
 - **Locally grown food is still a niche market and can be a challenge to source.** Retailers and restaurants that carry local foods are “mission-driven.”
 - **The supply of locally grown food currently draws largely on personal relationships with a local producer.** Although specialty distributors have emerged to meet the needs of local food distribution, they are still underdeveloped and their costs may be prohibitive for small- and medium-sized retailers.
 - Farmers markets provide the most consistent access to local foods.

- **Local farmers in the Western Catskills cite “difficulty getting products to market” and “no or limited local processing” as weaknesses that impair their ability to meet the needs of the marketplace.**
- **A significant amount of the sales between farmers and retailers or restaurateurs are believed to be cash transactions, making tracking and reporting more difficult and less accurate.**

LESSONS FROM CASE STUDIES/LITERATURE

- **On its own, “local” is not generally a strong enough attribute to reap a price premium.** Other selling points need be in place such as unique varieties of food, organic or grass-fed labels, sustainable practices, home delivery (of milk) or other positioning.
- In successful situations, **local farmers offer a diverse portfolio of products** and tend to market through multiple distribution channels.
- **Farmers receive a greater share of retail price when they market directly, thus increasing their profitability and sustainability.** The more intermediaries there are between the farmer and the end customer, the greater the decline in net revenue. However, farmers assume responsibility for many supply chain functions such as washing, packing, transporting and marketing in direct channels including, in many cases, the time/labor for traveling to and selling at the farmers market.
- **More money stays in to fuel the local economy when farmers market directly or choose a local distributor over mainstream distribution channels.**
- **With more intermediaries between the farmer and the customer, consumers are less likely to have a connection to where, how and by whom the food was grown, or value its differentiation.**
- **A value-added model (e.g. turning milk into cheese, making sauces) helps to counter commoditization—the purview of big agriculture.** Hardwick, Vermont has had noteworthy success following this model.
- **Retail and institutional customers seek a reliable and consistent supply of local food.** To meet this need (among others), farmers or regional distributors endeavor to extend the growing season using farming practices like high tunnels/hoop houses that enable seeds to be planted earlier. They also add partners in different parts of the region and pool their resources (Red Tomato, for example, has farmers in South Jersey who can start growing earlier than ones in New England). Distributors also have multiple farms supplying the same product, ensuring that even if a crop fails at one farm or area, there will be enough to meet demand.
- **Increasingly, distributors that focus on local food (like Red Tomato) are seeking to differentiate themselves based on branding, and by negotiating a fair price for both the buyer and the farmer.**
- **Greenmarket’s New Farmer Development Project** supports immigrants to enter into farming. One unique benefit: participants are bringing new products and culturally appropriate

traditional produce to market to meet the needs of the New York City area's ethnically diverse population.

- **The insufficiency of local agriculture's infrastructure/processing is a common problem throughout the United States.** Pockets of innovation around the country exist to address this critical gap.
 - In Hudson Valley, a local entrepreneur repurposed a former IBM facility as a full service contract processing facility to serve local growers. As a result of Glynwood's Slaughterhouse Initiative, a USDA-certified mobile slaughterhouse will enable more producers to bring high quality meat to market.
 - In Philadelphia, a non-profit called The Common Market is a values-driven wholesale consolidator and distributor of local foods, primarily serving the institutional market.
 - In Vermont, Intervale Food Hub, in collaboration with the Intervale Center, brings together 24 farmers to support multi-farm CSAs for consumers and a wholesale marketing and distribution service for restaurants, caterers, grocers and institutions.
 - In Puget Sound, a research study yielded an unintended result: underutilized processing and co-packing capacities were identified in the local region that could benefit local farmers.

Key Takeaways

- Despite the loss of farms and farmers in the Western Catskill region, there is significant demand for locally grown agricultural products. This demand can be met by existing and new farmers. It can also provide opportunities for those who wish to establish or expand agriculture infrastructure services.
 - Consumer interest in the environment, food security, reducing obesity, and local economic development, and the continuing popularity of books/media (e.g. Michael Pollan's books, interest in "slow food") have inspired interest in local foods and increased demand.
 - Direct sales channels, significantly more profitable for farmers, are showing strength. Strong growth in the number of farmers markets, CSAs and farmstands continues (many areas still do not have farmers markets and many CSAs have waiting lists.)
- The gross economic impact of farming in the Western Catskills is estimated at \$300-\$400 million annually based on authoritative sources that believe the economic multiplier effect for farming is between 1.58 and 2.5. In addition, research shows that agricultural land places less of a burden on municipal services than residential properties. Retaining farmland is more cost effective for municipalities than losing it to residential development. It is important to educate the public and public servants about the economic benefits of agriculture and engage them in preserving and expanding it in the region.
- Farms and agricultural infrastructure services are inextricably linked. When the number of farms decreases, support services (processing, farm equipment repair, veterinarians) disappear, leading to additional costs to farmers and their demise. Conversely, the presence of support services helps to reduce farm expenses and retain farmers. Any foodshed effort needs to focus on the agricultural infrastructure in order to retain farmers and increase economic development, and enable processing, kitchens, dairies, slaughterhouses and the like to create more profitable value-added products.
- Production expenses in the Western Catskill region are increasing faster than sales, making it more difficult for farms to be profitable and self-sustaining. It is important to determine which expenses are having the greatest impact on farmers (e.g. property taxes, energy, supplies) and find ways to reduce these costs. Cost reduction ideas include tax breaks, buying clubs for critical supplies, and other cooperative efforts.
- Together, second home owners and lifestyle/retirement farmers own a significant amount of property or vacant land that could be put into production in the region (either to grow crops or for pasture). In Sullivan County, for example, over 6,000 second home owners had vacant land in 2007. Efforts should be made to match these land owners with farmers/new farmers who wish to lease land for expansion or related arrangements.
- The highest sales in the Western Catskills are for milk/dairy, fruit/berries and poultry/eggs. Most of Sullivan County's (95%) and Delaware County's (86%) sales are from livestock/dairy.

In Ulster County, crops generate 90% of sales. Establishing or expanding services that can be used to create value-added products from these core categories should be a priority (e.g. creameries, kitchens, quick freezers).

- There is a new venture/entrepreneurial opportunity for the creation of these services but these businesses may need experienced executives to guide them to profitability.
- Repurposing existing space or identifying underutilized warehouse, processing or transportation services has proven successful in other regions and encourages economic development. Farm to Table Co-Packers in Kingston, NY, for example, repurposed an IBM facility; the Puget Sound Farm Project identified large processing facilities with available capacity.
- Successful local food farmers/regions exhibit diversified agricultural production. Demand in the New York City local food market indicates a large opportunity for the diversification of agricultural production in the region beyond the traditional core categories in the Western Catskills. Some 75% of 2005's estimated local wholesale food sales were produce (vegetables and fruit); 6% were meat/poultry, 5% eggs/dairy, and 14% floral/horticultural products.⁶ Demand for local grain, although not included in these figures, is also significant.
- The average age of a farmer in the Western Catskills is about 57 years, about the same as the national average. The creation of succession plans for older farmers will help maintain operations. Experienced farmers could be matched with new farmers through training programs, lease to buy efforts, or similar programs.
- On its own, "local" is not enough of a marketing proposition to garner a price premium. Branding and other means of differentiation are critical and must be the focus of any effort. As a brand, "Catskills" does not currently connote "quality food;" this perception needs to be addressed.
- Restaurants and high end retailers purchase local foods through the Hunts Point wholesale market, through partnerships with farmers markets, through a limited number of distributors or, in some cases, via a direct relationship with a farmer. These buyers are able to pay a price premium for high quality food to be sold in their restaurant or retail outlet. To meet their needs, it is important for farmers to get product to the wholesale market regularly through a reputable distributor or a "missionary" sales person.
- Farm-to-school programs hold promise. Schools appear to have a mandate to improve the healthfulness of the foods they offer to students, reduce obesity and improve the quality of students' diets. Millions of students eat meals at schools on a daily basis. Schools tend to purchase through a few distributors; it will be important to determine whether partnerships can be established with these distributors to meet the needs of the school or institutional buyer.

⁶ Market Ventures Inc. and Karp Resources, *A Study of Development of New York City Wholesale Farmers' Markets; Final Report Executive Summary* (Prepared for NYS Department of Agriculture and Markets; USDA Agricultural Marketing Service, Washington, D.C., January 2005), <http://www.marketventuresinc.com/download/NYC-WFM-ExecSum-Phase-1.pdf>.

Agriculture in the Western Catskills

OVERVIEW

According to an analysis of the 2007 Census of Agriculture, the three counties that comprise the Western Catskills—Delaware, Sullivan and Ulster—account for about 4.3% of New York State's farms and 3.7% of its agriculture sales.⁷

The Western Catskill region is losing farms and farm acreage (see table below).

- There are 130 fewer farms and over 47,000 fewer acres of farmland in just the five years between the 2002 and 2007 Census.
- The region is losing farms and farmland faster than New York State, which lost 2% of its farms and 6% of its farmland between 2002 and 2007, and more rapidly than neighboring Hudson Valley, which lost 3% of its farms and 10% of its farmland acreage.⁸
- The loss may be even more dramatic than the numbers indicate. In 2002, the Census broadened its definition of a farm to include more horse farmers and Christmas tree farms. Their inclusion may understate a bigger decline in farms that produce food.

Despite the loss of farms and farmland, sales increased by more than a third in the same period—to about \$163 million. Productivity per acre of farmland has jumped considerably—from \$362.4 per acre to \$559.2 per acre.

