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Tools for Community Self-determination

Hoosier Farmer? Emergent Food Systems in Indiana

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It should also be noted that *any* effort to describe a statewide industry with limited time and resources must necessarily fall incomplete. What Indiana has built is so much richer than can be conveyed in any single document; using the assistance of local experts, every attempt has been made to chronicle the key issues and opportunities.

To focus this analysis, one question was asked of all food practitioners, and was also asked of the historical and quantitative data analyzed for the study: “What is emergent in the Indiana food industry that most defines a new future for food?” In previous studies, this has been found to be an effective focus for analysis.

Several people made exceptional efforts to advance this project. Primary thanks go to Laura Hormuth, of the ISDH, for shepherding this project so elegantly and for introducing me to so many Hoosiers. Robert White played a key role in connecting me to Indiana Farm Bureau (IFB) farmers through the Value Added committee he chairs, and through the Indiana Cooperative Development Center. IFB President Don Villwock graciously offered a tour of his farm and generously gave his time for an interview. Purdue Extension Director Chuck Hibberd, Educators Roy Ballard, Kris Parker, Sandy Rodriguez, Steve Engelking, Dan Wilson, and Scott Monroe, and Extension Specialists Dan Egel and Shubin Saha introduced me to many of the farmers I visited, and also offered the harvest of their extensive experience with food and farming in Indiana. Kristin Hess and Kristen Fuhs Wells of the Indiana Humanities gave me an invaluable “road map” at the start of my journey, introducing me to many food pioneers. Michael Simmons generously introduced me to the history of food initiatives in Bloomington. Laura Henderson donated several hours to guiding me around Indianapolis farm and food locations. Adam Moody offered exceptional inspiration by contacting me early in the process to offer his insights. Cissy Bowman offered an extensive history of the growth of organic farming in the state. Almost all of the food practitioners cited here reviewed sections where they were quoted to ensure accuracy.

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Executive Summary

Indiana's food industry is experiencing tremendous changes that roll across the state as steadily as a summer storm.

A vital consumer movement seeking healthier food choices, born forty years ago in Bloomington, has expanded and matured. Now, people all over Indiana seek to know the farmer that feeds them, and to see with their own eyes the farms where their food was raised.

Hoosiers are responding to this hunger in a variety of ways. Direct sales from farmers to consumers rose 38% from 1992-2007. Over 100 communities host farmers' markets. These markets foster social connections and spin off commercial development, even as they bring consumers into direct contact with neighboring farmers. Many emerging farms sell memberships so consumers can share the risks of farming. Backyard and community gardens have sprung up across the state as Hoosiers decide to produce food for themselves.

Grocers, restaurants, and distributors now feature foods produced by Hoosier farmers. In many cases, this is centered on high-end outlets that sell to more prosperous customers. Many farmers with the means to do so have opened, or purchased, processing or retail businesses so they can vertically integrate. Intentional clusters of food-related businesses have spawned collaboration across separate firms. Delivery services bring local foods right to residential doors. Produce auctions have formed in many regions. In these respects, the marketplace appears to be working.

However, the market has failed many Hoosiers, and seems unable to respond to the burgeoning demand for local food. More than one of every four Hoosiers earns so little that they are in jeopardy of not eating well — a remarkable statistic in the nation's tenth-largest farm state. So, food leaders in lower-income communities have devised innovative ways to engage low-income consumers in growing or purchasing food. Wishard Hospital in Indianapolis, the "safety-net" hospital for the city, has launched a food initiative that places fresh food in the hands of low-income patients with food-related health conditions. These food boxes are accompanied by personal attention from medical staff.

Many young farmers find themselves in a vulnerable place. Many have turned away from a dependence on commodity agriculture since they view it as unrewarding, or beyond their financial means. Other farmers have concluded that to respond to the growing interest from consumers, they need to fashion farms that are vastly different from those their parents ran. Moreover, the prevailing farm economy is deeply dependent on fossil fuels; as the supply peaks, rising fuel prices threaten the viability of the entire food industry. People across the state warn that Indiana must grow thousands of new farmers if it is to meet consumer demand. The Indiana Farm Bureau responds sensitively to these cross-currents. Purdue Extension educators offer assistance to many emerging farmers. The county-based extension service places Indiana at a profound advantage over other states that have consolidated into less responsive regional units.

Market failure plagues commodity farmers. Net cash income from farming was \$1.1 billion less in 2009 than in 1969 (when the dollar is adjusted for inflation) — despite the fact that farm productivity doubled over that period. While at this writing, 2011 appears to be a banner year for many Hoosier commodity growers, the U.S. Department of Agriculture (USDA) projects that national net farm income will be lower than in 1929 (once again, after adjusting for inflation).

Despite these trends, some Hoosier farmers speak of doubling corn production over the next twenty years, from 200 bushels per acre to 400. New genetically modified varieties, and far more intensive production techniques, will be required to attain this goal, they say, if the world is to feed the 9 billion consumers expected to populate the globe by 2050.

Yet Indiana does not even feed itself, let alone feed the world. The state imports an estimated 90% of its food. More than \$14.5 billion is spent by Hoosier consumers each year buying food sourced outside of the state. Personal income for workers in food manufacturing, distribution, and retail industries has fallen in recent years.

What is emerging in Indiana

The key question asked in study was, “What is emergent in the Indiana food industry that most defines a new future for food?” This question is partially answered here, based on research and interviews performed for the study.

One key finding is that Indiana has a history of turning its attention to distant commodity markets, rather than feeding itself. This is a legacy of the pioneer days, when farmers came to the Midwest in debt to outside lenders, and had to plant cash crops in order to pay off loans. Shipping food commodities to distant urban markets offered the best choice for many farmers. Moreover, there was little commercial opportunity to raise food for fellow Hoosiers, because most of them were farmers with the capacity to produce food for themselves.

That situation is now drastically different. Few Hoosiers — even few farm families — produce their own food. Personal income is at record levels. Yet farms are still focused on outside markets. The marketing and distribution infrastructure creates great efficiencies for shipping food long distances, and few efficiencies for local food trade.

This appears to be an historic opportunity for Indiana. This may be the first time in the state’s history that public policy will be devoted to creating lasting infrastructure that promotes local food trade. The word “infrastructure” refers to facilities such as warehouses and freight systems, information and knowledge systems, highways, railroads, and other transportation systems.

Public Policy

In a situation of market failure, it would be wrong for the state of Indiana to trust the market to resolve the issues Hoosiers face as they farm and eat. Commercial enterprise cannot resolve these issues by itself. Educational initiatives, engaged citizens, and public policy will also play a significant role.

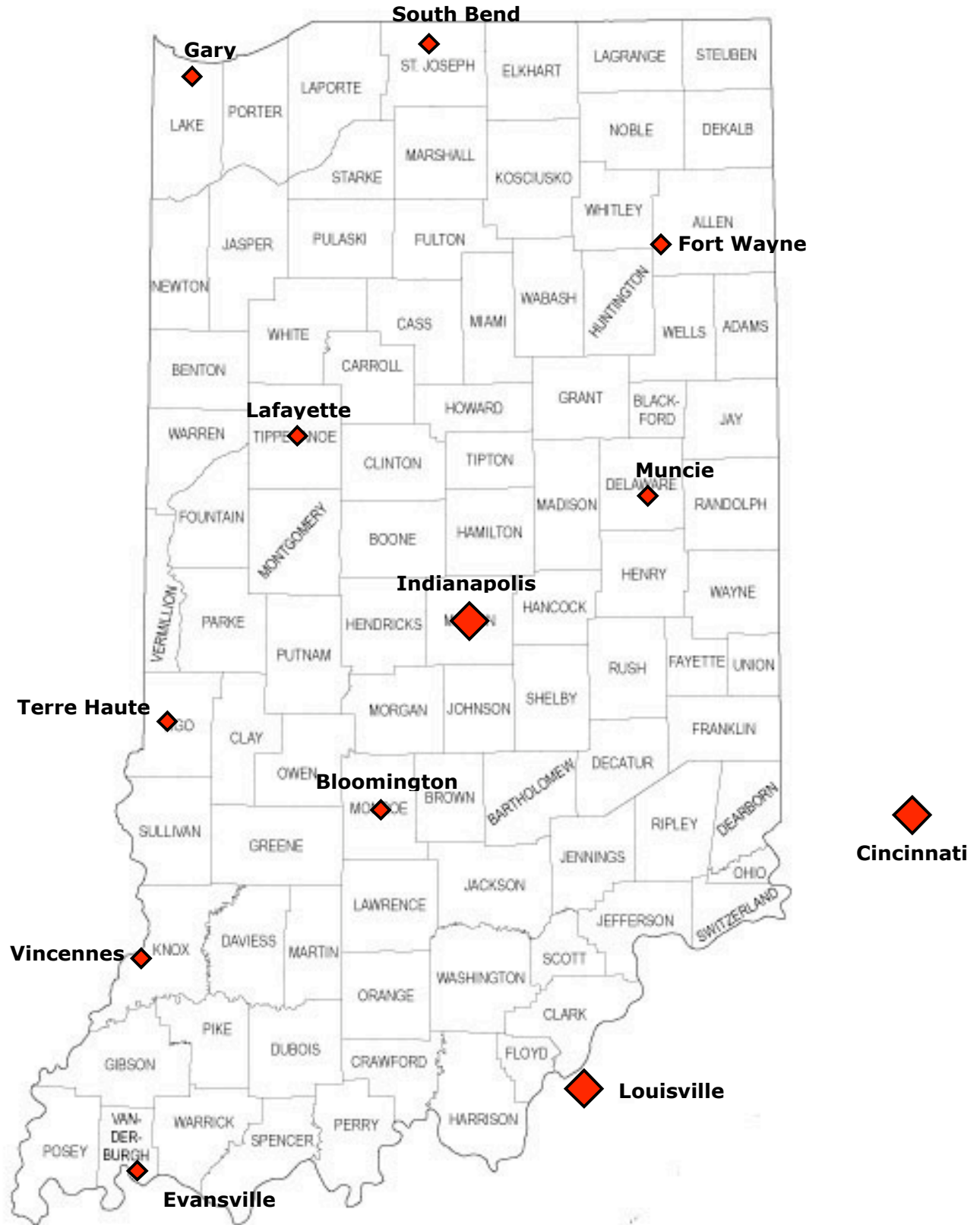
Yet public policy should not pick winners and losers. Unfortunately, existing public farm programs have done just that. By specifying which products will be supported, these subsidies have encouraged some farmers to produce commodities that, otherwise, they would not choose to grow. By throwing cash after commodities, public policies have drawn potential wealth out of rural communities, even as some farmers have prospered. When tax incentives are offered, often those best placed to take advantage of tax write-offs thrive, while other hard-working Hoosiers are disadvantaged. By focusing on long-distance travel for food, local markets have been overlooked.

There would be no logic to abandoning commodity production; these products are sorely needed, and Hoosier farmers are expert at producing them. Yet different incentives must be created, so that both farmers and rural communities are better rewarded for this production. Existing infrastructure is fully adequate to handle large-scale shipments of food commodities to different places.

What Indiana lacks is an infrastructure devoted to local food trade. This is the proper role for public investment. The best next steps for developing this infrastructure are listed below. Each is outlined in greater depth at the end of the report.

