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Food Logistics: From Farm to Fork

By Joseph O'Reilly

Demand for locally grown food is bringing supply chain sourcing back to its roots.



In 1985, Willie Nelson, Neil Young, and John Cougar Mellencamp brought the plight of America's family farmers mainstream with the first Farm Aid concert in Champagne, Ill. Their "music with a message" gave the U.S. agriculture industry a much-needed publicity infusion as demand for homegrown products and farming's economic relevance continued to erode.

The 1980s was a flashpoint for U.S. farmers, but especially smaller growers. The boom years of the previous decade, characterized by strong commodity prices, exports, and credit lending, turned fallow when offshore markets collapsed and debts accumulated. Then bioengineering emerged as a viable means for artificially improving crop yields. A widespread land grab ensued, and industrial farms quickly swallowed small operators in spades.

During the past three decades, the demise of the family farm became an indictment of U.S. agribusiness and consumerism. The message that Farm Aid rocked in the 1980s unleashed a mass media revolution in the 2000s.

Hollywood picked up the plow with director Richard Linklater's film adaptation of Eric Schlosser's book *Fast Food Nation*. Documentarian Morgan Spurlock's *Super Size Me* inflamed a broiling debate about the

fast food industry, while Michael Pollan offered an organic solution in *The Omnivore's Dilemma*. Schlosser and Pollan then teamed up to narrate Robert Kenner's exposé of U.S. factory farming in *Food Inc.*

Television programming has been equally complicit, introducing audiences to a potluck assortment of celebrity chefs, culinary travel guides, and reality show cook-offs that entertain as well as educate.

Each genre in its own way — driven by populism, pragmatism, and publicity — pulled the mask off U.S. agribusiness while giving a face to the American farmer. Collectively, they've contributed to a cultural foodie phenomenon that is sweeping middle-of-the-road America and creating demand for fresh, locally grown food.

This recent agricultural awakening is changing the way many food companies source products. Apart from marketing appeal, food quality and safety concerns, transportation costs, and local economic development efforts are compelling restaurants, groceries, and wholesalers to engage smaller producers and localize their supply chains. In turn, they are nurturing a “fresh food fast” procurement model that is growing from the ground up.

The farm-to-fork model is by no means new. Throughout history, agriculture and animal husbandry have been critical elements in the local supply chain, providing sustenance as well as stimulus for related economic activity. Even as a tangential force, the farm community gave industrialists such as Henry Ford the vision for innovative ideas, including vertical integration. No less important, agrarian sensibilities and demands paved the way for the modern-day trucking industry.

But global trade radically changed the U.S. farming dynamic during the 20th century. Competition in emerging markets, where farming remains the predominant economic force, devastated the agrarian ethos that inspired the likes of Thomas Jefferson, John Deere, George Washington Carver, General Mills, Kellogg, and the Quaker Mill Company, among many others.

Now that tide is turning, aided in part by wildfire media representations, as well as an unlikely name — Walmart.

THE WALMART SEED

The big-box wholesaler's impact on U.S. agriculture is tenuous at best. In fact, critics have argued that Walmart has greatly contributed to the decline of smaller enterprises, farmers included. But few can discredit the company's marketing and supply chain clout. When Walmart latches onto a new concept, consumers and competitors take note, then buy and borrow.

In 2008, Walmart made a public pledge to source more local fruits and vegetables to keep produce prices down and provide affordable and quality selections for its customers. At the time, the company reported

that partnerships with local farmers had grown by 50 percent over the previous two years. Walmart upped the ante in October 2010 by announcing that it would increase its commitment to buying locally, with a goal of sourcing \$1 billion in food from one million small and medium-sized farmers during the next five years.

“By taking a leadership role in sustainable agriculture, Walmart will reduce costs and make our business stronger, while providing our customers affordable, fresher, and higher-quality food,” said Walmart President and CEO Mike Duke on behalf of the new campaign.

“We’ll grow local economies by helping farmers expand their businesses and get more income for their products. At the same time, we’ll make a difference across a range of environmental issues and ensure a more sustainable food supply for the demands of a growing global population,” he concluded.

Walmart is hyper-sensitive to mainstream demand, whether it’s “greening” business practices or selling greener produce. More importantly, it has the means to efficiently and economically bring innovative ideas and products to a widely captive audience.