When farming sales increase, the benefit to the region's economy exceeds that of the increase, due to a multiplier effect. However, there is little agreement on the multiplier for farming. Some authoritative sources put it between 1.58 and 2.5. Based on that multiplier, recent growth in the Western Catskill area has stimulated total economic growth between \$257.5 and \$407.5 million annually. In addition, studies have shown that farms consume fewer municipal services than residential land. Therefore, the loss of farmland can increase the demand for municipal services without offsetting revenue generation to cover the cost of these services.⁹

Unfortunately, farmers have to work even harder to keep up because production expenses are increasing faster than sales. On average, farm expenses more than doubled between 2002 and 2007 and the average net cash income per farm, despite increasing by 64%, was still only about \$20,000.

⁷ New York State had 36,352 farms and \$4.4 billion in sales in 2007.

⁸ *The State of Agriculture In the Hudson Valley* (The Glynwood Center, 2010), 13, www.glynwood.org.

⁹ Thomas P. DiNapoli, *Bet the Farm: Farmland Protection as a Strategy for Economic Growth and Renewal* (NYS Office of the State Comptroller, October 2010), 6, www.osc.state.ny.us/press/releases/oct10/bet_the_farm_report1010.pdf.

Agriculture In the Western Catskills 2002-2007			
	2002	2007	2002-2007 % change
Farms (#)	1,701	1,571	-8%
Farmland (acres)	338,569	291,220	-14%
Average farm size (acres)	199	185	-7%
Sales (\$)	\$122,689,000	\$162,855,000	33%
Average total sales per farm	\$72,128	\$ 103,663	44%
Direct sales of agriculture for human consumption	\$6,704,000	\$4,549,000	-32%
Net cash farm Income from operations	\$19,946,000	\$30,176,000	51%
Average net cash Income per farm	\$11,726	\$19,208	64%
Total Farm Production Expenses	\$ 72,698,232	\$139,889,000	92%
Average per farm	\$42,739	\$89,045	108%

Source: Census of Agriculture, 2007

REGIONAL FARM ACREAGE

About 13% of the region's 2.3 million acres is farmland. In 2007, the land devoted to farming in the Western Catskills (291,119 acres) was about one third of the acreage used for farming in the Hudson Valley (848,456 acres).

About 43% of the farmland acreage in the Western Catskills (125,160 acres) is cropland. However, it is largely used to grow grain, hay and corn to feed animals rather than for produce. Some 3,437 acres, or 1.2%, is dedicated to vegetables that are harvested for sale.

Land in Farms by Type of Land - 2007 (Acres)				
	Western Catskills	% of Region	New York State	% of State
Cropland	125,160	43.0	4,607,307	60.1
Woodland	90,472	31.1	1,665,495	21.7
Pasture	48,874	16.8	763,033	10.0
Other Uses*	26,613	9.1	625,135	8.2
Total acres	291,119	100.0	7,660,969	100.0

*"Other uses" include farmsteads, buildings, ponds, roads, wastelands

Source: Census of Agriculture, 2007

In addition to the general challenges of sustaining agriculture in the region (e.g. increasing costs, decreasing prices paid for many agricultural products), other significant pressures exist in the Western Catskills.

- The **West of Hudson Watershed** lies within Schoharie, Greene, Sullivan, Ulster and Delaware counties. It provides 90% of New York City's water supply. In 1997, the counties of

the Western Catskills and others entered into a Memorandum of Agreement with NYC which allowed NYC to purchase land within the watershed to protect its water supply. In 2007, a new agreement approved an increase to \$300 million over ten years for land acquisition. Land acquisition for this purpose could decrease the land available for agriculture and drive up land values in the region in general.¹⁰

- **Natural Gas drilling leases/Marcellus Shale.** A highly controversial situation. Landowners including farmers may be enticed to sell or lease their land for hydrofracking/natural gas drilling. In 2010, some leases were paying \$3-\$5,000/acre—highly attractive to dairy farmers who have been slammed by low milk prices. While many resist fracking in the region due to its potential for creating environmental problems like groundwater pollution, many leases are already in place, with the potential for more to come. For example, as of May 2010, almost all of the parcels within a 1,000 foot radius of the Willow Wisp Organic Farm in Wayne County, PA were leased for gas drilling.¹¹
- **Second home buyers.** Due to its natural beauty and proximity to the New York metropolitan area, the Western Catskill region is popular with second home buyers. Sullivan County, for example, experienced a 65% increase in second home ownership between 2001 and 2007. In 2007, there were 10,085 second home owners and another 6,196 who owned vacant land.¹² The demand for second homes can also increase land values—making it more attractive for farmers to sell and more expensive for them to stay.

PRODUCT SALES OVERVIEW

The Western Catskills' share of New York State's agriculture sales is significant in several product categories. **The region accounts for over 22% of the State's poultry and egg sales, 12% of its fruit, tree nut and berry sales, and 10% of its aquaculture sales.**

About 58% of sales in the Western Catskills come from livestock sales and 42% from crop sales (although the product mix differs significantly by county). The region yields diverse agricultural products. In 2007, it notched over \$10 million in sales in each of these five categories: poultry and eggs; fruits, tree nuts and berries; cattle/calves; vegetables, melons, potatoes; and milk/dairy.

The product categories with the highest sales in the region are milk and other dairy products, fruits, tree nuts and berries—each with over \$40 million in sales—and poultry and eggs at almost \$27.9 million.

¹⁰ For a detailed evaluation of the economic impact on Delaware County and its surrounding area, see Delaware County Board of Supervisors, *The New York City Watershed Economic Impact Assessment Report*, May 2009.

¹¹ *Ground Up, Cultivating Sustainable Agriculture in the Catskill Region*, Spring 2010, pg. 20.

¹² Dr. William J. Pammer, Jr. et al., *Second Home Owner Study, Assessing Attitudes, Consumer Behavior and Housing Tenure in Sullivan County* (Sullivan County NY, Division of Planning & Environmental Management, October 2008), 3, webapps.co.sullivan.ny.us/docs/dpem/.../secondhomeownerstudy.pdf.

Western Catskills Product Sales by Product - 2007

(\$000)	Western Catskills	New York State	W. Catskills Share of NYS Sales
Poultry and eggs	\$27,897	\$123,727	22.5%
Fruits, tree nuts, and berries	\$43,193	\$363,295	11.9%
Aquaculture	\$2,009	\$20,417	9.8%
Other animals and other animal products	\$1,929	\$25,101	7.7%
Cattle and calves	\$13,409	\$318,080	4.2%
Horses, ponies, mules, burros and donkeys	\$1,975	\$50,616	3.9%
Cut Christmas trees and short rotation woody crops	\$336	\$8,819	3.8%
Other crops and hay	\$5,069	\$147,013	3.4%
Vegetables, melons, potatoes and sweet potatoes	\$10,208	\$338,037	3.0%
Sheep, goats and their products	\$264	\$10,246	2.6%
Nursery, greenhouse, floriculture and sod	\$8,887	\$389,117	2.3%
Milk and other dairy products from cows	\$44,502	\$2,280,218	2.0%
Hogs and pigs	\$249	\$28,302	0.9%
Grains, oilseeds, dry beans and dry peas	\$1,151	\$315,647	0.4%

Source: Census of Agriculture, 2007

FARM CHARACTERISTICS

On average, **farmers in the Western Catskills have been working their land for almost 24 years and are about 56.5 years old**, relatively consistent with New York State as a whole and similar to the average age of 57 for the Hudson Valley. Although these figures demonstrate the farmers' commitment, they also augur an uncertain future for the region. Eventually, these older farmers will be looking to retire, sell or somehow exit the business and, without an influx of younger farmers (someone within the family or an outsider) to replace them, their numbers will dwindle. While there are no data to support it, it is reasonable to raise the question of older farmers' willingness to invest in newer technology and techniques at this point in their careers in a changing market place.

More than 40% of farmers work at something other than farming as their principal occupation. This underscores the difficulty of making a living based solely on farm income. It also demonstrates a need to find ways to insure that farmers receive a fair price for their products while also lowering expenses.

Farming is still a predominantly male profession—almost 8 in 10 farmers are male. The number of female farmers in the Western Catskills is higher than it is in New York State.

Farm Operator Characteristics - 2007	Western Catskills	New York State
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Age and Tenure		
Average age of farmer	56.5	56.2
Average tenure on farm (years)	23.9	24.6
Principal Operators by Primary Occupation*		
Farming	56%	54%
Other	44%	46%
Principal operators by Sex*		
Male	79%	82%
Female	21%	18%

* In 2007, total number of farms in Western Catskills was 1,571 and in NYS 36,352

Source: Census of Agriculture, 2007

Just over half of all farms and more than a third of the acreage in the Western Catskills are devoted to “retirement” or “lifestyle” farming. Some owners use another job to subsidize their desire to farm while others have had a previous career that enables them to farm now—indicating just how difficult it is to make a living from farming without some other source of income. It may also indicate that many farmers in the region are not viewing their enterprise as a “business,” making it more challenging to engage them in economic development or farmshed efforts in the region.

Western Catskills Farm Typology - 2007 ¹³	Farms %	Acreage %
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Small Family Farms (under \$250,000)		
Limited Resource*	15.1	10.0
Retirement	21.6	16.4
Residential/lifestyle	29.5	18.0
Farming occupation/lower sales	16.0	13.7
Farming occupation/higher sales	5.9	9.9
Large family farms	4.5	10.5
Very large family farms	3.2	10.2
Nonfamily farms	4.2	11.3

* Limited-resource farms have sales less than \$100K and operator household income less than \$20K. They may report farming, non-farm occupation or retirement as their major occupation.

Note: Total farms in Western Catskills in 2007 was 1,571 and total acreage was 291,119 acres.