1. Food practitioners around the state need to be more closely networked with each other, to improve coordination across food initiatives, and to make sure that practice is as efficient as possible. This networking will take advantage of a Hoosier tradition of including all stakeholders and perspectives.
2. Indiana should focus its efforts on expanding the local foods movement that has built for over forty years.
3. Farmers report that responsive meat processing for beef, pork, chicken, and other meats is seldom available in proximity to Hoosier farmers who are attempting to meet local demand for meat. Developing this capacity is a high priority.
4. Stronger local distribution networks, local aggregation facilities, and processing plants for produce are also critical; several such initiatives are underway across the state, which require greater investment. Others must also be created.
5. Food safety has become a prominent concern across Indiana. Ensuring food safety is obviously a high priority, yet the state is split about how to achieve this. Some say that the more direct connections made between farmers and consumers, the greater the safety that can be created. Some dispute this, and also point out that for more distant transactions, where farmers and consumers cannot know each other, technology will be an essential component of food safety regimens. A thorough exploration of this topic is beyond the scope of this study. However, one conclusion is clear: Efforts to assure safe food must not place larger farms and businesses at an advantage over the small. Food safety approaches must be scale neutral. Food safety approaches must also build the capacities of consumers to make smart decisions while shopping, preparing, and eating food.
6. Networking food-related businesses into intentional clusters can help stabilize local economies, and will create larger economic multipliers.

Indiana's food system should build health, wealth, connection, and capacity in communities across the state. Following these recommendations will help advance those purposes.



Map 1: Indiana

Hoosier Farmer? The Emergent Food Industry in Indiana

Indiana's food industry is experiencing tremendous changes that roll across the state as steadily as a summer storm.

A vital consumer movement seeking healthier food choices, born forty years ago in Bloomington, has expanded and matured. Now, people all over Indiana seek to know the farmer that feeds them, and to see with their own eyes the farms where their food was raised.

When the Indiana Farm Bureau surveyed consumers a few years back, recalls president Don Villwock, "We learned that the public likes farmers, but they don't like farming. They don't necessarily like or understand modern farming practices." Along with other agricultural groups, the Farm Bureau decided it needed to communicate better with its customers.

Farm Bureau public relations director Andy Dietrick says communications really opened up when the Indiana Humanities Council (now Indiana Humanities) announced it was embarking on a two-year statewide conversation about food. Entitled "Food for Thought," the initiative included a number of components: public events with nationally known chefs; special dinners focused on food topics; local events highlighting regional cuisine; partnerships with food festivals and food-related events throughout the state; a presence at the Indiana State Fair where Hoosiers could tell their food stories; and a food-themed traveling exhibit that was seen by more than two million visitors.

"What was interesting to us when we first heard about 'Food for Thought' was that there weren't any farmers involved. How can you have a discussion about food without the folks who actually grow it?" asks Dietrick. "So our ag outreach coalition, Indiana's Family of Farmers, became the title sponsor of 'Food for Thought' and offered Indiana Humanities our help with funding, program ideas, statewide contacts, and the expertise that farmers bring to the food discussion."

Once farmers became involved, they learned that they had much to benefit by speaking directly with other stakeholders of the food system. It was, indeed, the same process that Bloomington food leaders had pursued forty years before: Create a more inclusive process in which all voices can be heard; ensure that women's leadership can surface; convene people to meet face-to-face with a great deal of respect and far from the political fray; and discuss everything — until by seeing all sides of many issues, clarity emerges. Such patient base building has typically been necessary to build lasting initiatives that make long-term impact. Yet now the discussion was happening at the level of the state government, and the state's largest farmer organization.

Moreover, the 2007 U.S. Census of Agriculture showed Farm Bureau leaders that their constituency was changing. As Dietrick recalls, "The only farms that were growing in numbers were the very large farms, those of over 3,000 acres, and the small farms, of 10-50

acres.” In fact, he adds, “The highest growth, both in numbers and percentage, was in these smallest farms. When we looked at the map, we found that the highest concentrations of new growers were around the metro areas — Fort Wayne, Evansville, and Indianapolis — where markets were available. Farmers were obviously finding paths to connect to customers in these regions.” He continues that this marks a consumer preference for freshness. “For many foods, the more local it is, the fresher it will be, and the better it will taste.”

Dietrick thinks farmers may find market openings by connecting with smaller stores. “Although efforts are being made to create space for local foods at the larger stores (Marsh, Kroger and Wal-Mart, for example), smaller stores spread out across Indiana, especially in urban areas, could provide more opportunity for local food production.”

In essence, the Farm Bureau was discovering that the discussion on agriculture became transformative as more stakeholders were brought in to augment the experience of the farmers themselves. Much of the forward movement occurred precisely because consumers and farmers connected in new ways, raised new issues, and took seriously the concerns of people who had not been at the table before. In late 2011, that discussion culminated in the formation of My Local Indiana, an association formed to build relationships between smaller growers, local markets, and consumers looking for locally produced meat, eggs, dairy, and produce.

Which new leaders, and farming styles, are emerging in Indiana?

The change was also propelled by young farmers who realized that they would have to farm in very different ways than their parents to carry forward the family farms where they grew up, or to fulfill the emerging consumer interest in a more direct connection to a farmer. Sadly, many also discovered they could not afford the farms their parents had built. Many emerging farmers also discovered there were severe limits to the ability of a mature commodity industry to reward farm labor financially. Pursuing a diverse set of strategies, geared carefully to their locations, interests, and market opportunities, Hoosier farmers have created many new approaches.

Neil Moseley, 28, a young farmer starting an operation near Clarks Hill, has set out to make his Pleasant Acre Farms “cutting edge for the U.S.” Working closely with his father Jim, he chose farming after starting out as a draftsman because “I like fixing problems and taking on new challenges.” He considered following his father in farming “but I didn’t see a new niche that I could fill” until he researched the growth of the local food movement and expansion of farmers’ markets. Then he started selling vegetables directly to consumers.

“I didn’t like the idea of wholesaling,” Moseley says. He wanted a direct connection to the consumer, not only for himself, but also to benefit the person who buys his food. “Most people have no idea how their food is produced,” he says. Now, “People are changing their thought process about food. I think people got sick of not knowing where their food came from. People almost got scared.” Even now, he adds, “I have customers who want to pick up their food at the farm,” even though the farm would deliver to a farmers’ market near them. “They want to visit us. They go way out of their way to see the farm.”

“I want to step it up one step higher, but to stay in direct connection with the consumer.” Moseley says he is looking for a balance between wholesale and direct sales. “I’d like to stay on the smaller scale, to sell to local restaurants but not the larger chains. I like that I can call up a local chef on his cell phone, and we can discuss what we both need. When it gets too big, you have no idea where the food goes. Educating our customers is very important to us.” He hopes to diversify, rather than getting large, to find new sources of income.

Moseley is converting a former hog barn into hydroponic vegetable production (*see page 90*). “Animal production has taken a big hit,” Moseley says. “We foresee that there will be a lot of animal facilities empty over the next ten years. So, we’re asking ourselves, ‘what else can you do with them?’ We think we’re creating a model. We think our hydroponic operation will give the local foods movement some legs. This will help solve the problem of supplying markets year round.” Moseley hopes to sell his produce to nearby restaurants and small wholesalers such as This Old Farm (*see page 114*), and at two nearby farmers’ markets, in addition to a Community Supported Agriculture (CSA)¹ operation he runs. Through the Alliance, connected to This Old Farm, he also sells produce to Green Bean Delivery (*see page 118*).

Adam Moody, a fifth-generation farmer in Ladoga, west of Indianapolis, made a dramatic turnaround in his farming when he realized he could not make a good livelihood as long as he was simply a producer of standardized commodities. “Being a commodity producer works if you are the biggest and the cheapest,” Moody says. Moreover, “Our state is importing 85 to 92% of its food. Agriculturally, if we limit ourselves to commodities, we are destined to become a Third World state.” In response, Moody decided to vertically integrate, creating his own food business by purchasing a nearby processing plant, and then opening up retail outlets in three locations. “The business that succeeds at this will be treating the public like a ‘person,’ not a ‘statistic,’ and like a ‘customer,’ not a ‘consumer.’ This can be done by innovating the entire system toward the wants of these customers, not toward the efficiencies of the industry.” He now says his financial returns are higher than for many banks (*see page 93*).

For Pete Eshelman, farming is a third career, after playing professional baseball and running a sports and entertainment insurance business. His family moved from Boston to the Roanoke area after being recruited by a Fort Wayne insurance company. Later, he started his own sports and entertainment insurance business in the basement of his house, then moved his business to the small town of Roanoke. Soon he found himself at the center of efforts to revitalize the town. He and his wife established a private dining room in Roanoke to entertain clients from around the world. This grew into a culinary destination named Joseph Decuis, which includes an award winning gourmet restaurant, retail store, inn, and a farm that supplies food products for the business. Now the revitalized town of Roanoke is becoming a regional and national destination for the “Farm to Fork” culinary experience. (*see page 108*).

¹ In a Community Supported Agriculture (CSA) farm, consumer members purchase shares at the start of the season. This means the farmer has sufficient money to plant or feed livestock, it also means the consumer shares much of the risk of farming with the farmer. As produce and livestock are harvested, CSA shareholders receive regular shipments of food in exchange for their investment.

Michigan City's Pete Scherf, also a business owner, sought to farm after he found himself growing weary of the business world — it was not feeling rewarding. After several years of research and reflection, he decided farming would nurture his interest in problem solving, and allow him to work for himself rather than manage employees. With his wife Rhonda, he is now launching a 25-cow dairy that will bottle its own milk for sale to local customers, many of whom have second homes near Michigan City on the lake. He is keeping things small because he does not want to feel like the machinery of his farm is running him; he wants to feel in command. Income from his business makes it possible for him to finance his own transition, and to explore options that another farmer might not have (*see page 101*).

Greg Gunthorp raises pastured pork the way his family has done for four generations on their land in Lagrange, in the northeastern corner of the state. "We always sold them [our hogs] as commodities, but as commodities we got the low end of the market." When prices fell to intolerable lows in the late 1990s, Gunthorp did some research in farm magazines to see what other producers were doing to recover. Many were going back to simpler ways of raising pigs — "the same techniques my family had been using all along." Gunthorp decided that since he already produced the quality consumers were seeking, he would market his pigs directly.

"No longer would I grow a shipment of pigs only to find out what price buyers would give me at the end of the process," he recalls. "I spoke directly to consumers to find out what they wanted, and what they would pay." After selling at farmers' markets in Chicago, he met a chef who asked him to supply his restaurant. One by one, he built connections with many high-end customers. Given his customers' ability to pay a high price, Gunthorp was able to build up his business, eventually expanding to the point where he could process his own animals on the farm, keeping even more of the value of the hogs for himself (*see page 97*).

Building new market relationships

It would seem that "the market" works well for those lucky enough to have means, and who hold access to high-end consumers. Yet not all farmers have resources of their own to launch a farm. Many feel lucky to purchase land if they can, and certainly depend on others — or conscious public investment — if they are to connect with the infrastructure that will allow them to readily find consumers. Other farmers have gone after the steep challenge of growing food for low-income consumers. None of the growers are well rewarded by food markets that currently exist. Yet these farmers, too, are helping shape the landscape of options open to both Hoosier farmers and consumers.

Like Gunthorp, Chris Birky also raises hogs, but he has decided to add catering for local customers to his farm business since he enjoys cooking, which creates more value than the farming itself. "This is the land where I grew up," Birky says of his farm outside Kouts, south of Valparaiso. "This was land my grandfather and father also farmed." His brother Greg began farming here in 1976.

When Chris started a separate farm in 1990, he said, "I was stubborn enough to keep raising hogs." Falling into financial trouble because of low hog prices, Chris joined his brother on

the family farm. They realized they needed to diversify, so they opened a “country market” on the farm.

Although the brothers supplemented their livestock and meat sales by selling specialty items like sweet corn and pumpkins directly from the farm, it was not enough. By focusing too narrowly on commodities, Birky was caught up in the same price debacle that had trapped Adam Moody. Unlike Moody, Chris Birky ended up with debts he could not pay. He mortgaged his home so he could consolidate into a plan to repay his creditors. His determination to repay these debts in a very real sense was a blessing, since, he says, it forced him to find more profitable ways to use the farm. He now caters for local functions. “It is not about making lots of money, but about sustaining the family farm and the way of life that goes with it,” he adds. These value-added avenues do augment the income he earns from selling hogs and balance his work load. Now he sees a clear path to getting his finances resolved over time and truly enjoys seeing the products he raises go directly to the consumer (*see page 99*).