“There is consumer interest, if not yet critical mass, in locally grown food,” says Mark Psilos, farm-to-chef forager and market manager for Green City Market, a Chicago farmer’s cooperative.

In much the same way the sustainability movement has stirred the “consuming conscience” during the past few years, people have become fascinated with the foodie phenomenon independent of how they stand on environmental politics. It just makes sense.

To point, Walmart recognized, then seized, an opportunity to green its supply chain, reduce transportation and logistics costs, and market that value to customers. Now it’s doing the same by supporting local growers. “In certain locations, Walmart was already sourcing key items from local producers,” explains Psilos. “In effect, it began marketing something it was already doing.”

Transportation efficiency and economy complement local sourcing models where just-in-time seasonal deliveries and shorter transportation routes eliminate product shrinkage and costs. Walmart’s logistics pedigree allowed it to easily execute a ripening idea. Still, there are obstacles.

For one, comparatively few consumers buy food from Walmart. Secondly, the majority of small U.S. farms don’t have the scale or sophistication to meet the wholesaler’s purchasing needs. The biggest upside to Walmart’s local sourcing roadmap is the buzz that’s building as a consequence. The company is feeding fresh food to customers at cost and local growers are reaping the real value.

FOOD MARKET-ABILITY

Chicago's Green City Market is among a number of food cooperatives that have sprouted nationwide during the last decade, bringing seasonal supply to evergreen demand.

Abby Mandel, a Chicago-area chef, food writer, and entrepreneur established Green City Market in 1998. It began with nine local farmers in an alley next to the downtown Chicago Theater, but soon grew and moved to a larger location on the south side of Lincoln Park. It currently operates year-round, moving markets inside during the winter months. The non-profit operation hosts more than 200 farmers and, in 2010, welcomed close to 200,000 visitors, up from 40,000 in 2007. While demand for quality local foods is increasing, pressures on the supply side have helped spur growth as well.

"During the past two or three years, small farms struggling to meet demand began forming informal cooperatives," says Psilos. "They pooled resources, goods, truck space, and delivery drivers to help each other."

Green City Market evolved as a channel to help local farmers bring their product to market and establish relationships with customers. The cooperative holds members to strict standards, requiring all products be sourced within a 300-mile radius of Chicago. Farmers from Illinois, Wisconsin, Indiana, Michigan, and Iowa undergo a rigorous application process — they can only sell what they grow and they have to meet certain expectations in terms of growing practices. Green City Market formed a committee that approves farms and inspects locations to make sure growers are compliant.

While Chicago residents have benefited from Green City Market's presence, its restaurants are in the midst of a culinary renaissance. The market has become a citywide institution, which was part of Mandel's original vision when she transplanted Europe's sustainable marketplace to Chicago in 1998.

"Abby chased down the area's top chefs — Rick Bayless among them — just as the Food Network was gaining popularity," says Psilos. "Then restaurants began sourcing from the market in droves."

Restaurant chains ranging from Chipotle to white tablecloth eateries buy ingredients at the market, many twice a week. Ten small, independent groceries also purchase directly from farmers.

"Cost isn't as much of a factor on our end. If companies want to save money, they can buy from a large distributor, such as Sysco," says Psilos. "But large distributors often can't provide the quality that consumers demand."

For this reason, the direct-from-farm sales model is a fast-growing trend among area restaurants. And local growers favor setting up their

own distribution channels, through Green City Market or otherwise.

“The adoption rate of fast food and large food-service wholesalers localizing their supply is still quite low in Chicago. In fact, over the past few months, we have seen numerous wholesale distributors attempt and fail to enter the marketplace,” Psilos adds.

That might change, in time. Psilos acknowledges that as the local sourcing movement progresses, there will be room for more brokers, distributors, and third-party logistics providers that can help growing farms execute the transportation and logistics piece.

FARMED TO SCALE

One of the challenges small producers and large buyers with local ambitions face is scalability. That is one of the benefits Green City Market affords vendors and customers alike: access to a broader market and a wide variety of different types of foods.

But even the Walmarts of the world and grocery chains have to lock in a certain volume to make it worth their while — especially as procurement relates to transportation and logistics.

With increasing demand for fresher foods, some companies are locating processing plants and distribution facilities closer to raw materials, even if that means being farther away from the consumer.