Source: Census of Agriculture, 2007

¹³ The USDA (see “ERS/USDA Briefing Room - Farm Household Economics and Well-Being: Glossary,” <http://www.ers.usda.gov/briefing/wellbeing/glossary.htm>.) defines the farm types as follows: Small family farm has gross sales less than \$250,000; a large family farm has gross sales of \$250,000-\$499,999; a very large family farm has gross sales of \$500,000 or more. A non-family farm is any farm not classified as a family farm, that is, any farm for which the majority of the farm business is not owned by individuals related by blood, marriage or adoption.

ORGANIC FARMING

In 2007, 65 farms in the Western Catskills dedicated over 5,500 acres to organic agriculture production—about 2% of the total farm acreage in the region. The market value of organic crops from these farms was \$1.3 million, accounting for 2.6% of New York State's organic food sales but less than 1% of regional agricultural sales. This is the same share of total sales reported from organic farming within the 100-mile Philadelphia Foodshed and slightly more than 0.6% of the national share of organic foods to all food sales according to the Census of Agriculture. According to a report from NYS Comptroller Thomas DiNapoli from February 2010, New York State is ranked fourth in the nation in the number of certified organic farms.¹⁴

Farmers continue to transition land to organic production. In 2007, some 464 of the total *organic* acres in the Western Catskills (about 9%) were in the process of being transitioned to organic production. Farmers can earn a premium for organic products, making it an attractive proposition. However, about 120 farmers in New York State are opting to follow the Farmer's Pledge, farming in an organic, sustainable way without following all of the USDA's regulations, while others operate on the basis of sustainable and natural food production. This may be due to real (or perceived) burdens of the USDA's regulatory standards for food safety and certification, or the higher production costs associated with organic farming (although those higher costs are offset somewhat by a sales price premium).¹⁵

Organic Production 2007	Western Catskills	New York State	Share of NYS
Organic Production*			
# of farms with organic production	65	1,137	5.7%
Acres of farms with organic production	5,565	131,796	4.2%
Market value of organic products sold (\$)	\$1,360,000	\$54,164,000	2.6%

* A new item in the 2007 Census. Respondents were instructed to report organic production as defined by the National Organic Standards. The count of farms may differ from that found in other sources because this item is self reported by respondents and no attempt was made to verify it with the certifying organic organization. For example, according to *The Role of Agriculture in the New York State Economy*, February 2010, from NYS Comptroller Thomas DiNapoli, in 2008 there were 827 certified organic farms (up from 580 in 2006), ranking NY fourth-highest in the nation.

Source: *Census of Agriculture, 2007*

PARTICIPATION IN COMMUNITY SUPPORTED AGRICULTURE

Farmers in the Western Catskills are very active in Community Supported Agriculture (CSA) endeavors. In 2007, 45 farmers marketed their products through CSAs, representing over 12% of the CSAs in New York State. CSAs are a form of direct sales for farmers, and direct sales are significantly more profitable for farmers than selling products through other distribution channels.

Participation in CSAs -2007	Western	New York	Share of NYS
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¹⁴ Thomas P. DiNapoli and Kenneth B. Bleiwas, *The Role of Agriculture in the New York State Economy* (NYS Office of the State Comptroller, February 2010), www.osc.state.ny.us/reports/other/agriculture21-2010.pdf.

¹⁵ *Ground Up: Cultivating Sustainable Agriculture in the Catskill Region*, Urban Design Research Seminar (Columbia University Urban Design Research Lab, Spring 2010). Mountain Dell Farm and Gorzynski Farm, for example, have forgone their organic certification. The report also cites national data from the 2007 Census of Agriculture and the 2008 Organic Production Survey, showing higher yearly production expenditures for organic farms (\$171,978) compared to \$109,359 for a conventional farm.

	Catskills	State	
# of farms that marketed products through Community Supported Agriculture (CSA)	45	364	12.4%

Source: Census of Agriculture, 2007

AGRICULTURAL INFRASTRUCTURE

In order to move farm product to market efficiently and effectively, a working agricultural infrastructure of support services needs to be in place including farm supplies, wholesales/packers, distributors, veterinary support and related services like slaughterhouses and other processing facilities. When the number of operating farms declines, it weakens the infrastructure. When infrastructure businesses leave, farm operations become more expensive for the farmers who remain (one has to travel far to a processor, have farm equipment repaired, or get to a vet) and the situation can be untenable. Conversely when the base increases it attracts independent businesses and processing facilities.

The Western Catskill region has experienced significant declines in farm and equipment companies, grocery and related food wholesalers and veterinary services between 2002 and 2008, while companies classified as food manufacturers increased slightly¹⁶. This obviously hampers the creation of a successful foodshed in the Western Catskills, making higher productivity from existing farms and attracting new farmers a clear priority of any foodshed effort.

Western Catskill Food Manufacturers, Wholesales and related farm service establishments – 2002 & 2008	Establishments	Establishments	% change
	2002	2008	
Food Manufacturers	33	35	6.1%
Farm & Garden Equipment Dealers	7	6	-14.3%
Grocery & Related Food Wholesalers	54	42	-22.2%
Veterinary Services	37	35	-5.4%

Source: County Business Patterns, 2002 and 2008

¹⁶ "Censtats Database," 2008 County Business Patterns, New York State, <http://censtats.census.gov/cgi-bin/cbpnaic/cbpsect.pl>.

COUNTY PROFILES

Overview

The objective is for the Western Catskill region to serve as a foodshed for the New York City metropolitan area. There are many similarities among the three counties that comprise the region, although they are by no means uniform in their characteristics. Understanding their similarities and differences will assist the Stakeholder Group as it engages with the region's agricultural stakeholders, gains their trust and enlists their participation.

- Delaware County has significantly more farms and farmland acreage than either Sullivan or Ulster counties. Its farms are larger—over 200 acres on average—and the median size is 132 acres. About 18% of Delaware County is farmland, compared to 10.5% for Ulster and 8.1% for Sullivan.
- Ulster County, despite fewer acres dedicated to farming and smaller farms, generates significantly more sales—over \$65 million—than either Delaware or Sullivan counties, and is more profitable as well. Ulster also accounts for more than half of direct sales for human consumption in the region.
- Sullivan County has a higher share of retirement (26.6%) and lifestyle farms (34.1%) than the region as a whole (21.6% and 29.5%, respectively).

	Sullivan County		Delaware County		Ulster County		Western Catskills	
	2002	2007	2002	2007	2002	2007	2002	2007
Farms (#)	381	323	788	747	532	501	1,701	1,571
Farmland (acres)	63,614	50,443	191,537	165,572	83,418	75,205 ¹⁷	338,569	291,220
Average Farm Size (acres)	167	156	243	222	157	150	199	185
Median Farm Size	85	100	160	132	60	62	n/a	n/a
Sales (\$000)	\$37,753	\$42,117	\$50,520	\$55,143	\$34,416	\$65,595	\$122,689	\$162,855
Average per farm	\$99,090	\$130,393	\$64,111	\$73,820	\$64,692	\$130,928	\$72,128	\$103,663
Direct Sales of agriculture for human consumption (\$)	\$667,000	\$624,000	\$986,000	\$1,155,000	\$5,051,000	\$2,770,000 ¹⁸	\$6,704,000	\$4,549,000
Net cash income (\$000)	\$12,280	\$2,747	\$6,880	\$13,135	\$786	\$14,294	\$19,946	\$30,176
Average per farm (\$)	\$32,146	\$8,504	\$8,720	\$17,583	\$1,478	\$28,532	\$11,726	\$19,208
Total Farm Production Expenses (\$000)	\$26,504	\$40,529	\$46,158	\$45,797	\$36,232	\$53,563	\$72,698	\$139,889
Average per farm(\$)	\$69,383	\$125,477	\$58,502	\$61,308	\$68,105	\$106,911	\$42,739	\$89,045

Source: Census of Agriculture, 2007

¹⁷ The Ulster County Planning Board counts 66,817 acres for 2009, The 2010 Agriculture District reported 67,995. This is an indication of the level of overstatement in the Census of Agriculture.

¹⁸ Although we contacted USDA's New York field office regarding the drop in Ulster County direct sales, USDA could not explain it. There were 10 fewer farms reporting in 2007 than in 2002 but more investigation is needed to determine if this is a "real" drop or a reporting issue.

Product Mix

The vast majority of agricultural sales in Sullivan County (95%) and Delaware County (86%) are from livestock/dairy. In Ulster County, 90% of sales are generated from crops.

Their needs for agricultural support services, therefore, will differ. Sullivan and Delaware counties are more likely to need slaughterhouses, milk processing facilities and veterinary services, while Ulster County may need more kitchens.

A more detailed look at sales by product and county reveals:

- Sullivan County is the only county in the region with significant revenue from poultry and eggs.
- Delaware County is by far the largest producer of milk and dairy products in the region, accounting for over 77% of sales and almost three-quarters of sales from cattle and calves.
- Ulster County accounts for practically all fruit, tree nut and berry sales and aquaculture sales, and about 90% of vegetable sales.