Not far away, in an urban neighborhood of Gary, farming is also seen as a tool for revitalization. When two churches merged in 2004 to become the Christ United Methodist Church, one of the old church buildings was left vacant. On that property, says Pastor Katurah Johnson, the merged congregation plans an historical plaque commemorating the old church, and contemplates creating an urban garden. They were inspired in this effort by the Black Oaks Center in Pembroke, Illinois, that has created four urban “sustainability tracts” and aims to grow its own food while remaining off the grid.

Erick and Jessica Smith bought This Old Farm, an 88-acre parcel of land near Darlington, in 2000 and proceeded to build a solid CSA business. They built a solid customer base but found they could not ship to larger markets until they could sell in quantity. So, they formed a collaboration, “The Alliance,” of growers who aggregate the products they raise on their small farms into larger loads for urban consumers in Chicago, Indianapolis, and Lafayette. They’ve persisted despite a devastating fire. One of the members of the Alliance is Neal Moseley (*see page 90*).

Andy Vasquez has been farming near Kouts since 1994. On 20 acres, he raises more than enough to sell from a farm stand three days a week, to ship produce to three local restaurants and two natural foods stores, and to supply two schools. He calls his farm JnJ Organics, although he has decided not to apply for organic certification due to the recordkeeping involved. He would like to ship to local grocery stores, but there is no distributor who can carry his produce to these buyers. So Vasquez would like to raise money that would enable him to pull away from farming, and to organize some of his neighbors into a co-op where people could “leave their egos at the door.” As chair of the local Republican Party, and president of the RC&D (Resource Conservation and Development) District, he feels he is well placed to bring people together.

Stan Skillington added poultry processing to his farm business, responding to an outpouring of interest from his neighbors who loved the flavor of his free-range chickens. Yet ironically, he was forced to shut down commercial meat processing, not because of any failed inspections — there were none — but because the state of Indiana both mandated inspection and did not provide funding for inspection. He scaled back to personal

processing only, because he could not get inspectors to come to his farm. Ultimately, state officials were quite flexible in attempting to find a resolution, he adds, but ultimately Skillington was forced to close his processing operation because county officials would not allow him to sell his own chickens at the local farmers' market unless they were inspected by the state. Skillington stopped raising chickens commercially and is now exploring other options, including buying milk from Pete Scherf to make yogurt (*see page 101*).

Drew Cleveland, regional manager for the Farm Bureau in six east central counties of Indiana, says, "I grew up on an almost 500-acre farm." When he decided to enter farming, "It was very competitive to buy land. Land prices are extremely high (\$8,000 - 10,000 per acre), and rents are extremely high," he adds. At such land prices, "I'm not going to farm the way my father did." Cleveland is starting his own farm on 90 acres. He now raises one acre of vegetables, and hopes to soon extend his growing season using high tunnels (relatively simple metal frames with transparent plastic covering that heats like a greenhouse). Cleveland supplements this income with his job at the Farm Bureau, and by raising corn and beans. He is also exploring other options such as adding an orchard, or building an on-farm dairy to bottle his own milk.

Cleveland adds that he was inspired in his farm design by his travel to other countries. "I was able to visit Costa Rica," he says. "They have a lot of small producers down there. Three acres is considered a large farm. I also traveled to Zimbabwe, and they raise everything under the sun on small farms. If you don't have government commodity programs, things become more open."

The Sisters of St. Francis in Oldenburg have a long history, dating back to 1854, of producing their own food for the residents of the convent and the students at the attached school. Yet the farm languished in the 1980s as convenience foods became widely available. By 1991, the sisters rededicated themselves to running their farm as a way to nourish the community around them, and to serve as a symbol of the order's commitment to stewardship. They named it Michaela Farm after the first sister who directed the farm long ago. Producing beefalo, apples, and a variety of vegetables, the farm now has attracted 87 Community Supported Agriculture (CSA) members, mostly in Cincinnati. They sell some of their product through the Findlay Market in central Cincinnati, and have developed several value-added products like dried herbs. In 2006, the farm helped to create the Laughery Valley Growers Co-op, a group of 15 growers who wanted to reach larger markets. Robert White, an advisor to the sisters and to the Indiana Cooperative Development Center, says that "Michaela Farm serves as the anchor to the co-op, accounting for nearly 40% of the co-op's sales." To do more, he adds, "There needs to be a facility where we can pack produce for larger markets." Michaela Farm once had its own small refrigerated truck, he adds, but was forced to give that up. White adds that the farm also needs money for regular staff. Relying upon volunteers who come for the summer, he says, holds some uncertainty. "We don't know who they are until they get here. Moreover, there aren't that many people who know farming skills, and the work ethic is not what it used to be" (*see page 121*).

Albert Armand, a grower in Westport, southwest of Greensburg, has been raising vegetables for local residents and commercial processors for twenty years. As a pioneer, he entered the produce market before it was popular. At first, he says, "It didn't take off. The consumers were not ready." Moreover, he was not entirely understood by his neighbors. "We kind of

got these looks from our neighbors. They'd say, 'You can't make any money with vegetables. That's just the way poor people farm.'”

Yet over two decades he built a diversified farm raising tomatoes, sweet corn, pumpkins, watermelon, cucumbers, ornamentals, and flowers. “I always go back to what my grandmother told me,” he says, “don't put all your eggs in one basket.”

Now consumers are ready. By engaging them, and putting a story to the food, he attracted great loyalty. “I want to look them [consumers] in the eye and know they're coming back next month,” he adds. He said that due to high corn prices he expects in 2011, he may have an unusual year: For the first time, “My row crops may make more money than my vegetables” (*see page 127*).

Emerging new farmers

Although consumer interest is strong, “We don't have enough farmers willing and able to sell to these markets,” cautions Roy Ballard, Purdue Extension Educator in Hancock County. “There has been a significant change in the consumers' perspective. They are verbalizing a demand for a different kind of product, different types of options in the way food is delivered, its ripeness, its quality, and price.

“Most of the farmers who already sell directly to consumers have reached a limit on what they can or wish to produce. They don't want to expand. Only a small group wants to engage with larger buyers, and that is a key group for us to work with.” To expand successfully, he adds, “They must have a substantial core group of growers.” As one step, he is working on aggregation centers or food “hubs” where a group of small growers can collectively sell enough produce to meet the demand of institutional food buyers. He sees especially strong potential east of Indianapolis. “There is a strong core of growers in that region, and wonderful access to the Interstate transportation network. In two hours, you can be in Columbus, Cincinnati, Dayton, or Louisville.”

Ballard points out that on the commodity side, “We're still a corn and soybean state. But there the markets are very consolidated, and it is an uphill battle to enter them.” The Farm Bureau's Andy Dietrick adds, “I've been talking to younger conventional farmers, asking them, how do we get more people involved in agriculture? What does that pipeline look like? With capital and acreage hard to come by, smaller operations may offer an alternative entry point.”

Moreover, connections to urban areas may be important for more than markets — it helps with off-farm income. “Very few of the new farmers are going to be just farmers. They will have to have another job to provide additional revenue or benefits,” says Dietrick. “In the past, the Farm Bureau had taken the position that only full-time farmers were true farmers, but we're getting past that ‘us versus them’ way of thinking. If you are growing it and selling it as part of making your living, then you are a farmer.” But, Dietrick adds, “One of the biggest obstacles to growing new farmers is how utterly hard the work is.”

Cissy Bowman, a pioneer in organic agriculture and former member of the USDA's National Organic Standards Board, agrees. “I grew up in the inner city, and I wanted to get back to

the land. After many years, I have six acres. It is the hardest work I have ever seen.” Yet she adds that her farm has cultivated great interest from young farmers. “I have a lot of interns work here. They are now in their thirties. They are dedicated to local foods. How are we going to help them get into farming, especially if they have no money?”

Robert White, former senior policy analyst for the U.S. Senate Agriculture Committee and Director of USDA Rural Development, now consultant to the Indiana Cooperative Development Center, also finds there is considerable opportunity in smaller-scale farm operations. He adds, “You can make a six-figure net income on one acre if you do it right.” However, White continues, Indiana has not yet developed a culture that wholeheartedly embraces rural entrepreneurship. “One of the issues we have in rural Indiana is that, if you are an entrepreneur and you fail, you are often looked down upon for doing something different.” He adds that only a few pockets of rural Indiana support risk-taking.

Several pockets that have supported entrepreneurial initiative have been supported by Purdue Extension, buoyed by the fact that each Indiana county retains its own office, in part paid for by county funds. This assures a responsiveness to local farmers that has been weakened in other states that have consolidated into regional offices. This is an exceptional strength that should be protected.

Meanwhile, the entrepreneurial movement that erupted in the 1970s in Bloomington, as farmers chose to grow for local markets, and residents decided they wanted better food options, still builds strength. Co-op groceries have “popped up all over the state,” says Debbie Trocha, director of the Indiana Cooperative Development Center (with offices at the state headquarters of the Indiana Farm Bureau). “In some communities people want organic food, not just local. Most want more than access, they want some control over their food as well.”

Food impacts public health

Forty years ago, food leaders in Bloomington worked out of a concern for health. This still continues, of course, with attention to this issue spreading to more official quarters over the past four decades. Today the U.S. Centers for Disease Control and Prevention (CDC) tracks a national epidemic of obesity that has broken out across the nation over the past two decades. In Indiana 66% of residents are overweight or obese, with 36% weighing more than they should, and 30% considered obese.

Diabetes has become a major health concern, as well, with 9.8% of Hoosiers diagnosed with diabetes. The medical costs for diabetes-related health conditions are estimated at \$3.7 billion for the state of Indiana — an amount that rivals the value of the annual corn crop.

About 48% of state residents report that they engage in 30 minutes of moderate or 20 minutes of vigorous activity 3 or more times a week. Only 21% of Hoosiers say they eat the recommended five fruits and vegetables per day, which is viewed by medical experts as a minimum diet to protect against cancer. Not all Hoosiers are covered by insurance, either — 18% of adults lack health insurance.

Meanwhile, food consumption habits contribute to the leading causes of death. A high-calorie diet, combined with a lack of exercise, accounts for one-fifth of the annual deaths in the U.S.² Six of the fifteen leading causes of death nationally are related to poor diet and low physical activity.³ Indiana certainly is part of these trends.

Foodborne illness challenges Hoosier health

Several of the major public health questions currently under discussion center around the risks of foodborne illness. Indeed, this is a significant medical issue, causing an estimated 3,000 deaths per year nationally, and incurring costs of more than \$152 billion of medical expense in the U.S. (\$3 billion in Indiana) annually.⁴ This is a staggering figure, equivalent to nearly half of all the revenue earned by the nation's farmers selling all of the crops and livestock they raise each year.

Yet Hoosiers propose widely divergent strategies for addressing these risks. Many farmers and buyers are persuaded that some farms are too small to warrant detailed certification or inspection procedures. The potential costs of close oversight and inspection may not be warranted by the volume of food sold by any one individual farm. No public interest is served, this position argues, by county or state officials intervening between a small farm and its direct customer.

Amish farmers selling through produce auctions have successfully made the case that since the elders of the community meet on a weekly basis to discuss agricultural practices, and the farmers have an ongoing discussion and training about how to produce food safely, the community has adequate safeguards in place to protect consumer health.⁵

Yet for the largest vegetable and fruit producers, close attention to production practices is seen as essential to buyers who want their customers — who cannot know the farmer directly — to have solid assurance that safe practices have been followed.

The question of who is liable for this risk is quite contested. Many produce farmers have been required to buy a \$5 million insurance policy to protect them from liability in the event of a disease outbreak. Some cooperative produce pools are trying to buy joint insurance that covers all members of the co-op that have a GAP (Good Agricultural Practices) plan, certification, or stronger safeguards. Some institutional buyers have even agreed to indemnify the farmers they buy from, in order to reduce the financial burden on the farmers.