“Local sourcing may mean lighter loads when multiple growers aren’t combining their harvests. And these smaller volumes place upward pressure on transportation costs,” explains Jim Emmerling, executive vice president for Aspen Logistics, a California-based 3PL that has heavy play in the food space.

Geographic constraints also impact load efficiencies and transit times. “Farms located closer to major urban areas are typically smaller and more spread out than those in traditional agricultural regions,” he adds. “This translates into multiple stops to pick up lighter loads.”

Another major obstacle is seasonality. Restaurants have much greater flexibility adapting their menus to varying harvests and food availability than grocery stores and fast-food chains.

“High-end restaurants change their menus multiple times a year,” says Psilos. “Seasonal cooking comes into style with local food movement. But this presents a challenge for farmers working with a Chipotle-type customer that has a set menu and static food demand year-round.”

One way that grocery chains circumvent seasonality constraints is by relying on dedicated third-party logistics operations to help individual stores incorporate local buying strategies within the corporate supply

chain. In effect, this creates year-round sourcing flexibility.

“We have a locally harvested program where we use established warehouse and buying systems that specify growing and food grade packaging requirements,” says Mike Siemienas, spokesperson for SUPERVALU, a grocery chain based in Eden Prairie, Minn., that operates stores branded under 11 names, including CUB, Albertsons, and Lucky.

In 2005, SUPERVALU acquired third-party logistics provider Total Logistic Control and incorporated W. Newell & Co. as a new division dedicated exclusively to fresh produce. One advantage of having this operational arm is that field buyers help retailers find new growers as well as the means to bring them to market. This may include sourcing locally grown produce in season or finding fresh ingredients elsewhere out of harvest.

FRESH, LOCAL, AND SUSTAINABLE

Bringing local producers to the shelf when possible is important to SUPERVALU, explains Siemienas.

“In the fall, at our Minnesota CUB stores, we sell locally grown tomatoes and apples,” he says. “Obviously, during the winter we can’t provide them. But W. Newell gives us fresh supply whenever it’s in harvest.”

Beyond serving its own food retail needs, SUPERVALU has become the largest publicly held distributor to grocery retailers in the United States — a product-supply lifeline for more than 5,000 retail end points across the country. And its network of 35 distribution centers helps ensure that fresh produce is centrally collected and quickly delivered to grocers within tight delivery parameters.

While volume and seasonality are barriers for many companies, others use them as competitive differentiators. For example, Burgerville, a Vancouver, Wash., chain that operates 39 restaurants and two mobile kitchens in Washington and Oregon, has been sourcing local ingredients since it began operations nearly 50 years ago. Today, 70 percent of its menu comes from “neighborhood” vendors.

“We’re deeply rooted with our suppliers. It’s how we’ve grown,” says Cathy Insler, director of supply chain, Burgerville.

The fast-food chain maintains a network of year-round and seasonal vendors that it works with to provision various ingredients. For example, Franz Bakery delivers fresh bread five days a week. Fulton Provisions Co., a meat processor now part of Sysco, supplies products from Country Natural Beef — a beef cooperative that consists of 120 family ranches across the West, including Oregon and Washington. Both companies are located in Portland.

Beyond bread and beef, there's artisanal cheese from Tillamook Creamery; Stiebrs Farms' cage-free eggs; French fries and potatoes from Lamb Weston; Portland Roasting Coffee; and Oregon Rain water — not to be confused with nature's own.

And that's just the top of Burgerville's year-round shopping list. Naturally, certain items aren't grown in the region. For example, Burgerville's lettuce and tomatoes come from California.

"We're always looking to source locally, but scalability is sometimes an issue given volumes," says Insler. "There isn't a lot of antibody-free chicken available in the Pacific Northwest right now. So we also work with Sysco's broadline service to source products."

Burgerville is unique among chain restaurants in that it flexes menus and limited-time offers to coincide with local harvests. "Walla Walla sweet onions are seasonal; so are our onion rings," Insler explains. "Liepold Farms sits at the base of Mount Hood and provides us with local berry supplies for milkshakes. Our menu follows the growing seasons. We leverage the supply chain to chase quality."

Working with smaller local suppliers brings its own unique challenges and rewards. Insler recalls negotiating a supply contract with Country Natural Beef, discussing in depth the volume Burgerville would need each week to meet its demand. To make it feasible, the restaurant worked offline with the cooperative for a few years to determine how many cattle and ranches were necessary to support the business.