Western Catskills Product Sales by Product and County- 2007				
\$ (000)	Sullivan	Delaware	Ulster	Western Catskills
Milk and other dairy products from cows	7,468	34,392	2,642	\$44,502
Fruits, tree nuts, and berries	108	288	42,797	\$43,193
Poultry and eggs	27,679	D	218	\$27,897
Cattle and calves	2,321	9,900	1,188	\$13,409
Vegetables, melons, potatoes and sweet potatoes	486	369	9,353	\$10,208
Nursery, greenhouse, floriculture and sod	328	3663	4,896	\$8,887
Other crops and hay	953	3110	1,006	\$5,069
Aquaculture	D	D	2,009	\$2,009
Horses, ponies, mules, burros and donkeys	735	747	493	\$1,975
Other animals and other animal products	D	1,881	48	\$1,929
Grains, oilseeds, dry beans and dry peas	72	420	659	\$1,151
Cut Christmas trees and short rotation woody crops	141	47	148	\$336
Sheep, goats and their products	76	109	79	\$264
Hogs and pigs	67	123	59	\$249

Source: Census of Agriculture, 2007

The Market

OVERVIEW

It is proposed that the Western Catskill region be established as a foodshed for both the New York City metropolitan area¹⁹ and the counties that comprise the Western Catskills. Based on the initial release of data from the 2010 Census, there are **19.7 million people** to feed in this area.

The estimated food dollars spent in the foodshed target market is \$77.4 billion dollars per year (\$32.1 billion in NYC alone) based on the forecast national average for per capita spending on *all* food (at home and away from home) in 2010 of \$3,931.²⁰ Per capita spending in the NYC metropolitan area is likely significantly higher than the national average (wealthier area, food prices are higher), making this a rather conservative estimate. For example, according to the 2009 Consumer Expenditures Survey, consumer units (basically a household) in an urban area with more than 5 million residents spends about 11% more on food than other consumer units do.²¹ This would indicate that expenditures in the foodshed target market is closer to **\$85.8 billion**.

Western Catskill Foodshed Population & Per Capita Food Spending - 2010	Population 2010	Estimated Food Spending \$ Million
New York City	8,175,133	\$32,136
NYC MSA (excluding NYC)	11,510,990	\$45,250
Total NYC MSA	19,378,103	\$76,175
Delaware County	47,980	\$189
Sullivan County	77,547	\$305
Ulster County	182,493	\$717
Total Western Catskills	308,020	\$1,211
Total Western Catskills Foodshed Market	19,686,123	\$77,386

* Per Capita Spending on Food at home and away from home, projected national average in 2010

Source: U.S. Census Bureau, 2010 Census and USDA Economic Research Service

¹⁹ The U.S. Census includes the following counties in the NYC MSA. In New York: Brooklyn, Queens, Manhattan, Bronx, Staten Island, Westchester, Rockland, Putnam, Suffolk and Nassau. In New Jersey: Bergen, Hudson, Passaic, Middlesex, Monmouth, Ocean, Somerset, Essex, Union, Morris, Sussex, Hunterdon. In Pennsylvania: Pike.

²⁰ Annette Clauson and USDA Economic Research Service, "ERS/USDA Briefing Room - Food CPI and Expenditures: Table 13," http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/Expenditures_tables/table13.htm.

²¹ "Consumer Expenditures Survey 2009" (Bureau of Labor Statistics, October 2010), www.bls.gov/cex/.

LOCAL FOOD MARKET SIZE ESTIMATES

It is very difficult to quantify the demand for local foods. However, empirical evidence shows that a growth in interest results from a convergence of movements, as summarized in the USDA ERS Report entitled *Local Food Systems; Concepts, Impacts and Issues* (May 2010)²²:

The environmental movement encourages people to consider geographic dimensions in their food choices. Long-distance transport of food is considered to contribute to greenhouse gas emissions. The community food-security movement seeks to enhance access to safe, healthy, and culturally appropriate food for all consumers. Challenges to the dominance of large corporations also have contributed to efforts to expand local food. The Slow Food movement, which originated in Italy, is a response to homogenous, mass-produced food production, and the “fast” nature of people’s lives, by encouraging traditional ways of growing, producing, and preparing food (Gaytan, 2003). The local food movement also reflects an increasing interest by consumers in supporting local farmers, and in better understanding the origin of their food (Ilbery and Maye, 2005; Pirog, 2009).

Publicly available sales data for local food’s share of total food spending are limited. Many reports on local food and foodshed topics endeavor to provide estimates of sales and demand for local food; the same will be done in this report. These “back of the envelope” estimates of the *potential* size and demand in the market, while the best of what is available now, seem to be directionally valid and are appropriate for discussion and planning purposes. Depending on the methodology, the estimates can vary widely. In addition, trends in the number of farmers markets, CSAs and related programs/efforts will be presented as indicators of demand for local foods.

Readers should keep in mind that other agricultural locales—Hudson Valley, the Finger Lakes region, the farming areas of New Jersey and other areas—are currently more developed than the Western Catskills for providing local foods to the NYC metropolitan market. Although these regions should be viewed as competitors, there appears to be enough surplus and growing demand in the market for local foods. **A widely cited 2005 report, one that modeled only wholesale supply and demand, found \$719 million in demand that was not being met.**²³

Indicators of Local Food Demand

- Local food sales of all kinds (wholesale, retail, direct) make up a small share of overall food expenditures. Estimates nationally have been from less than 1% to about 3%. Using this as a range and examining the indicators below, sales of local foods in the region, **based on the estimate of per capita food spending, are estimated at \$1.5 to \$2.3 billion annually.**²⁴
- **Unmet wholesale demand among New York City food retailers, restaurants and produce distributors alone for locally grown foods was estimated to be \$866 million in**

²² Steve Martinez and Constance Newman, *Local Food Systems; Concepts, Impacts, and Issues*, ERS (Economic Research Service, May 2010), www.ers.usda.gov/Publications/ERR97/ERR97.pdf.

²³ Market Ventures Inc. and Karp Resources, *A Study of Development of New York City Wholesale Farmers’ Markets*; Final Report Executive Summary.

²⁴ Any estimate of “local food” spending is troublesome due to myriad definitions of “local.” There are also significant regional differences. The figure here is based on the range of percentages quoted in the literature. Actual spending could be much higher or lower.

2005. Of this, produce accounted for \$649 million, meat/poultry \$48 million, eggs/dairy \$44 million and floral/horticulture \$126 million.²⁵

- **Applying the national average of per capita spending on foods sold directly to consumers (\$4.02 in 2007) to the NYC metropolitan area population yields direct sales of \$79.1 million.** The actual direct sales total for New York State was only \$77.4 million in 2007; some of the demand is being met by local farms in New Jersey, Pennsylvania, Delaware or New England. Per capita spending on local foods varies significantly from one area to the other. For example, the estimate for New York State is \$3.96, \$6.10 in Pennsylvania, \$3.47 in New Jersey and \$36.80 in Vermont. Per capita direct sales for the three counties of the Western Catskill region averaged \$15.02.²⁶
 - Direct sales in the 100-mile Philadelphia Foodshed study area (which overlaps much of the NYC metropolitan area) increased 54.6% between 2002 and 2007 and accounted for 1.4% of agricultural sales (as compared to 0.4% nationally). This indicates that direct sales is a high growth segment in the New York metro area, and that direct sales are stronger here than in the country as a whole. This bodes well for the Western Catskills, as it indicates that there is an opportunity for more direct sales, a method of selling that is more profitable for farmers.
- Community Support Agriculture (CSA) has increased significantly in New York City. **There was only 1 CSA drop-off location in 1995 (the same farm can have multiple drop-off locations) and 100 in 2010.** Nationally, CSAs have grown from 2 in 1986 to 2,500 in 2010.²⁷ In addition, almost all of the CSA farmers who participated in the Philadelphia Foodshed study were at capacity with a waiting list. The high growth and the waiting list for CSA farmers, indicates that Western Catskills farmers who wish to expand their distribution by participating in Community Supported Agriculture should find customers willing to purchase shares. For the farmer, selling through a CSA is also more profitable because it shortens the supply chain.
- **The number of farmers markets in NYC has increased: from about 40 in 2000 to 120 in 2010 indicating growth in demand for locally grown food.** Nationally, the number of farmers markets more than tripled from 1,755 to 6,132 between 1994 and 2007.²⁸ According to the Agricultural Marketing Service, there are 114 farmers markets in NJ, 127 in Connecticut and 25 in the Western Catskill region.
- The USDA estimates that American consumers spend 0.2% of their food dollars at farmers markets. Applying this to the **food shed target market yields sales at farmers markets of \$15.5 million.**²⁹ It is likely that this share is significantly higher for the NYC metropolitan area.

²⁵ Market Ventures Inc. and Karp Resources, *A Study of Development of New York City Wholesale Farmers' Markets*; Final Report Executive Summary.

²⁶ Delaware Valley Regional Planning Commission, *Greater Philadelphia Food System Study* (DVRPC, January 2010), www.dvrpc.org/reports/09066A.pdf. and calculations by Becky Hoffman.

²⁷ Sarah Brannen, *FoodWorks, A Vision to Improve NYC's Food System* (The New York City Council, November 22, 2010), council.nyc.gov/html/food/.../foodworks_fullreport_11_22_10.pdf.

²⁸ Ibid. From Chart

²⁹ Suzanne Briggs et al., *Real Food, Real Choice; Connecting SNAP Recipients with Farmers Markets* (Community Food Security Coalition and Farmers Market Coalition, June 2010), www.foodsecurity.org/.../RealFoodRealChoice_SNAP_FarmersMarkets.pdf.