² McGinnis, J.M. & W.H. Foege (1993). Actual causes of death in the United States. *JAMA* 270(18):2207-12; and Mokdad, A.H, J.S. Marks, D.F. Stroup, & J.L. Gerberding (2000). Actual causes of death in the United States. *JAMA* 291(10):1238-45 [with published corrections in *JAMA* (2005), 293(3), 293-294].

³ Heron M., D.L. Hoyert, J. Xu, C. Scott, & B. Tejada (2008). *Deaths: preliminary data for 2006*. National Vital Statistics Report 56:16. http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_16.pdf.

⁴ Scharff, R.L. (2010). *Health-Related Costs from Foodborne Illness in the United States*. Pew Charitable Trusts. Available at www.MakeOurFoodSafe.org. While the study originally attributed 5,000 deaths per year to foodborne illness, the government has revised its estimation model, and now says that 3,000 deaths occur each year.

⁵ See, for example, Meter, Ken (2010). *Ohio's Food Systems: Farms at the Heart of it All*.

Meat inspection has been somewhat trickier, because greater health risks are associated with meat. No clear pattern emerges from our interviews. County, state, and federal officials are sometimes viewed as helpful, and sometimes as obstacles.

At the state level, funding cutbacks have created exceptional tensions, since farmers who are told they must submit to state inspection find that state inspectors cannot visit their farms due to budget cutbacks.

Food practitioners across the state call for inspection practices that do not discriminate against small producers. They argue that these should offer minimal intrusion into the market, yet provide adequate safeguards to consumers. Exactly how to do this has not yet been determined.

Low-income Hoosiers are often marginalized

A significant segment of Indiana's population is unable to gain adequate access to food due to poverty. More than 28% of Hoosiers earn less than the income level at which children qualify for free or reduced lunch at school (185% of the poverty level).⁶ Even though low-income Hoosiers spend \$3.5 billion each year buying food, existing markets consistently provide low-quality foods to these consumers. While some \$503 million⁷ is given to low-income residents in SNAP benefits (formerly called food stamps; now called Supplemental Nutrition Assistance Program) each year, even more money (\$549 million) is given to the state's farmers, largely to plant commodity crops such as corn, wheat, or soybeans that are used for industrial processing — not eaten directly by Hoosiers.

That the tenth-most prominent farm state in the U.S. could be suffering ill effects from its food supply, and finding that one-quarter of its residents do not have adequate access to food, is a mystery amidst the most highly developed, and arguably most productive, agricultural system of the world.

Hunger is always caused by breakdowns in social connection and political inequality. There is no way to resolve hunger simply by producing more food, nor can technological improvement, by itself, solve hunger.

Commodity industries plan to expand dramatically

Responding to the prospect of hungry Hoosiers and billions of hungry mouths to feed abroad, many Hoosier farmers express an energetic sentiment that American farmers must feed the world. World population is growing fast, this view holds, and it is up to America to step up to the plate and produce as much grain as possible so that the world may eat.

⁶ Source: U.S. Census Bureau. The Indiana Department of Education notes that 43% of Indiana's students qualify for free and reduced price meals. *See* <http://compass.doe.in.gov/Dashboard.aspx?view=STATE&val=0&desc=STATE>

⁷ This figure is the 30-year average from 1980 to 2009; actual SNAP coupon use was far larger in 2010, at \$1.4 billion.

One farmer in Southwest Indiana, who is already harvesting exceptional yields of 200 bushels per acre of corn, says he wants to do even more. “Monsanto tells us they want us to double production out here by 2030.” His crop expert agrees this is attainable.

This is a formidable goal, and many Hoosier farmers seem ready for the challenge. They speak of planting corn even more closely together, fertilizing more precisely, and finding new hybrids that are modified to produce as much as possible.

The hopes for such intense output also rest upon sophisticated new technologies. One computer-assisted technology especially piqued interest: variable rate systems. Using detailed, electronic land and soil maps that have been developed at land grant universities over the past several decades, crop technicians can identify precisely which fields are best suited to a certain crop, such as corn.

Soils are tested for nutrients at close range — one test site for every two and a half acres — and technicians insert these findings into computer models. The computers calculate the optimal yields for each area of the farm, and make detailed recommendations for seed density and nutrient applications that will achieve those yields. These soil maps are then transferred directly to computers located in field equipment. Precise applications of nutrients and seeds, changing by the second as the tractor moves down the field (variable rate), is said to ensure the best possible results. Using satellite imagery, it is then possible to check the field later to assess growth patterns, and suggest flow rates for the next pass over each field. Once combining begins, software can gauge which parts of the field had the best yields and transfer that data to the computer as well. Over several seasons, using this technology, it is said that input applications can be minimized, and output increased.

Other large farmers have found niche markets that allow them to transcend the limitations of the commodity market. They argue that only by connecting closely with large industrial customers can they be assured of lasting trade, given the vagaries of global markets. To reduce risk, some of these farmers also rely on cooperative arrangements for purchasing inputs or selling their products. Even at this high level of production, it would seem direct connection with the consumer is critical.

Anne Schmelzer, former program manager for entrepreneurship and diversified agriculture at the Indiana State Department of Agriculture (ISDA), points out that her department has only been in existence for six years. Still, she feels the agency has a critical role to play in knowing where resources are, and then connecting people with each other to strengthen the state’s network of food initiatives into what she calls a “family of businesses.”

Her colleague Gina Sheets, director of economic development, adds that ISDA “plays a huge role in educating the legislature” about food issues and concerns. Sheets says the agency has met with Wal-Mart officials who asked how to make contact with Indiana farmers. ISDA is also negotiating with CSX Railway, encouraging them to build a dedicated set of tracks for what is being called a “Green Express” to bring produce from Florida farms to markets in Chicago and Indiana. This proposal also suggests that Indiana farms can ship their food products to Florida when the southern weather gets too hot for food production and harvesting.

Planning for food is also happening at the local level. The Northwestern Indiana Regional Planning Commission (NIRPC) recently adopted a Comprehensive Regional Plan that includes unusually thorough attention to agriculture. “More than 50% of our land is devoted to agriculture, yet only 0.5% of our population earns its living by farming,” the plan states. Noting that “the minimal 0.1% of our farmland that grows fresh fruits and vegetables makes up a full 5% of the total market value of agricultural products for the region,” the plan calls for a greater balance between local, regional, and global markets to bring resilience to the region. This is to be accomplished by strengthening public/private partnerships that increase regional investment. “The local food system will have the most impact if public/private partnerships are able to jump-start the creation or rehabilitation of appropriately scaled infrastructure.” The inclusion of food planning in the Comprehensive Regional Plan is part of the larger Northwestern Indiana Local Food Study, being conducted by Kevin Garcia and Beth Shrader of NIRPC. A final report of the study’s findings will be released by the end of 2011.

Farm returns are weaker than commonly thought

The Associated Press reported on September 1, 2011, that a Purdue economist predicted record farm income for the state based on strong demand for grains in global markets. “Purdue’s Chris Hurt says Indiana’s 2011 [net] farm income could approach \$4 billion. That would eclipse the state’s previous [net] farm income record of \$3.2 billion set in 2008.”

Indeed, farmers across Indiana report in glowing terms the money they earned in 2010, and their satisfaction with demand for commodities like corn and soybeans. The market for corn has held strong due to demand for ethanol, which now accounts for about 40% of use. Exports constitute another 14% of the corn market.⁸

Yet Hoosier livestock producers are equally unanimous in pointing out that they cannot profitably feed their animals with grain prices as high as they are. High commodity prices are also encouraging input dealers to raise the cost of farm inputs, squeezing farmers over the long term. Experts report that the world supply of phosphorus is peaking, which will make the U.S. increasingly dependent upon Morocco and China for this essential nutrient. Already over half of America’s nitrogen (urea) is imported from abroad.

Dr. Hurt himself adds that these exceptionally high grain prices are unlikely to last (*see page 136*). Moreover, it would be important to note that while \$4 billion of net farm income is an exceptional year, it is not a record. Adjusting for inflation, net farm income in Indiana is projected in 2011 to be about the same as it was in 1949. Returns were even higher in 1973, when Hoosier farmers earned a net income of \$6 billion.

Nationally, USDA economists project that net cash income from farming (cash receipts less production expenses) in 2011 will be lower than it was in 1929⁹ — after nine years of a rural depression that was a leading cause of the Great Depression.

⁸ USDA ERS Feedgrains data base. <http://www.ers.usda.gov/Data/Feedgrains/>.

⁹ When adjusted for changes in the cost of living.

Indiana farmers sold \$7.8 billion of food commodities per year (1980-2009 average),¹⁰ spending \$7.6 billion to raise them, for an average net gain of \$200 million each year. This amounts to a net income of \$3,000 per farm, or 2.6% of sales.

Although farmers earned a surplus of \$6 billion producing crops and livestock over the years 1980 to 2009, bringing significant value to the state, farm production costs exceeded cash receipts for 13 years of that 30-year period. Moreover, 44% of the state's farms and ranches reported a net loss in 2007 (Census of Agriculture).¹¹ Overall, Indiana farmers and ranchers earned \$1.1 billion less by selling commodities in 2009 than they earned in 1969 (after adjusting for inflation) — despite the fact that farm productivity doubled¹² over that period.

Moreover, farmers spend an estimated \$3.5 billion per year¹³ buying farm inputs that are sourced outside of the state. This means that even in a year in which farmers individually make money, the state itself may see its resources draining away.

Meanwhile, in the tenth-largest farm state of the U.S. — in a country that prides itself on “feeding the world” — Indiana does not even feed itself. Hoosiers spend \$16 billion per year buying food, \$14.5 billion of which is sourced outside of the state.¹⁴

Thus, total loss to the state's farm and food economy is nearly \$18 billion of potential wealth *each year*. This loss amounts to more than double the value of all food commodities raised in the state.

If the purpose of a food system is to build health, wealth, connection, and capacity in Hoosier communities,¹⁵ the prevailing food system is failing on all four counts. Even in years when Hoosier farmers earn a profit, their input purchases take money out of the state, while consumers are forced to buy foods from distant farms. Health outcomes are unsettling in a state that prides itself for “feeding the world.” Food is one of the leading causes of death in the U.S., rivaling tobacco, costing taxpayers hundreds of billions of dollars. Farmers and consumers are feeling divorced from each other, not connected. And in part due to convenience foods, consumers know less about their food, including its source and how to handle it safely, than they would have known decades ago.

Hoosiers face a significant question: Should future investment be focused on feeding the world, or on feeding Hoosiers? Given the extensive infrastructure already in place to assure efficient production and transport of commodities, what should be the priority for creating

¹⁰ Data from the Bureau of Economic Analysis; <http://www.bea.gov/regional/reis/>. Figures above are adjusted for inflation.

¹¹ Some of these losses reflect accounting procedures meant to minimize tax payments.

¹² Total factor productivity for agriculture data by state (Table 19) downloaded from <http://www.ers.usda.gov/Data/AgProductivity/#datafiles>.

¹³ Estimated by the author using data from the 2007 Census of Agriculture, and intended to understate the total.

¹⁴ Estimated by the author using data from the Bureau of Labor Statistics Consumer Expenditure Survey, and consistent with figures provided by farmer/entrepreneur Adam Mooney.

¹⁵ See Meter (2009). “Mapping the Minnesota Food Industry.” Crossroads Resource Center: <http://www.crcworks.org/mnfood.pdf>.

infrastructure for the future? If both cannot be pursued simultaneously, what is the proper course?

Overall, what are the next steps for Hoosiers who wish to build a healthier food system? Before we can look at practical steps, it would be important to summarize what this report has found to be the most emergent qualities of our current the food system.

What is emerging in the food industry

A maturing movement to build community-based food networks now finds itself encountering significant gaps. Consumer interest is rising rapidly, outpacing the ability of farms to meet this demand. It would seem that the very size of the food industry, as well as its focus on exporting food out of Indiana, is helping to create market failure, from the perspective of Hoosiers who wish to eat foods grown close to home by farmers they know.