"When managing the local supply chain, you have to be acutely aware of a farm supplier's expertise, its understanding of how to bring product to market," says Insler. "Sourcing lettuce out of California is a beautiful distribution model. Locally it's different — a challenge. We rely on supply and distribution partners to support us. And we allow them to grow as well."

For businesses that embrace the "buy local" mantra, one of the least tangible but most rewarding benefits is the intimate knowledge they gain of their product — literally from farm to fork. Knowing where a product comes from builds appreciation and adds value.

"My advice to any company looking to source locally is to buy a pair of boots, get out in the field, and learn about the product from the ground up," Insler offers.

ROCKING U.S. AGRICULTURE IN A FREE WORLD

U.S. agriculture remains a dynamic, if docile, force in today's economy, comprising big and small growers, industrialists, naturalists, and capitalists. The United States is a net exporter of food, delivering half the world's grain supply. But in some niche areas, and especially among smaller farmers, attrition and change have been unavoidable.

At the turn of the 20th century, 41 percent of the U.S. workforce was employed in agriculture, according to the U.S. Department of Agriculture. By 2000 that number had dropped to 1.9 percent. Of the two million U.S. farms in existence today, 80 percent are categorized as family-owned-and-operated.

Globalization and economic protectionism continue to shade the spirit of free trade and the laws of supply and demand. The trend toward local food sourcing presents an organic way to stimulate domestic consumption — preserving an economic lifeline for local growers that can't otherwise compete in the global export market.

Agronomics aside, media influences borne from fact and fear have triggered a consumer crusade for locally grown food products. Consumers want to know what they're eating, where it comes from, how it's processed, and why it costs so much. When salmonella, E. coli, botulism, melamine contamination, mad cow disease, and other outbreaks arise, people are reassured because they know their Burgerville burger and onion rings with ranch dressing come from Fulton Provisions Co., Litehouse Foods, Keystone Fruit, Sunshine Dairy, and Shepherd's Grain — all local suppliers. That's real comfort food.

The "buy local" concept also supports community economic development. Burgerville created a brand by assimilating well-known local names into its food supply chain. The bulk of money it spends on food procurement stays in the communities it sources from.

Walmart's impact is no less important. In spite of its reputation as anathema to small business, the company is now helping to support the very institution it has been criticized for destroying. Pundits will debate whether this is commendable, self-serving, or a pinch of both.

But one thing is certain: "Walmart's publicity doesn't hurt, and it shows that buying locally is being taken seriously," says Psilos. "But all parties in the supply chain need to recognize that sourcing locally can be profitable. We want to ensure that this model is sustainable on all fronts. Agriculture needs to become a stronger economic force. It has a solid foothold and it's growing."

U.S. agriculture continues to adapt and change. By its very nature, farming is resilient, following seasonal cycles of surplus and shortfall. The hope is that U.S. family growers will always have another harvest to look forward to — and that optimism continues to build.

On Oct. 2, 2010, Farm Aid commemorated its 25th anniversary in Milwaukee, Wisc. The usual suspects, a little grayer but no less enthused, celebrated the fortitude of U.S. family farmers. A quarter of a century on, Farm Aid has raised \$40 million for the cause. More importantly, it continues to raise awareness in support of America's oldest industry, which is now finding encouragement from a variety of

likely and unexpected sources.

Local Sourcing Rings True

Burgerville's signature Walla Walla Sweet Onion Rings are hand-battered and breaded every day when onions are in harvest, then cooked in trans fat-free canola oil. Here's Burgerville's recipe for sourcing the ingredients to create a true local favorite.

Walla Walla Sweet Onions. Only growers within the Walla Walla Valley (a two-county area spanning southeast Washington and northeast Oregon) can market Walla Walla sweet onions. The growing season is typically from late June to early September, with peak harvest in July. Walla Walla Sweet Onion Rings are sold in Burgerville restaurants only from mid-July until early September, depending on the year's harvest.

Buttermilk. Purchased from Sunshine Dairy, located in Portland since 1938. The company uses rBST hormone-free fresh milk from family farms in the Willamette Valley of Oregon and the Yakima and Chehalis valleys of Washington.

Flour. Sourced from Shepherd's Grain, a group of Pacific Northwest family farms dedicated to sustainable agriculture practice.

Homestyle Ranch Dipping Sauce. Produced by Litehouse Foods, a family-owned, Idaho-based company.