- **Nationally, sales made through the Supplemental Nutrition Assistance Program (SNAP)—more commonly known as food stamps—reached \$1.6 million at farmers markets in 2007 and increased to \$4.2 million by 2009.** According to the USDA Food and Nutrition, 289 authorized SNAP retailers were classified as ‘farmers markets’ in 2004. That number grew to 963 in 2009 and is projected reach over 1,100 nationwide in 2010.
 - In New York City, Greenmarket has a model program for installing Electronic Benefit Transfer (EBT) in its farmers’ markets. **Greenmarket has gone from accepting EBT at three markets in 2005, to 40 in 2010. EBT sales in 2010 reached \$500,000 from almost zero in 2005.**
- Each year, New York City agencies spend over \$175 million on food for food programs, senior centers, daycare centers, after school programs, summer meals and student breakfast/lunch.³⁰ New York State’s Council on Food Policy’s suggested goal is that by 2020, 20% of all food purchased by state agencies and authorities should be produced locally. **Based on the \$175 million annual institutional total, this would equate to \$35 million in annual purchases of local food by NYC agencies by 2020.**³¹
 - NYC’s school food budget alone is \$143.5 million dollars. NYC schools serve over 860,000 meals daily to 1 million students. Between 2006 and 2009, NYC’s Department of Education successfully purchased almost \$4.5 million of regional food without additional cost, according to an analysis by Karp Resources.³²
- Farm-to-school programs, which use local farms as food suppliers for school meal programs, increased from 400 in 22 States in 2004 to 2,095 programs in 40 States in 2009, according to the National Farm to School Network. This makes NYC’s and its suburban school systems desirable targets despite the slow and tedious process (including policy development) that is required to penetrate them.
- **U.S. organic food sales increased 307% between 2000 and 2009—from \$6.1 billion to \$24.8 billion—while all food sales increased 34% to \$669.6 billion,** according to the Organic Trade Association. While the growth of organic food sales cooled from double-digit rates throughout the decade in 2009 due to the recession, sales still increased 5.1% in 2009 whereas total food sales rose only 1.6%. And in 2010, the organic farming sector grew by 8%, dramatically outpacing the food industry as a whole, which only grew at less than 1%.³³
- **According to the National Restaurant Association’s 2008 operator survey, 89% of fine dining operators served locally sourced items and 90% believed it will become more popular.**
- **Walmart** has an initiative to purchase \$400 million in locally grown produce with an aim of having 20% of its produce sourced locally in the summer months. Walmart defines “local” as grown and available for purchase within a State’s borders. Many of the leading supermarkets have established “buy local” programs as well.³⁴

³⁰ Brannen, *FoodWorks, A Vision to Improve NYC’s Food System*.

³¹ Scott M. Stringer and Jeni Clapp, *Food NYC: A Blueprint for a Sustainable Food System* (Borough of Manhattan, President’s Office, February 2010), http://www.mbpo.org/uploads/policy_reports/mbp/FoodNYC.pdf.

³² Brannen, *FoodWorks, A Vision to Improve NYC’s Food System*.

³³ <http://www.sustainablebusiness.com/index.cfm/go/news.display/id/22268>

³⁴ Steve Martinez and Constance Newman, *Local Food Systems; Concepts, Impacts, and Issues*.

- **The Park Slope Food Cooperative** in Brooklyn has over 12,000 members and \$39.4 million in sales in 2009, making it the largest consumer-owned, single-store coop ranked by sales in the U.S.³⁵ The Park Slope Food Co-op purchases over \$2 million worth of New York State food.³⁶

LOCAL FOOD SUPPLY CHAIN

Based on empirical indicators, the convergence of movements that have led to an increase in interest in local foods, and a need to revitalize the local economy through agricultural, many areas, including the New York City metropolitan area, are seeking to increase their purchases of local foods.

Unfortunately, many retailers, restaurants and institutions have found it challenging to obtain a consistent and reliable supply of local food at the quality level they require, creating a conflict between conceptual and bottom line goals. For farmers, especially from small farms, getting food to market for a fair price continues to be extremely challenging as well.

The New York City metropolitan area market has a dizzying number of food outlets accessible to the consumer and/or restaurants and institutions. In New York City alone, there are more than 24,000 restaurants, 1,500 public schools and 5,000 supermarkets/grocers as well as food and beverage manufacturers who may need local ingredients. There are also thousands more outlets in the foodshed target market outside New York City.

New York City Food Outlets	Quantity
Restaurants	24,000
Supermarkets, Grocery Stores, & Convenience Stores	5,445
Food Wholesalers	1,730
Public Schools	1,500
Emergency Feeding Programs	1,000
Food & Beverage Manufacturers	1,000
Green Carts	445
Farmers Markets	120
Community Supported Agriculture (CSAs)	100

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages and NYC Dept. of Health and Mental Hygiene as published in *FoodWorks*

A Columbia University report entitled *Understanding New York City's Food Supply* (May 2010), prepared for the New York City Mayor's Office of Long Term Planning and Sustainability, outlined the distribution players in the New York market:

- **Food Manufacturers:** The largest brand name manufacturers, like Coca-Cola and Pepperidge Farm, and some smaller manufacturers, deliver directly to retail stores and large supermarkets. However, many retail stores rely on middlemen to buy and pick up food from the distribution centers of these manufacturers and deliver it to their retail outlets.

³⁵ Beth Kowitt, "The Rise of the Grocery Co-op - Sep. 17, 2010," *Fortune*, September 19, 2010, http://money.cnn.com/2010/09/16/news/companies/grocery_coop_Brooklyn.fortune/index.htm.

³⁶ <http://www.unitedforaction.org/news-information-blog/newyorkcitysparkslopefoodcoopjoinsbusinessesopposedtofracking>

- 47% of local food manufacturers, according to a 2007 survey for the NY Industrial Retention Network and Fiscal Policy Institute, rely on their own distribution (either use their own delivery fleet and/or UPS, FedEx or middlemen/jobbers).
- **Store-owned Distribution Centers:** Some large supermarket chains have their own distribution centers that supply their individual stores and often serve as third party distributors for smaller stores. These distribution centers may also supplement their own stock from Hunts Point Market or other distributors.
- **Distributors and Wholesalers:** Some large supermarkets and bodegas rely primarily on third party wholesalers and distributors (many of whom fulfill both roles). Sometimes these distributors will deliver directly to the stores; they also use independent middlemen to purchase and deliver product. Sysco is an example of a distributor/wholesaler for restaurants/institutions.
- **Specialty Distributors:** Several companies act as both supplier and distributor of specialty products, for example Lucky's Real Tomatoes or Mountain View Farm (beef/produce). They may grow, raise or process the product and deliver it directly to stores and restaurants. Some distributors, like United Natural Foods, specialize in organic; others, like Baldor Specialty Foods or Regional Access, specialize in local product.
- **Independent Middlemen/Jobbers:** These delivery services operate independently from distribution companies and manufacturers. They purchase food on behalf of clients from distribution centers, wholesalers and manufacturers, then deliver directly to their clients. **Food brokers** are another type of middleman; they maintain a catalog of products and receive a commission on their sales.
- **Cash and Carry Wholesaler:** Stores from which retailers and restaurants purchase food directly. Restaurant Depot and Jetro are examples.
- **Wholesale markets (Hunts Point):** Hunts Point consists of Hunts Point Cooperative Market, Hunts Point Terminal Produce Market and the New Fulton Fish Market as well as private distributors and vendors (115 firms or so). It is the largest wholesale food distribution market in the world. It provides wholesale food to large food retailers, specialty retailers, restaurants, institutions, country clubs, independent butcher shops.³⁷

Some key points from this report are relevant to local food distribution:

- Despite varying needs, a good deal of the food supplied to retail stores, restaurants, schools, and institutions come from a small number of sources.
- **Suppliers are chosen for three main reasons: price, quality and convenience.** Those who must feed large numbers of consumers purchase from wholesale suppliers and distributors because they are less expensive and more convenient. Quality-focused

10/27/11 2:20 PM³⁷ "In 2009, GrowNYC assumed management of the Wholesale Greenmarket located in the Hunts Point Food Distribution Center in the Bronx. Consisting of a core group of farmers who made up the former Bronx Terminal Market Growers, the Wholesale Greenmarket, under GrowNYC's management, seeks to expand opportunities for small retailers, food service professionals and the public to buy fresh, healthy, local produce directly from the farmer at wholesale prices." – excerpted from GrowNYC 2010 Annual Report

restaurants or specialty stores, on the other hand, will use a wide spectrum of suppliers to get the highest quality.

- Caterers or restaurants concerned about price will purchase most of their food at one time from a wholesaler/distributor like Restaurant Depot, Sysco, or Jetco.
- Quality-focused restaurants, regardless of cuisine, will buy at Hunts Point and a common set of wholesalers/distributors.
- NYC's public schools, through SchoolFood, uses four distributors to move the food to the individual schools based on their location.
- In general, processing of food occurs very early in the supply chain, prior to its arrival at the distribution point used by the end consumer (e.g. retailer, restaurant). Most produce, is pre-washed, and dairy/egg products are already processed and packaged before their arrival.
- The type of supplier or distributor used varies by end point. Food retailers rely heavily on middlemen, whereas food service sector distributors deliver directly to the restaurant unless they use a cash and carry wholesaler.
- The vast majority of food in the NYC metropolitan area is moved by truck, regardless of its end point.
- **Locally grown foods: still a niche market for retailers and restaurants.** Suppliers that carry local foods are “mission-driven organizations committed to supporting and supplying local foods, serving customers that demand these foods.”
- **The supply of locally grown foods currently draws largely on having established a personal relationship with a local producer.** While some regional distribution companies (e.g. Regional Access, Angelo's) have emerged to transport local produce from the farmer to the distributor/end point, “**the underdeveloped nature of this industry, prices charged by these regional distributors are prohibitive for many small and medium sized retailers.**”
- **Farmers Markets provide the most consistent access to local foods.** Over 2 million New Yorkers visit one of GrowNYC's Greenmarket's³⁸ each year and some restaurants have established relationships with farmers market vendors for their product.
- **With the exception of some restaurants, farmers market vendors or organic retailers,** few buyers are aware of the geographic origin of the food they buy. They only know where they bought it (e.g. Hunts Point, Restaurant Depot).