As the following narrative will show, several important themes have emerged:

Indiana is coping with immense change by collaborating with exceptional directness, honesty, compassion, and resilience.

1. New forums have been developed by several state organizations and agencies that have created a broad discussion of the potential for Indiana to feed itself.
2. Indiana consumers want better food choices and want to know who grew their food.
3. Indiana farmers are also beginning to seek a closer connection to those who eat the foods they grow.
4. Hoosiers value direct and long-term connections; forging stronger, direct personal connections will help create new ways of doing business that give the state more economic stability over the long haul.

The commodity economy does not directly feed Indiana residents; Indiana must grow new farmers.

1. An estimated 85-92% of the food Hoosiers eat is sourced out of Indiana.
2. The commodity economy poses risks for even successful cash grain farmers; many farmers say they have to detach from the commodity economy to make a sustainable livelihood.
3. Despite its status as the 10th largest farm state, 28% of Indiana's population lives below the poverty level at which children qualify for free or reduced school lunch.
4. Indiana's low-income residents collect \$1.4 billion in SNAP benefits, covering almost 30% of their food budget; while Indiana farmers collect an average of \$550 million in farm supports — which subsidize farmers to grow commodities like corn, soybeans, and wheat that are not directly eaten by state residents.
5. There are not enough farmers in Indiana growing food to meet Hoosier demand for local foods.

Indiana endures considerable expense because of the costs of treating food-related health conditions.

1. The medical costs of treating diabetes in Indiana total an estimated \$3.7 billion.
2. Faulty diet, combined with a lack of exercise, is now a leading cause of death, rivaling tobacco.

Some farmers have established solid market channels.

1. Those who were the first to raise food for local sales in the 1970s were new farmers with limited means; many of these farmers made little money for decades, but created the conditions under which new farmers can thrive today.
2. Many of those farmers and chefs who have become well known for offering local foods since 2000 did so by using wealth previously built in some other line of work and were able to invest that money to launch successful farms. This path is only open to people of means. The “market” rewards such early adapters, but primarily if they sell to higher-end customers. Moderate- and low-income Hoosiers are often left out.
3. The primary “market-based” solutions have worked because farmers with some means are selling to wealthier customers, or have the means to purchase an entire supply web.
4. Farmers and consumers of limited means will be served only if new infrastructure is built that creates local trade efficiencies. This will require both private and public investment.

Infrastructure is the most critical gap.

1. Growers and food experts alike say the primary obstacle to growing local food sales is a lack of supportive infrastructure (smaller farm equipment, green energy, greenhouses and hoop houses, warehouses, freezers and cold storage, processing facilities, distribution networks, and knowledge) that creates more efficient local food trade.
2. The Farm Bureau’s Tiffany Obrecht points out that Indiana has plenty of meat processing capacity, but very little that is responsive to the needs of emerging meat producers. Farmers report needing to schedule time one year in advance to assure a processing slot. They also report a lack of processors that are flexible in offering custom services. Many farmers are quite distant from the needed small and medium-sized processors.
3. Produce growers across Indiana point out that local distribution networks that can efficiently transport food from small and mid-sized farms to larger buyers are lacking.
4. Significant public investments have been made in creating export-based infrastructure, while very little attention has been given to connecting local consumers with local farms.

Indiana need not spend more money than it spends now, but must spend it in different ways, if all Hoosiers are to have access to healthy fresh food grown inside the state.

1. Farmers with limited means will have great difficulty entering the market unless supportive infrastructure is built through public action and investment.
2. Low-income consumers are unlikely to be able to afford quality food as long as the consumer market focuses on selling food to those in higher income brackets.

As Andy Dietrick puts it, “For me, at the end of the day, I often find myself thinking of the single moms who are out there struggling to feed their children. What have I done today to make it easier, or more difficult, for them to put food on the table? What have I done to help them eat well?”

Hoosier Farmer?

Indeed, as the Farm Bureau learned, it is a time to like farmers and to question everything not only about farming, but also about how food gets to Hoosier tables.

The main private and public investments that can create better conditions would be to invest in infrastructure that creates efficient local food trade. Since public monies have been in part devoted to building an export-based infrastructure, tax funds have been instrumental in building the very system of economic relationships that extracts potential wealth from Indiana communities. This certainly means that Hoosiers know that public investment can make a strong impact. Now, it is time to redirect that investment toward achieving benefits for the state’s own residents.

No discussion that focuses solely on farm income, separate from health outcomes and poverty, is likely to provide answers. Indeed, Indiana must focus attention on the entire food system and how it connects to public health. Reweaving connections among Indiana producers and consumers is clearly key to helping Hoosier farmers and low-income Hoosiers create solutions that suit their own needs.

With this in mind, let’s review the history of Indiana food and farming.

A Brief History of Hoosier Food & Farming

Farmer and entrepreneur Adam Moody points out that Indiana imports 85 to 92% of its food. How did a top farm state like Indiana become such an importer of food? How could the tenth-ranked farm state in the U.S. by sales, and the fifth-largest producer of both corn and hogs,¹⁶ amply endowed with several urban centers, become so dependent on imported food?

Indiana, after all, is a \$16 billion market for food, and the state boasts 60,000 farms. How could these farms be so disconnected from Hoosier markets? If 90% of the food Hoosiers eat is sourced outside the state, this means \$14.5 billion leaks out of Indiana's economy each year, just at a time when Indiana consumers are forcefully saying they want local food choices.

This is the result of long-term trends in agriculture that are too complex to be covered fully in this report.¹⁷ The basic story would resemble trends in nearby states: Most of the farmers who migrated to Indiana in the state's early years arrived with some means, enough to buy land, but also with debts to pay for purchasing land or buying farm inputs. Many of these debts were owed to banks in New England, or some other region outside of the state. When these settlers arrived, most of their neighbors were also farmers, able to raise their own food, but they had little money. So, the Indiana food market was seen as sparse, hardly an essential market to address in the state's formative years.

If farmers were going to pay off their debts, they would have to find higher-end customers in distant urban centers. At the time, railroads were few; most commodities would have been conveyed by boat. This, combined with the fact that river land often had good fertility after centuries of flooding, and that rivers could in some places power grindstones and could carry boat traffic, meant that farmers settled as close to rivers as possible, and structured trade along river routes. Farmers also settled near Lake Erie for many of the same reasons, with the additional advantages the lake climate gave to those who produced fruit.

Relying on the Wabash River, Indiana farmers could reach markets in New Orleans or St. Louis. Along Lake Erie, farmers might ship to Chicago or eastern ports. The state invested in canals to bring additional farmers within reach of water routes (*see map on next page*). Yet over time the costs of maintaining the canals, combined with the advent of rail traffic, meant these canals never had the impact officials had hoped.

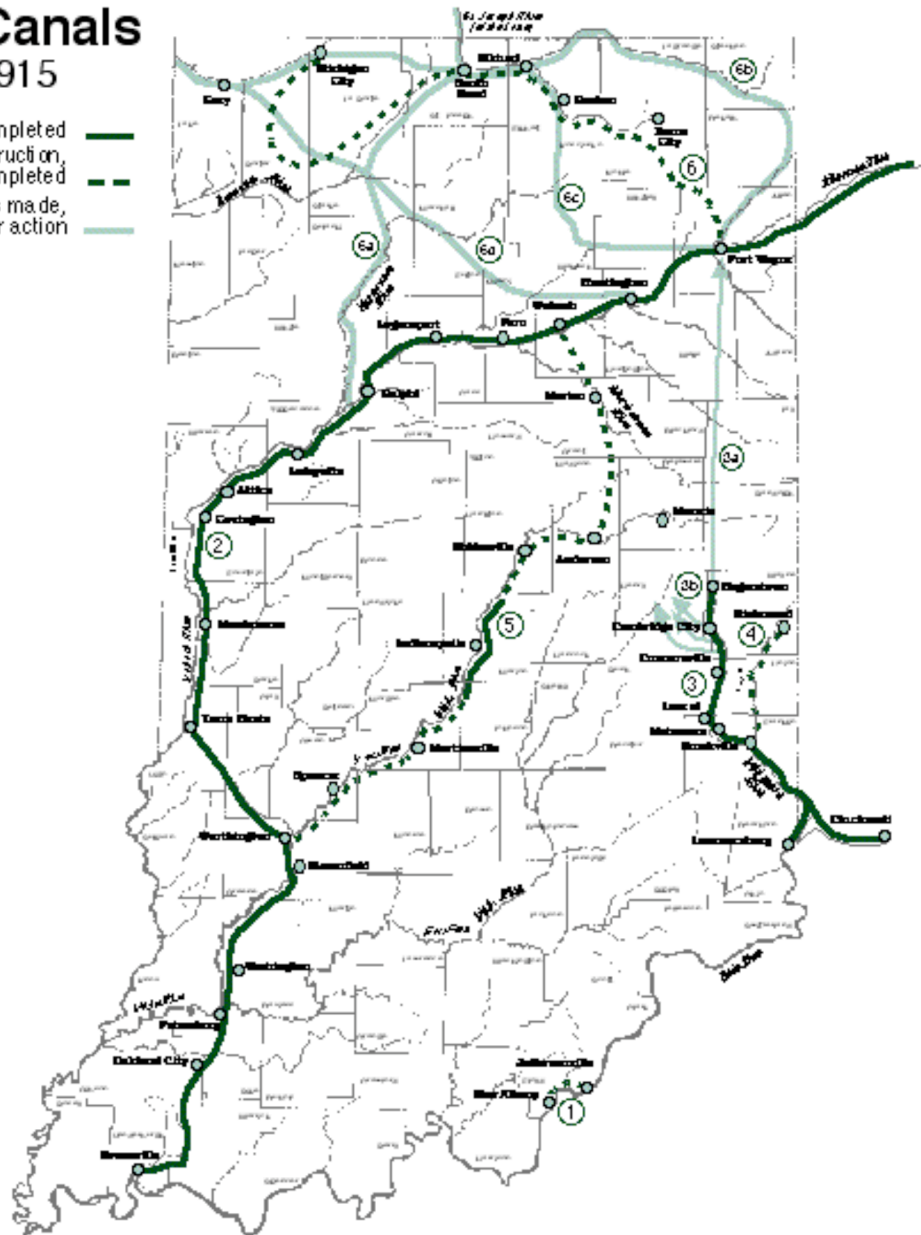
During these early years, food was traded locally at times, but many state residents grew their own. Little lasting infrastructure was built supporting local food trade. Rather, meeting the needs of local markets was more or less an afterthought, after exports were addressed. Instead of investing in infrastructure to ensure Hoosiers were fed, public monies were devoted to making sure food could be transported long distances.

¹⁶ 2007 Census of Agriculture.

¹⁷ A more detailed history of this era, covering the state of Ohio, can be found at <http://www.crcworks.org/ohfood.pdf>.

Indiana Canals 1805-1915

Canal construction completed ———
Some construction, but never completed - - -
Surveys made, no other action ———



Source: State of Indiana — <http://www.in.gov/history/2518.htm>

1. Ohio Falls Canal — to provide passage around the Falls of the Ohio, 1805, 1816.
2. Wabash and Erie Canal — to connect Lake Erie with the Ohio River through the Wabash Valley, 1827.
3. Whitewater Canal — to connect Whitewater Valley with the Ohio River, 1833, 1836.
3a, 3b: Surveys, 1825, 1837 of proposed routes for Whitewater Canal.
4. Richmond and Brookville Canal — to connect Richmond to Whitewater Canal, 1837.
5. Central Canal — to connect Wabash River with Ohio River at Evansville, 1836.
6. Erie and Michigan Canal — linking Wabash and Erie Canal with Lake Michigan, 1836.
6a - 6d: Surveys completed to link Lake Michigan and Wabash Valley, 1829, 1830, 1876, & 1915.