While there is an established (albeit complex) food distribution system for foods in the NYC metropolitan area, local farmers face many challenges in getting their goods to the point of distribution.

- In the Agriculture and Farmland Protection Plans for the towns of Bethel, Callicoon, Delaware and Liberty in Sullivan County in 2009, for example, stakeholders cited “difficulty getting products to market” and “no local processing (milk, community kitchen, slaughterhouse)” as weaknesses of the local agriculture market.

³⁸ “GrowNYC Annual Report 2010,” www.grownyc.org/files/GrowNYC.Annual.2010.web.pdf.

- In Sullivan County, more than half of the productive soil is not being used for agriculture; the lack of infrastructure and distribution impede growth.³⁹
- Without sufficient processing and transportation capabilities, sales opportunities are compromised. There are only 34 USDA-certified slaughterhouses in New York State and smaller facilities have year long waiting lists.⁴⁰ A *New York Times* article in 2010 quoted a NYC restaurant owner as saying “there are a lot of people out there who raise great animals for us to use, and they don’t have the opportunity to get them to us because the slaughterhouses are going away.” The owner’s veal supplier, from Delaware County, stated that there are no slaughterhouses in Delaware County and admitted that he had difficulty finding adequate transport for veal cattle to NYC.

³⁹ *Ground Up: Cultivating Sustainable Agriculture in the Catskill Region.*

⁴⁰Ruth Kroeger and Yelena Zeltser, “Developing a Vibrant Local Food Economy in New York Communities” (Cornell University City & Regional Planning, December 18, 2009), <http://ecommons.cornell.edu/handle/1813/14227>.

Case Studies

INTRODUCTION

This section, as initially conceived, was to include case studies of established foodshed efforts. However, research and a review of the literature reveals that many of the foodshed endeavors are in their initial stages—not far enough along in their lifecycle to serve as a true case study. Nor have they utilized metrics or measures upon which to base an evaluation of their success—something that any initiative of this kind should establish. However, many insights relevant to the effort in the Western Catskill region can be culled from the literature in general and from the specific efforts captured here.

LOCAL SUPPLY CHAINS

The Economic Research Service compared the structure, size and performance of local and mainstream supply chains for bringing local foods to market for five products/markets—apples from Syracuse MSA, blueberries from Portland-Vancouver MSA, spring mix from Sacramento MSA, beef from Minneapolis and fluid milk from the Washington DC area.⁴¹ Key findings include:

- **The local supply chain infrastructure for these products in these markets was well developed, demonstrating its critical importance to the success or failure of bringing local agriculture products to market.**
- **“Local,” on its own, is not generally a strong enough attribute to exact a price premium in the marketplace.** Other attributes that may earn a price premium include organic, grass-fed, home delivery, and other positioning.
- **Product diversity and utilizing more than one distribution channel is key.** Successful farms that participate in the local food supply chain offer a diverse portfolio of products and tend to market through multiple distribution channels (CSA, farmers market, farm stand, farm to school).
- The local supply chains studied do not currently rely on the national infrastructure or other local supply chains. **Cooperating with other supply chains may increase product volume and reduce per unit costs as demand for local product grows.**
- **Farmers receive a greater share of retail prices in local supply chains than in mainstream chains.** The net revenue per unit in local chains ranges from about equal to more than 7 times the price in mainstream channels.
- **In direct channels (farmers market, CSA, roadside stand) farmers assume responsibility for additional supply chain functions like processing (generally washing), distribution and marketing that would otherwise rest on to a third party.** The cost of bringing a product to market totals 13%-62% of the retail price. Farmers may

⁴¹ King et al., *Comparing the Structure, Size and Performance of Local and Mainstream Food Supply Chains*. Ms. Hoffman also reviewed many other reports and articles that, in general, were consistent with these findings.

spend time traveling and manning a booth at a farm stand; this time investment is not without cost in terms of transportation and capabilities like refrigerated trucks and labor.

- **The perception is that prices are often higher at farmers markets than in supermarkets** (and for local products in general, regardless of channel) but that is not always the case. The lowest prices for Syracuse's apples (with the exception of unusual varieties) were at farmers markets.
- Compared to mainstream supply channels, **direct and intermediate channels of distribution contribute a larger share of wages and business proprietor income to the local economy.**
- **Few mainstream channels provide the customer with detailed information about an item's production.** The more intermediaries between the farmer and the end consumer, the harder it is to maintain certainty about where, by whom, and how their food was produced.
- Retailers/end customers have stable relationships with their farmers. Generally, there are no written contracts. **Close relationships give farmers some flexibility in the intermediated supply chains, independent of commodity market prices.** While this was the case for the intermediated chains for blueberries and spring mix (they received negotiated prices rather than prevailing market prices), in the DC-area creamery and somewhat in the school market for Syracuse apples, commodity prices took hold.

Insights: Successful local food efforts have established sufficient infrastructure (ERS documents five product markets where this is their study). Branding or differentiation efforts must showcase more selling points than being "local." An educational piece is needed to show that local is not always more expensive, and buying local has ancillary benefits to the local economy. When there are fewer intermediaries between the farmer and the end customer, there is a stronger link to information and interest about where, how, and when the food was grown. To date, farmers have had to establish close relationships with retailers in order to receive a price premium.

NORTHEAST IOWA FOOD AND FARM COALITION⁴²

The Northeast Iowa Food and Farm Coalition (NIFF) was the first pilot community to receive funding in 2006 (\$20,000) from the Regional Food Systems Working Group (RFSWG) in Iowa. NIFF comprises agricultural growers, retailers, market gardeners, independent meat processors, fundraisers and others in several northeast counties in Iowa. The coalition's **initial goals** were to:

1. Provide an opportunity for existing and new producers to diversify.
2. Explore development of regional processing and storage facilities to add value to all agricultural products in the area.
3. Increase the consumption and sale of locally grown crops.

NIFF created a strategic plan based on these three goals. With \$500,000 in additional funding from the W.K. Kellogg Foundation (as one of nine Food and Fitness initiatives in the U.S, the coalition was able to successfully facilitate an increase in institutional purchases of produce, dairy and meat products (many institutions were operating under the false impression that they were

⁴² "Success Stories: RFSWG: Northeast IA FFC," <http://www.valuechains.org/success/successRFSWG1.htm>.

not allowed to buy fresh fruits and vegetables from farmers). NIFF spurred the Iowa Department of Agriculture and Land Stewardship to clarify its policy on the use of local foods by institutions, enabling institutional buyers to feel comfortable purchasing local foods.

In 2008, encouraged by the increase in purchases by institutions, NIFF was able to extend the growing season by convincing a local wholesale and retail horticultural company to convert about three acres of greenhouse space for the production of several types of vegetable and fruit crops.

With the addition of the greenhouses, local school districts were able to purchase local food for approximately nine months out of the year. A local college also committed to purchasing 35% of its food from local producers by 2012.

Initial investments in NIFF have been leveraged into approximately \$1.2 million in food and fiber infrastructure and resources to the region. This includes investments in infrastructure (greenhouses, hydroponics), marketing, expansion of production and other grants. Over the last two years, NIFF identified an increase of over \$377,000 in institutional purchases, and more than \$220,000 in increased food sales from local farmers to restaurants, food co-ops and other institutions.

GROWNYC – NEW FARMER DEVELOPMENT PROJECT

Farmers are reaching retirement age; it is critical to identify new farmers to take over. Many immigrants are underemployed. GrowNYC, working to increase food access to New Yorkers for over 30 years, has established the New Farmer Development Program (NFDP) to address both needs. In addition to running 51 Greenmarkets in the five boroughs of New York City, assuming management of the Wholesale Greenmarket from Hunts Point (now located at the New Fulton Fish Market) and running educational programs, GrowNYC has established this program to **link immigrants who possess the knowledge and skills to farm with resources to enable them to do so** (e.g. workshops, micro credit loans, technical and marketing assistance, land identification).

NFDP's achievements include:

- Creating 20 new independent farm businesses since 2001.
- Participation of NFDP farmers at some 70 farmers markets in the New York region. These farmers sell vegetables, fruits, flowers, eggs, honey and pastured poultry.
- Bringing new products and **culturally appropriate traditional produce to market** including papalo, pipicha, alache, epazote, callaloo, Caribbean pumpkins and squash blossoms.
- Keeping 250 acres of farmland in production.
- Purchasing about 50 acres of farmland by five NFDP farmers.

Insights: Many immigrants are receptive to farming. Growing culturally appropriate traditional produce and offering it in the New York market may be a differentiation opportunity that the Catskills could benefit from.

HARDWICK, VERMONT

Ben Hewitt's book, *The Town That Food Saved*⁴³, profiles the local food system in and around Hardwick, Vermont. The town includes a seed company, a dairy, a composting venture, a well-established food coop, a restaurant that serves local foods, and support services like an independent contractor that slaughters cattle/poultry/hogs on site. Based on his study of Hardwick, Hewitt concludes that the elements of a decentralized food system are:

- **It must offer economic viability to small-scale producers.** The **value-added model (such as turning milk into cheese, using organic practices, or other claims) helps to counter commoditization** which is the purview of big agriculture.
- **It must be based on sunshine** (sun-based fertility rather than chemicals). In Hewitt's view, this is not only more natural and healthy, it provides resiliency to disruptive change (e.g. delay in oil supply, availability of fertilizer and animal feed stocks).
- **It must feed the locals.** This element may conflict with economic viability for small-scale producers because, in many places like Hardwick, the local population cannot afford to purchase \$20/lb artisanal cheese. Therefore, local producers must seek out more distant markets and, in doing so, risk undermining local food production elsewhere—and chasing the highest price.
- **It must be circular (e.g. renewable).** In Hardwick, within a ten-mile radius of the town, there is a seed producer, a composting operation and several vegetable growers. Ideally, the seeds are sown and grown into vegetables, and the vegetables are served and the scraps remain and are turned into compost that fertilizes the seeds and crops.

Hardwick has a 22,000 sq. ft. cellar for storing cheese (and enough room to lease space to other cheese mongers). It is modeled after Comté, a cheese region in Eastern France that established strict specifications for milk and regulations for making cheese. Hardwick has invested in a location that will house a shared kitchen and other processing services in the not too distant future.

Hewitt also found that one of **the most important aspects of a local food system is the process, awareness and connectedness that it builds within the community. This linkage and sense of community are hard to measure using financial metrics and measures.**

Insights: Hardwick is in the process of creating the infrastructure to make it self-sustaining in terms of agricultural supplies (seeds, compost), processing (dairy, cheese cellar, communal kitchen) and related services. It has local outlets (Food Coop & restaurants) that buy the food, as well as products that can be sold in Boston, New York City or more distant markets. The benefits not only accrue economically to the town, but are a vital link in creating a sense of community and connectedness.

LOCAL PROCESSING

Critical to the success of a local farm system is the presence of a local infrastructure of farm services including processing, warehousing, distribution and veterinary services. As the number of farms has declined, the infrastructure has been battered making it more difficult for the remaining farms to survive. Food initiatives that require the use of locally produced product

⁴³ Ben Hewitt, *The Town That Food Saved; How One Community Found Vitality in Local Food* (Rodale, 2009).

can spur infrastructure development. For example, GrowNYC instituted a requirement in April 2010 that all participating bakers in its markets must use at least 15% locally grown flour in their products. This has led to the establishment of mills and a greater diversity of grains grown.⁴⁴ In addition, innovations have been made in nearby Hudson Valley and across the country to help reestablish a local infrastructure; some of those efforts are highlighted below.

Farm to Table Co-Packers

Located in Kingston, NY, **Farm to Table Co-Packers is a full service contract packaging facility intended to serve local growers. It has a 20,000 sq. ft. kitchen, a dedicated processing line, a full bakery and an incubator/test kitchen as well as storage space for refrigerated, frozen and dry goods.** In it, food processors are able to jar, pickle, can, freeze and bake. It enables produce growers to preserve fresh food during the growing season as well as create value-added products.

Farm to Table **transformed a former IBM facility** into this processing center. While it has only been in business for a short while, it has served over 25 farms and found outlets for local produce. The company added a Individually Quick Frozen (IQF) freezer which enables area farms to sell their vegetables at **an industry standard.**⁴⁵

Modular Harvest System™

The number of USDA-licensed slaughterhouses has declined substantially across the county and in the Northeast, making it extremely difficult and expensive for small farmers who raise livestock to bring their meat to market. Restaurants offering local food have increased demand for local, high quality meat.

In 2010, as a result of the **Glynwood Slaughterhouse Initiative, the first USDA-licensed mobile slaughterhouse unit for large livestock in the region began to operate.** According to Glynwood, it will operate at a series of docking sites, and rotate throughout the Hudson Valley, to increase capacity for all farmers. The expectations are that this will enable more producers to bring high quality meat to market.

Identifying Underutilized Processing Facilities in Puget Sound

The Puget Sound Food Project (2008), conducted in partnership with the Cascade Harvest Coalition and the Northwest Agriculture Business Center, **began an inventory to identify product development and incubation services, small-scale processing centers, co-packing facilities and processing facilities devoted to specific functions in the Puget Sound counties.** It then sent out a survey to the facilities it identified. **An unintended result of this effort was that it uncovered at least three relatively large processing facilities** with real potential for custom or co-packing services for other producers.⁴⁶

One 44,500 sq. ft. facility left half of its square footage unused. The facility featured cold and warm storage as well as space for custom packing of fresh produce. Another even larger space was about 50% unused; it featured a commercial kitchen and freezing capabilities. A smaller

⁴⁴ "Greenmarket Grains Week: November 14-21, 2010 | GrowNYC," <http://www.grownyc.org/greenmarket/topics/grainsweek>.

⁴⁵ *The State of Agriculture In the Hudson Valley.*

⁴⁶ Cascade Harvest Coalition & Northwest Agriculture Business Center, *Puget Sound Food Project Final Report* (Carolyn Foundation and Cascade Harvest Coalition, December 2008), www.agbizcenter.org/.../Final%20Carolyn%20Foundation%20Report_12_16_08.pdf.

family-owned processing facility was actively seeking food producers to utilize new equipment that could custom-cut virtually any produce.

Surveying or identifying locations that can be repurposed or more fully utilized is one way to increase economic development and assist farmers at the same time.

Insights: Entrepreneurial opportunities exist for co-packers, processors, kitchens. Establishing these facilities strengthens the local infrastructure. Identifying underutilized facilities, or repurposing facilities for processing, warehousing, packaging, are critical to the farm infrastructure and to the local economy. Regional or communal efforts to provide services are a step in the right direction (like mobile slaughterhouses). Values-driven wholesale markets are critical components to driving sales to restaurants and institutions while also helping the local farm economy.

DISTRIBUTION

Common Market – Philadelphia

The Common Market is a non-profit, **values-driven wholesale consolidator and distributor of local food** in the Philadelphia area. Operation began in July 2008; since then, Common Market has sold over \$500,000 of local farm product, primarily serving hospitals, schools and universities. It expects to become financially self-sustaining in 2011.⁴⁷ Participants in the Philadelphia 100-Mile Foodshed study were aware of and impressed by the Common Market and wanted to see this concept replicated and expanded.

Intervale Food Hub – Vermont⁴⁸

The Food Hub is a collaboration between the Intervale Center, located in Burlington, VT and 24 local farmers is a noteworthy development. It evolved from a research project in 2007 to address the barriers and opportunities to increasing local food production and consumption. The Intervale Food Hub offers both a multi-farm CSA, and a wholesale marketing and distribution service. Their CSA differs from the traditional model in that it is a multi-farm program whereby products from their 24 farms are combined into the weekly shares, and members are not shareholders in any of the farms. Rather, farmers receive a fair price for their crops and members receive the retail-equivalent of the value they pay for those crops. One percent of shares sold through the Food Hub are set aside to partially subsidize shares to low-income households.

The wholesale marketing and distribution services make it easier for producers to reach local restaurants/institutions, while buyers are able to more readily access high quality, locally grown products through one central ordering/distribution system.

Red Tomato⁴⁹

One of the biggest challenges for local agriculture is an insufficient distribution infrastructure that makes it difficult for farmers to get their product to market at a fair price while, at the same time, makes it easier for retailers and other buyers to source and receive local foods. **Red Tomato was born out of the desire to sell local produce fairly on a wholesale scale.**

⁴⁷ Delaware Valley Regional Planning Commission, *Greater Philadelphia Food System Study*.

⁴⁸ "intervalefoodhub," <http://www.intervalefoodhub.com/home>.

⁴⁹ Jose B Alvarez, Mary Shelman, and Laura Winig, "Red Tomato: Keeping It Local" (Harvard Business School, May 26, 2010), <http://hbr.org/product/red-tomato-keeping-it-local/an/510023-PDF-ENG>. And other references.

Founded in 1996, Red Tomato is a non-profit with revenues over \$3 million in 2009 that now **coordinates marketing, sales and wholesale logistics for a network of over 40 medium-sized fruit and vegetable growers in the Northeast**. It sells to retailers such as Trader Joe's, Whole Foods, Kings, and D'Agostino.

Red Tomato **works with mid-sized farms of 50-250 acres** (which are larger than most of the farms in the Western Catskills) that are large enough to have refrigeration and packing lines necessary for wholesale production (whereas smaller farms would need to band together to accomplish this). Even though these farms are larger than most in the Western Catskills, lessons abound for the smaller farm community that wishes to reach the NYC metropolitan area market.

Red Tomato **works with regional farmers—from New England, New York, New Jersey and Pennsylvania—in order to increase supply and extend the growing season** of product availability for customers (two major needs of retailers). While some of its farmers produce certified-organic crops, Red Tomato handles both conventional and organic products.

One of the key components of Red Tomato's business model is **servicing as the logistical coordinator for products** that moved from local farmers to the point of sale. During the growing season, Red Tomato purchases products from growers and sells them to supermarkets on a **daily basis. Third party trucking companies are used to move the product; Red Tomato consolidates products from multiple farms into larger loads to fulfill retail orders.**

"Dignity" pricing is another key component of Red Tomato's mission. For any given product, prior to the season, Red Tomato's staff establishes three prices with the grower: last year's average, this year's ideal price, and the farmer's personal price floor (the lowest price the farmer can accept without losing both money and dignity). Armed with this information, Red Tomato staff members negotiate prices with the retail buyer that cover the cost of product acquisition and shipping, plus a 10% margin for Red Tomato.

Branding is a key component of the Red Tomato strategy of product differentiation in or to "decommodify" the product. Red Tomato has created a visual identity (the Red Tomato name and logo) as well as grower-identified packing that farmers in the Red Tomato network can use when they sell products on their own (e.g. independent of Red Tomato distribution). Red Tomato has also created point-of-sale materials, including photos of each farm and profiles of the growers on the Red Tomato website. This makes it easy for retailers who want to promote local products and represents a level of quality to the retailer and the consumer.