When the railroads entered the state, farmers celebrated their newfound access to urban markets all over the nation. Yet they soon found that the same rails that gave them new export opportunities also brought them great competition. Just as farmers could reach any urban center, so could any other farmer in the nation near a rail line. Indeed it simultaneously became easier to import food from other regions. This decimated farm income.

Railroads became targets of severe discontent among farmers since they controlled farmers' access to markets and often charged rates that seemed exorbitant to hard-pressed producers. At the end of the 19th Century, farmers nationally found their income had ultimately been pared down by the entrance of the railroads, not improved. Moreover, lenders were offering unfavorable terms, and banks cycled through one crisis after another. A severe depression in rural America settled in as the 20th Century began.

Farming achieved great prosperity in the years 1910-1914, as the banking system stabilized and as war-torn European nations — their fields in disarray due to battle — purchased massive quantities of grain from the U.S. However, as industrialization set in, urban areas became more prosperous, and lenders focused on making loans to manufacturers. At times, rural banks could not procure money to lend, because urban centers had cornered it all. During the 1920s, farmgate prices¹⁸ plunged due to overproduction, even as urban consumers indulged themselves in extravagant lifestyles. Weakness in the farm commodity industry globally was a primary cause of the Great Depression.

With the advent of effective farm programs, at least for White landowners (since the successful policies were written by White landowners), and with the slow recovery of consumer purchasing, farm income gained a foothold again during the 1930s, but of course only after the failure of many rural banks. Once again, it was war that returned prosperity to rural America — first, as the government purchased food commodities for processing to feed troops, and then after W.W. II, when the U.S. loaned money to European nations so they could buy commodities from U.S. producers. This heralded the second most prosperous era in U.S. agriculture.

During the War, the federal government encouraged Americans to plant Victory Gardens to grow their own vegetables. By the height of the effort, 20 million gardens were producing food. U.S. Navy researchers concluded that 41% of all produce consumed in the U.S. was raised on Victory Gardens — after only two years of this gardening initiative.

Europe recovered the ability to produce its own food after war's end. Farmers enjoyed a few relatively prosperous years in the early 1950s, but then farm income began steadily declining. With the advent of larger tractors, and greater use of fertilizers and herbicides, farmers produced more with less labor, but financial returns dwindled.

¹⁸ The “farmgate” price is the wholesale price paid a farmer by commodity buyers; i.e., the price as the product “leaves the gate of the farm.”

Recent economic trends in Hoosier food and farming

It was not until 1973-74 that American farmers would experience bountiful prosperity. This occurred in the aftermath of the OPEC decision to restrict oil production. This had the effect of raising the price of oil, and since most of the oil America purchased at the time came from the Middle East, our purchases funneled dollars into the hands of the oil industry there. At the time, Middle Eastern oil producers did very little to reinvest in the U.S., so these dollars flowed steadily away from our shores.

In an effort to bring dollars back to the U.S. economy, and to offset higher prices induced by oil costs, the White House created what they said would be a “win-win-win” solution. The government asked American farmers to produce more grain, promising them “permanent export markets abroad” if only they would ramp up production. The Soviet Union agreed to purchase considerable wheat and corn, using dollars they held in savings accounts; this was necessary because crop failures and distribution breakdowns had made many Soviet citizens hungry. According to the plan, Soviet consumers would eat better, farmers would make more money, and the treasury would recover the dollars that had been sent overseas.

Many farmers remember Secretary of Agriculture Earl Butz standing in front of microphones asking them to “plant fence row to fence row.” Further, he encouraged farmers to expand their operations, saying “Get big or get out of farming.” Both federal and private lenders responded accordingly, encouraging farmers to take on additional debt. This analyst interviewed several farmers in the 1980s who had approached lenders asking for a loan of, say, \$250,000, and were rejected because they asked for “too little.” As one farmer recalled, the lender responded that he would not consider making a loan unless the farmer asked for \$400,000 at minimum. Given the promise of permanent export markets, these farmers felt they had no choice but to go along.

However, in 1974, the Soviet Union stopped buying massive quantities of grain, saying they had restored their own capacity to feed themselves. Suddenly, markets for grain commodities collapsed. As sales plummeted, so did farmgate prices, since there was no other buyer who could buy in quantity. Rural elevators across the Grain Belt loaded grain high onto immense cone-shaped piles on their lawns, since storage was full. The “permanent export markets abroad” had been an illusion.

Farm income returned to levels similar to those prior to the oil crisis, but with one big difference. Farmers now had higher debts to pay — loans they had taken on, at times under duress, thinking prices would stay high. Farmers now found they could not repay their debts. It took a decade for this to become obvious to the rest of the nation.

Purdue Extension Educator Scott Monroe recalls several “coffee shop” discussions of this upheaval, and its causes, while growing up and subsequently working in Southwest Indiana. “Prior to the farm crisis in the early 1980’s, many local farmers felt that they were living in the best of times. Many still recall it — the late 1970s — as the glory days.” Yet, he adds,

there were dark clouds on the horizon. “Part of the reason no one saw it coming was because on top of the existing debts, farmers were encouraged to ride the ‘inflation train.’ They would borrow on the basis of rising land values and other collateral. Most of the borrowing was to increase farm size and ramp up production.”

Monroe recalls that “The bubble went ‘pop’ when President Reagan and the Federal Reserve induced a recession in the early 1980s to curtail that very inflation.” Land values no longer rose, in fact many fell. “Many farms were suddenly upside down on their loans. They could no longer borrow for production.”

Thus, the farm economy fell into a severe credit crisis in the 1980s, the outgrowth of the only two years of substantial prosperity for farmers since the early 1950s. Net cash income for farmers fell close to zero from 1999 to 2002; only in the past few years have producers experienced positive returns.

The first dramatic rise in commodity prices after the depths of 2002 was due to speculation in the grain industry, as investors who had been stung by the home mortgage debt crisis looked for places to invest. This price bubble collapsed in 2009, when net farm income nationally fell close to zero. In 2010 and 2011, corn prices rose on the strength of demand for ethanol. This placed upward pressure on other commodity prices. Many farmers working today consider 2011 one of the best years grain farmers have ever known. Indeed if one looks at net cash income for farmers, trends look overwhelmingly positive (*see next page*).

Chart 1: Farm production balance (net cash farm income) for U.S. farmers, 1929 – 2011 (not adjusted for inflation)

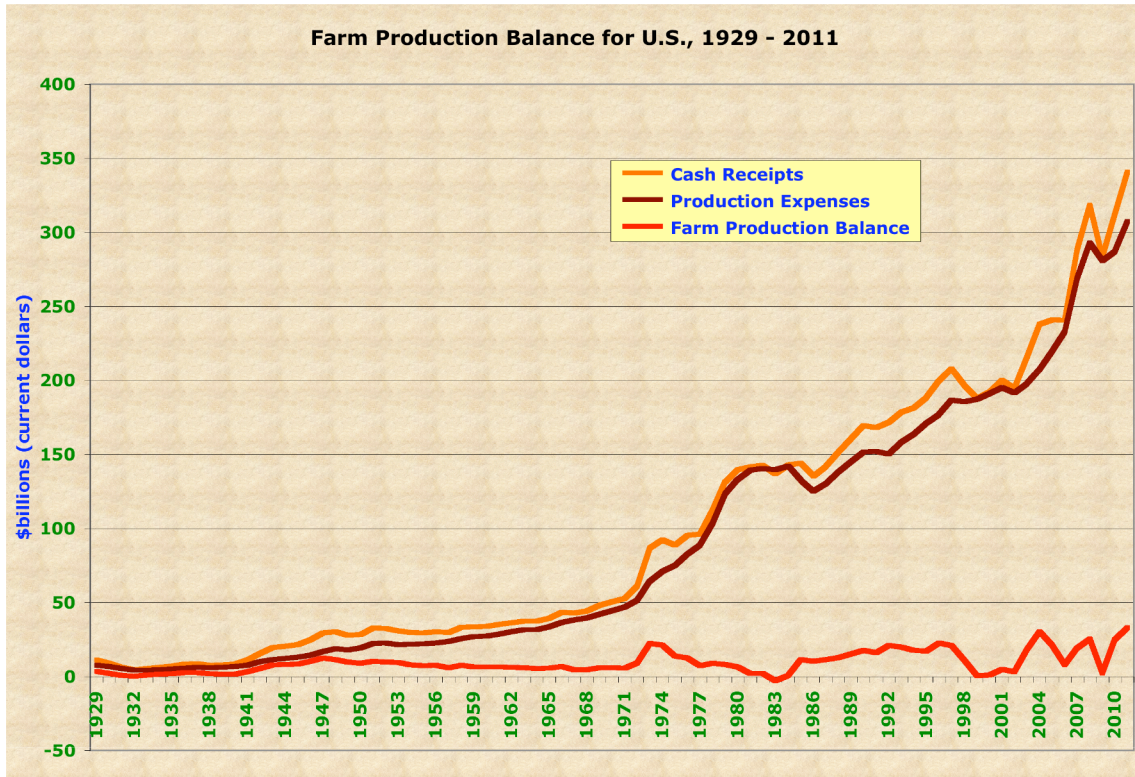


Chart by Ken Meter using data from USDA Economic Research Service (“constant-dollar table”). Data are in dollars at their current value in each year for which data are entered. Projections for 2011 were made before harvest.

Yet even this chart shows some troubling trends. For all of the expansion of markets, production costs have kept close pace. So farmers’ net income is not much higher now than it was in 1947. Even more troubling, the return to farmers is sporadic; they cannot count in advance that a given a year will be rewarding.

Moreover, as Chart 2 (*see next page*) shows, adjusting these data for inflation produces a vastly different story. Overall, when adjusted for inflation, projected net cash income for farmers in 2011 was lower than it had been in 1929, following nine years of a farm depression. That global rural depression is considered by many economists to have been a primary cause of the Great Depression.

Chart 2: Farm production balance (net cash farm income) for U.S. farmers, 1929 – 2011 in dollars adjusted for inflation

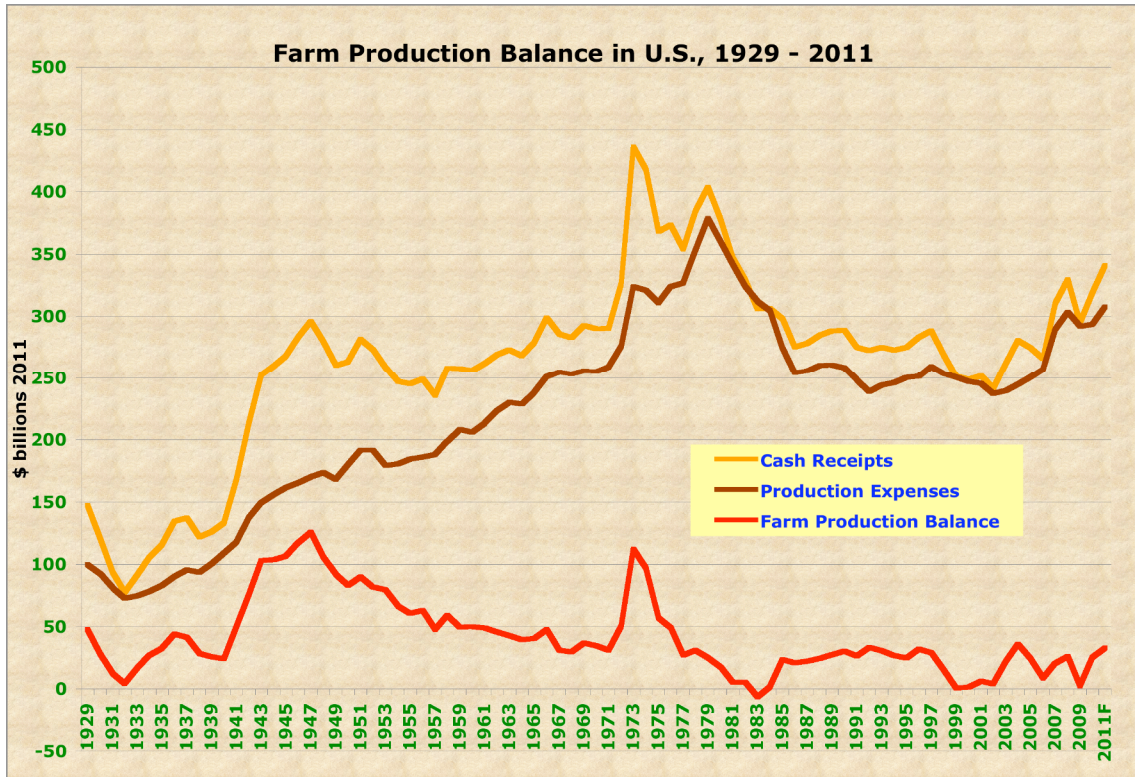


Chart by Ken Meter using data from USDA Economic Research Service (“constant-dollar table”). Data are adjusted for inflation, so that dollars are valued at their 2011 value at all points on the table. Projections for 2011 (dated “2011F” for forecast) were made before harvest.