Insights: There are values-based distribution models that have had initial success in supporting farmers to receive a fair price while providing buyers with an efficient supply and distribution for local products. Common Market in Philadelphia provides the infrastructure for farmers to reach the institutional market, while the Intervale Food Hub works cooperatively with 24 farmers to provide a diversity of products to both consumers and wholesale buyers. The Red Tomato model supports farmers by providing logistics, pricing and marketing support while making it easier for retailers to source local products. Via its regional network, Red Tomato has extended the growing season and hedged against supply issues by being able to substitute with other farmers if one has trouble. While Red Tomato is still battling to be sustainable and its brand only has limited consumer recognition, its model has addressed some of the major infrastructure barriers for both farmer and retailer.

Food For Thought

On behalf of **Catskill Mountainkeeper**, many hundreds of pages of reports, studies, statistics and books related to foodsheds, the local food movement and local agriculture were reviewed. In addition to the areas covered thus far in the report, and based on an understanding of the mission of the Western Catskill Foodshed Stakeholder Group, other themes, concepts, questions and potential opportunities and insights emerged in the analysis.

- Loss of farms/farmland and farm infrastructure have been discussed and analyzed in this report. Similar goals and aspirations have been found among most of the foodshed reports. Farmland Protection Programs are in place and Agricultural Marketing programs exist in most states and even at the regional and local level. Yet, while these programs have improved awareness of local product and saved some farmland, they have not significantly improved the economic outlook for local farms. How will the Stakeholder Group improve upon the methods and effectiveness of these programs or find another way?
 - In New York State, substantial funding has been appropriated for its Farmland Protection Program (\$205.6 million since 1994) but **expenditure delays and bureaucracy have limited the program's effectiveness** and caused a significant backlog in projects. Many contracts have been pending for over three years, according to an October 2010 report from the Office of the State Comptroller.⁵⁰ In addition, the 2009 NYS Open Space Plan reports that \$547 million in farmland protection applications were turned away between 1996 and 2008 due to insufficient funding. The American Farmland Trust found that **two-thirds of farms who voluntarily wished to protect their land were turned away due to lack of funding** (in 2006-07).
 - Almost all States have an agricultural marketing program for local foods. New York's Pride of New York began in 1996 and New Jersey's Jersey Fresh started in 1983. **Jersey Fresh is one of the few programs that certify that a labeled product is indeed local.**⁵¹ New Jersey requires products bearing the Jersey Fresh logo to be registered and meet quality standards "equal to or better than U.S. No. 1" (State of New Jersey, NJDA, 2009). **Most States have no metrics in place to measure the success of their programs.** A recent survey that included New Jersey found that consumer awareness of its program was higher than State's with newer programs but that customers bought food with "locally-grown" labeling more often than they did State-labeled product.

⁵⁰ DiNapoli, *Bet the Farm: Farmland Protection as a Strategy for Economic Growth and Renewal*; Liz Brock, David Haight, and Jerry Cosgrove, *Picking up the Pace: A Road Map for Accelerating Farmland Protection in New York* (American Farmland Trust, January 2007), www.farmland.org/.../AFT_PickingUpthePace_NewYork_January07.pdf.

⁵¹ Kathryn A Onken and John C. Bernard, "Catching the 'Local' Bug: A Look at State Agricultural Marketing Programs," *Choices: The Magazine of Food, Farm and Resource Issues* 25, no. 1, Agricultural & Applied Economics Association (2010): 7, <http://www.choicesmagazine.org/magazine/print.php?article=112>.

- There appears to be more demand for local food than there is supply in the New York City metropolitan area. Many farm areas in the Northeast are following a similar strategy to serve this market. The Hudson Valley, the Finger Lakes region, New Jersey, and even areas further away like the Berkshires in MA or Hardwick, VT are participating at NYC farmers markets, operating CSAs, or supplying NY area restaurants. **There appear to be opportunities to cooperate with other areas to lengthen the growing season, satisfy demand for a broader range of products, or strengthen the regional agricultural infrastructure.** On the other hand, if each area is truly competitive with the other, a cautionary word from Ben Hewitt, author of *The Town That Food Saved*, may be instructional:

“An operation that’s too big for its locality will find itself needing to exploit other, more distant markets in order to off-load its product and in doing so, it will compete with operations in these markets, forcing them to lower their prices and then extend their reach in order to survive. It becomes a race to the bottom.”

- One of the key findings is that **it is difficult to achieve a price premium simply by virtue of being a “local” food.** Other attributes like branding, organic, grass-fed and the like are needed to support a higher price; the Western Catskill region will need to distinguish its products in some manner. **Growing appropriate traditional produce may be a way for the area to differentiate itself.**
 - The New York City metropolitan area is ethnically and culturally one of the most diverse markets in the world. **Growing appropriate traditional produce to meet the needs of this population (as possible based on what can be grown in this region) may be a way to stand out from the crowd and create a unique identity for the Western Catskills.** The immigrants involved in the New Farmer Development Program offered by GrowNYC have successfully demonstrated that there is a demand for diverse produce in the NYC area. In addition, the New Fulton Fish Market (part of the Hunts Point wholesale market) has a strong ethnic base of communities of color: 20% of buyers are Chinese and 30-40% are Korean.⁵²
- **A downside of price premiums is that locally produced products (organic milk, premium cheeses, locally pastured beef) may become unaffordable to less affluent residents in the local market** (in this case, for the residents of Delaware, Sullivan and Ulster counties). These residents will more often eat food bought in supermarkets (products of industrial agriculture) and a large share of their food dollar will end up outside of the local economy. Farmers will need to court more distant markets (and increase their transportation expenses). Making direct sales and finding local markets for local product (schools, local government, food programs, local restaurants, agro tourism) may preclude the need to seek out distant markets and are more profitable for the farmer and the local economy.
- **Extending the growing season and making small-scale farming more intensive and profitable appears to be one way to sustain farmers and meet the demands of retailers.** Farmers in the region can use methods like high tunnels, or can follow the

⁵² Matt Barron et al., *Understanding New York City’s Food Supply* (NYC Mayor’s Office of Long-Term Planning and Sustainability by Columbia University, May 2010), www.columbia.edu/.../UnderstandingNYCsFoodSupply_May2010.pdf.

practices promoted by Four Season Farm's Barbara Damrosch and Eliot Coleman, to improve the profitability and productivity of small farms and extend the growing season.

- **Walmart, Whole Foods, Wegman's and other major food retailers have established local food initiatives** and these outlets have a substantial customer-base and the ability to sell millions of dollars of local agriculture products. Walmart alone has a goal of selling \$400 million in locally grown foods.⁵³ These retailers have the potential to create a substantial demand for local foods, yet they pose significant challenges for a local farmer in terms of earning a fair price and getting the food to market. However, it is too big a market to ignore and one that could help sustain farmers and spur economic development. Farmers must create opportunities to work with these retailers in ways that work for both parties.

⁵³ Steve Martinez and Constance Newman, *Local Food Systems; Concepts, Impacts, and Issues*.

Summary Of Critical Learning

- As this report substantiates, agriculture is a positive driver of economic growth.
- Every dollar in agriculture product sales creates 1.5-2.5 dollars in economic activity for the region.
- A successful agricultural industry attracts and supports a service industry, which generates additional economic activity.
- Agriculture requires less public infrastructure and spending than other land uses (such as residential or other commercial uses), increasing its desirability.
- The number of farms in the Western Catskills, and the acreage under use for agriculture, are both on the decline. Statistics show that the decrease in this region is at a greater rate than in surrounding areas such as the Hudson Valley.
- The productivity of existing farm acreage has increased substantially but farmers' costs have increased at an even faster rate.
- The infrastructure of businesses and services that support farming in the Western Catskills is weak, a situation that increases the cost and difficulty of doing business for farmers and deprives the area of an economic base.
- The New York metropolitan area of over 20 million people is an extremely robust market for food. There are indications that the per capita expenditure for food in this market exceeds the national average.
- There is a significant trend toward increasing purchases of locally grown food for reasons of taste, nutrition, value, environmental concern and conscience.
- Local food is sold to consumers at farmers markets, farmstands, supermarkets and food specialty stores. Local food is an increasingly desirable purchase for restaurants and is becoming less niche and more mainstream as a product. The Western Catskills are well poised to take advantage of this trend however, other areas like the Hudson Valley, The Berkshires and Southern New Jersey have a time and volume lead.
- The increase in demand for local food in the NYC metro market seems to be growing faster than the increase in supply. This indicates an opportunity for the Western Catskill region if it can increase supply.
- Retailers, restaurants and wholesalers indicate that the single greatest challenge to providing locally grown food is obtaining a consistent and reliable supply.
- In other areas, actions that have addressed consistency and reliability include extending growing season via high tunnels and hoop houses, pooling product, creating cooperative distribution and creating relationships with farmers in other regions.

- Farmers report that their biggest challenges are getting product to market and securing margins that sustain them.
- Lessons from other markets where foodshed initiatives have been started reveal that when farmers can handle channel of distribution functions traditionally provided by others, the increase in margin more than offsets the cost and effort.
 - These functions routinely include cleaning, packing, warehousing and transportation. Additional functions include value-added processing, branding, unit packaging and consumer education materials.
- The fewer intermediaries there are between the farmer and the consumer, the more profitable and sustainable the farmer. More direct interaction between the farmer and the consumer also enables the consumer to better understand the value of local food and differentiate it from a commodity food purchase.
- Data indicates that “local” positioning alone isn’t a strong enough differentiation for most consumers. Farmer contact, branding, packaging and added value processing are also frequently needed.
- Foodshed efforts in other markets, although in many cases not far enough along in the process to provide proven case studies, indicate that when progressive, well-planned initiatives are undertaken, farmers become more secure and profitable, production is increased, local economies benefit and nearby markets respond by “voting with their dollars” in buying locally grown food over other options.

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