With corn approaching \$8 per bushel in 2011 and ethanol markets strong, many have suggested that prosperity for American farmers is here to stay. However, as Purdue economist Chris Hurt cautioned, “It’s not always going to be like this. We had \$8 corn. That made it one of the most extraordinary years of the last century.” Still, he adds, “The new crop will not come in at that price level.”

Others, mainly farmers, further point out that commodity prices have always cycled high and then low, in part because the livestock industry relies on corn and soybeans for animal feed. Farmer after farmer interviewed for this study pointed out that no one can profitably raise livestock with grain prices so high. This pressure is likely to lower grain prices in upcoming years.

Nor do high grain prices offset the fact that inherently, the farmer has no ability to set a price. As individual producers selling to highly concentrated and global buyers, producers have little market power. Those who are among the largest producers may prosper for a short while, but these prices are unlikely to last, especially as farmers compete with grain producers in other nations who have lower land and labor costs.

When the Indiana Farm Bureau combed through the 2007 Census of Agriculture and found that the number of very large farms was increasing, they were tracking a tendency larger growers have had — if they can afford it — to ramp up the size of their farms. Much of this growth is fueled by the need to survive in a deeply competitive global market, and is fueled by tax breaks as much as by any efficiencies earned by growing larger.

Yet the Census of Agriculture also showed that the number of very small farms is also increasing. To understand more about this, let's examine the recent history of Indiana's markets for food.

From 1969 to 2009, Indiana's population increased 25%, from 5.1 million to 6.4 million. During that same time period, personal income earned by residents of the state nearly doubled, from \$111 billion to \$218 billion. This combination of rising population and increased earning power fueled a rise in consumer spending for food:

Chart 3: Consumer food purchases in Indiana, 1969 – 2009

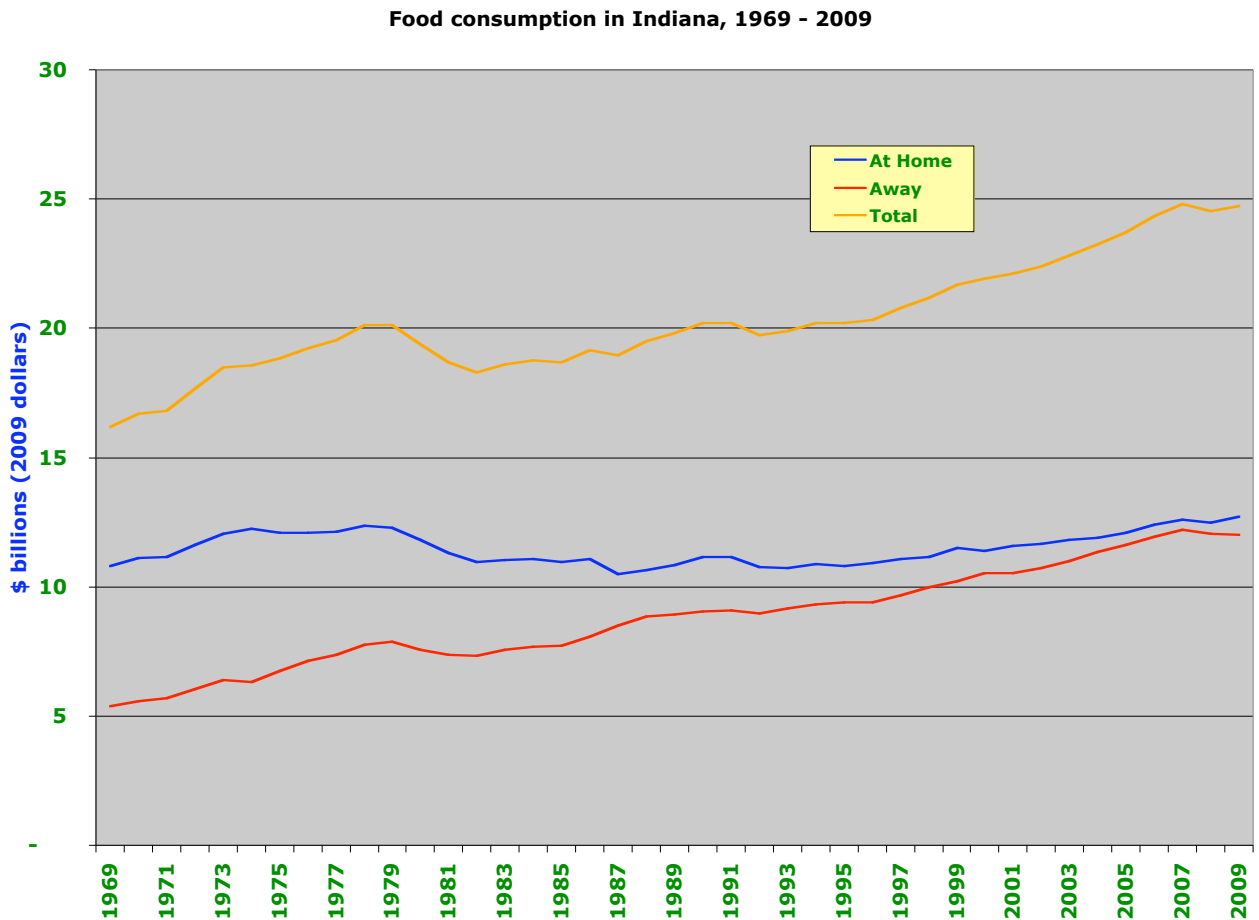


Chart by Ken Meter using data from the Bureau of Labor Statistics. Note that the data used for this chart are based on national averages of per capita food consumption and do not reflect any regional variations. Still, this offers a solid approximation of Indiana food consumption.

The following data show quite vividly that Indiana farmers and consumers are quite separate from each other. Farmers sell to national and global commodity markets, while consumers purchase from national and global markets.

Consumption patterns are unique to specific products. For example:

Hogs: Although pork consumption in Indiana has risen steadily since 1975, hog production by Indiana farmers has been falling since 1987. The decline in hog sales in the late 1990s was caused by farmgate prices falling well below the cost of production. This led many farmers to get out of hog farming since they could not make an adequate living.

Cattle: Although beef consumption has hovered steadily around 600 million pounds per year for forty years, cattle sales fell dramatically from 1978 to 2002. This is largely due to consolidation of the feedlot industry in the western states. Not only did animal production shift to these large facilities, the new feedlots were able to produce beef at a lower price, so many Hoosier farmers opted to stop raising cattle. The upward swing of farm sales from 2002-2007 reflects fewer producers selling more animals and receiving higher prices as consumers adapted to higher meat costs.

Dairy: Milk production held steady at about 1.3 million pounds per year from 1983 to 2008, the most recent year for which data are available. The increase in dairy sales after 2002 appears to be due to the entry of Organic Valley into the Hoosier milk market. Since the co-op pays farmers more for milk than conventional markets had its purchases also put upward pressure on all milk prices. A few larger-scale dairy farms also opened over the past decade. All told, the number of dairy farms in Indiana decreased steadily from 1987 (4,316) to 2007 (2,071), while the number of animals increased.

Vegetables: Indiana consumers are eating more vegetables now than they used to. Consumption has risen steadily since 1983. However, the increase in vegetable sales does *not* reflect more production. It is the result of higher prices paid to those who do sell vegetables. In fact, the number of acres planted to vegetables in Indiana fell from 2002 to 2007, as growers realized they had overplanted some crops such as melons (which are considered a vegetable for marketing purposes).

Fruit: Similarly, fruit consumption in Indiana has increased since 1970, but very little fruit is produced in the state. The number of acres planted has actually been reduced since 1997, but farmers are commanding higher prices.

The disconnects in these core markets are one solid reason that consumers have been asking for a more direct connection to farmers.

Charts follow on the next five pages.

Chart 4: Estimated consumer purchases of pork in Indiana, 1969 – 2008

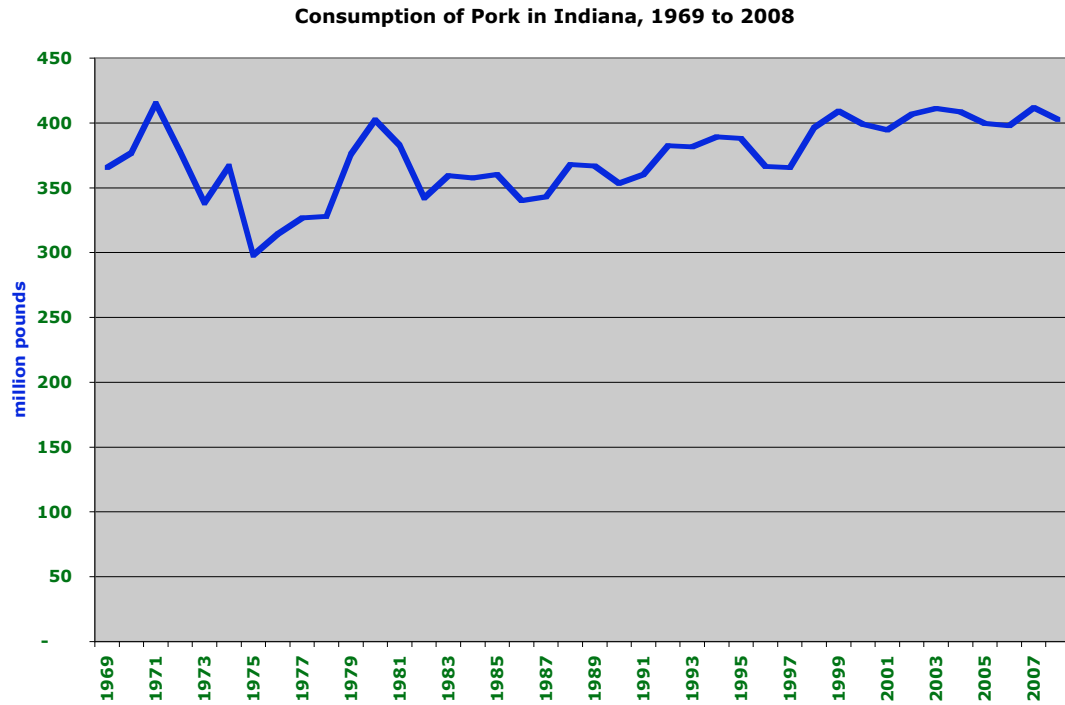


Chart by Ken Meter using data from the Bureau of Labor Statistics. Note that data used for this chart are based on national averages of per capita food consumption and do not reflect any regional variations. Still, this offers a solid approximation of Indiana food consumption.

Chart 5: Hog sales by Indiana farms, 1987 – 2007

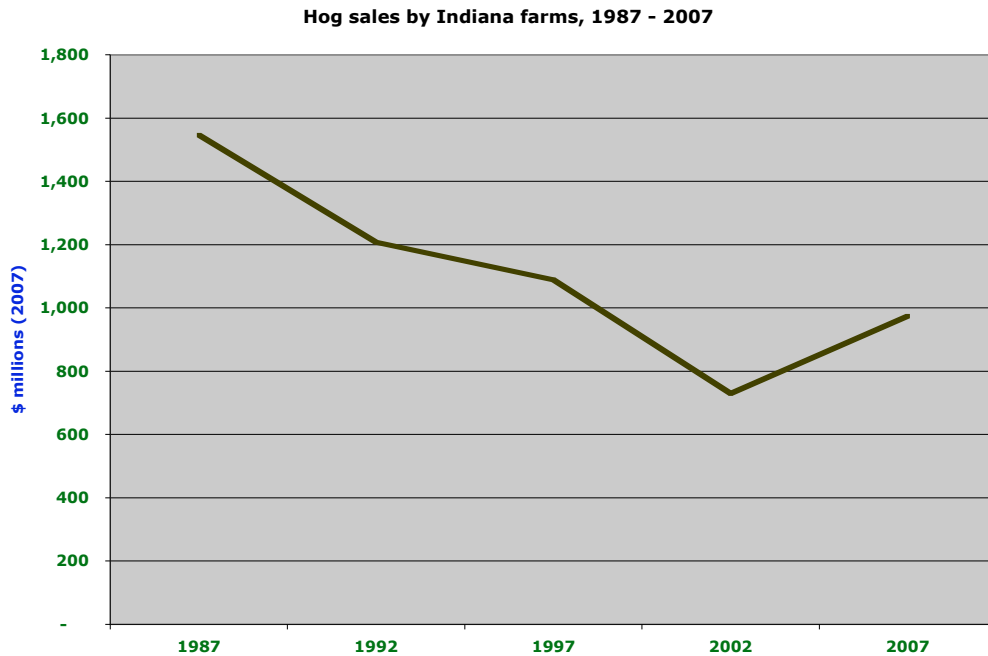


Chart by Ken Meter using data from the Census of Agriculture, 1997 & 2007.

Chart 6: Estimated consumer purchases of beef in Indiana, 1969 – 2008

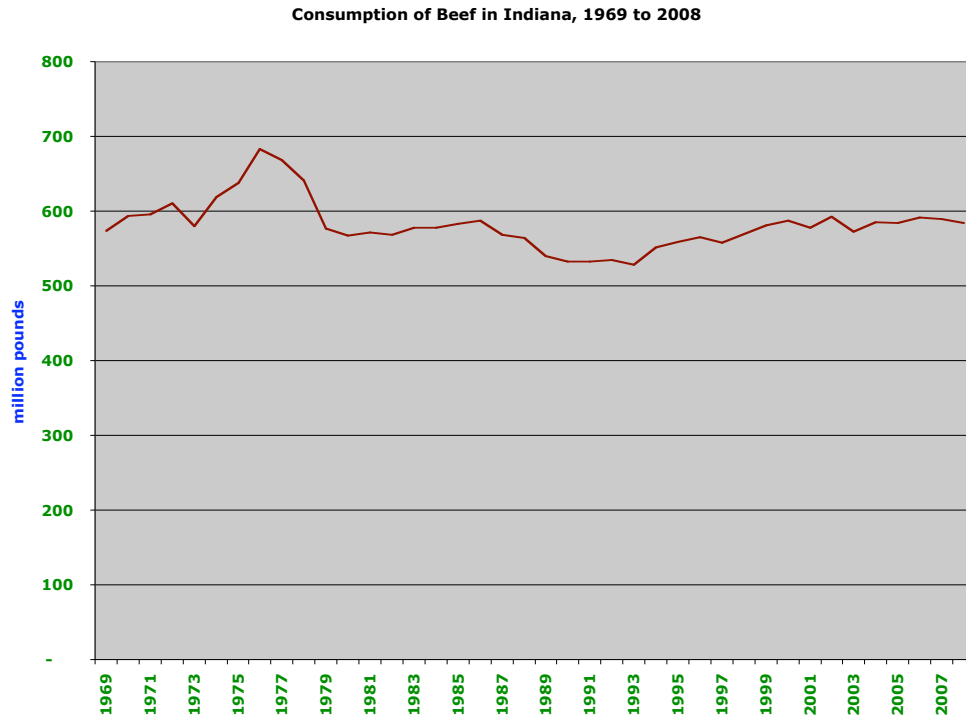


Chart by Ken Meter using data from the Bureau of Labor Statistics. Note that data used for this chart are based on national averages of per capita food consumption and do not reflect any regional variations. Still, this offers a solid approximation of Indiana food consumption.

Chart 7: Cattle sales by Indiana farms, 1987 – 2007

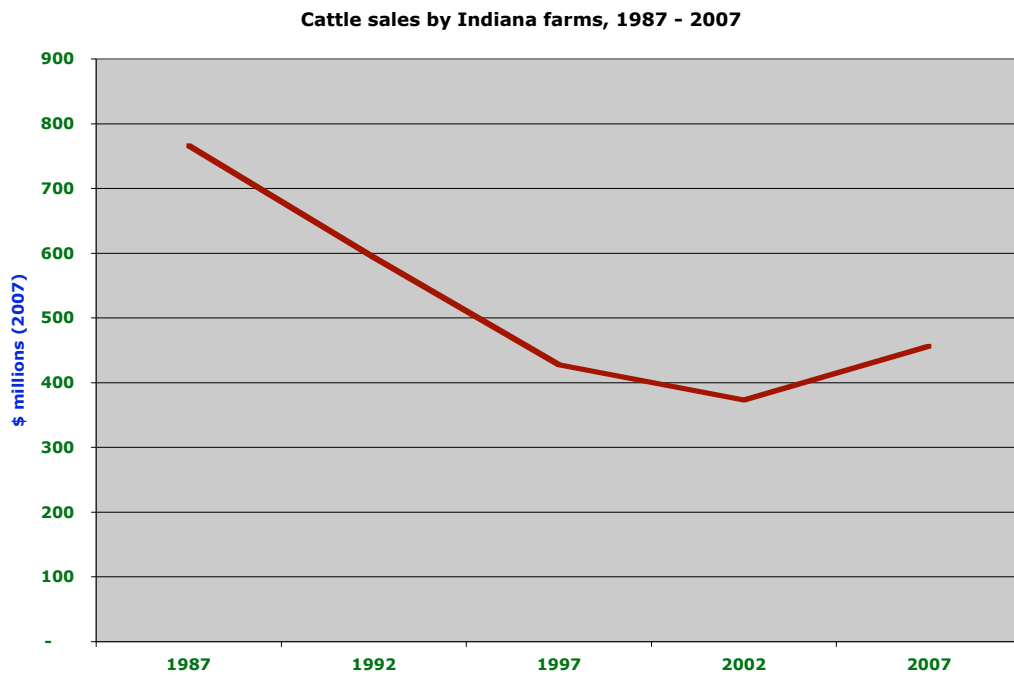


Chart by Ken Meter using data from the Census of Agriculture, 1997 & 2007.

Chart 8: Estimated consumer purchases of milk in Indiana, 1969 – 2008

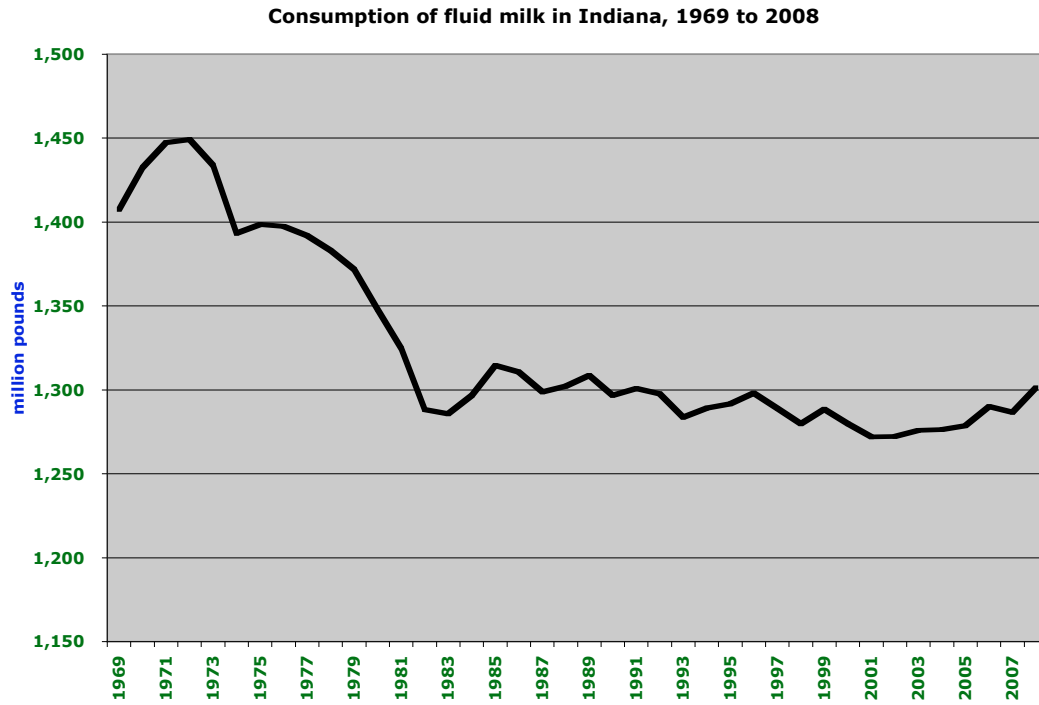


Chart by Ken Meter using data from the Bureau of Labor Statistics. Note that data used for this chart are based on national averages of per capita food consumption and do not reflect any regional variations. Still, this offers a solid approximation of Indiana food consumption.

Chart 9: Dairy sales by Indiana farms, 1987 – 2007

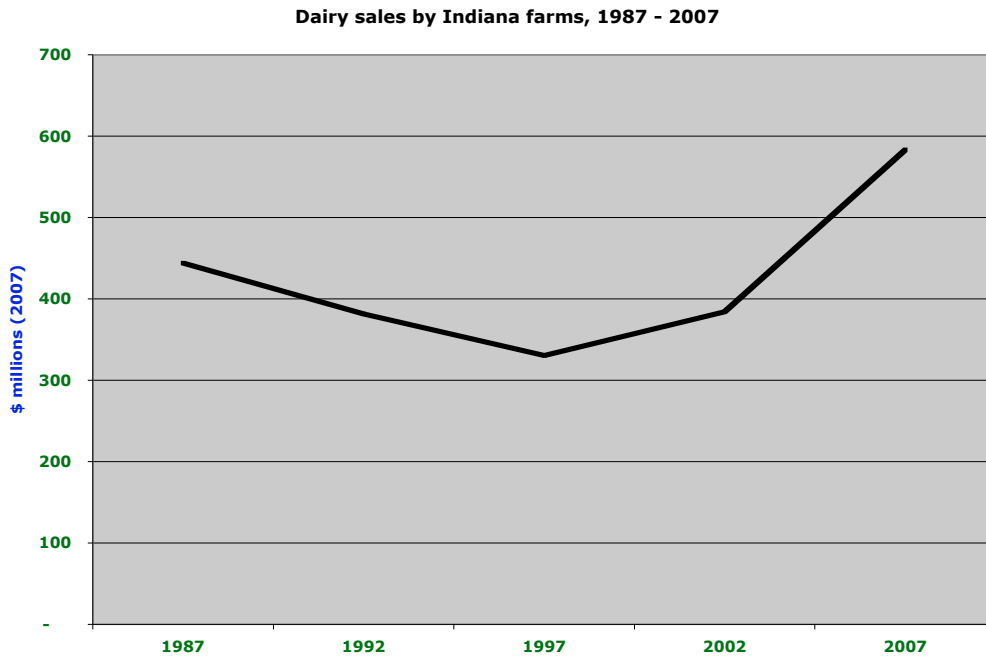


Chart by Ken Meter using data from the Census of Agriculture, 1997 & 2007.

Chart 10: Estimated consumer purchases of vegetables in Indiana, 1970 – 2008

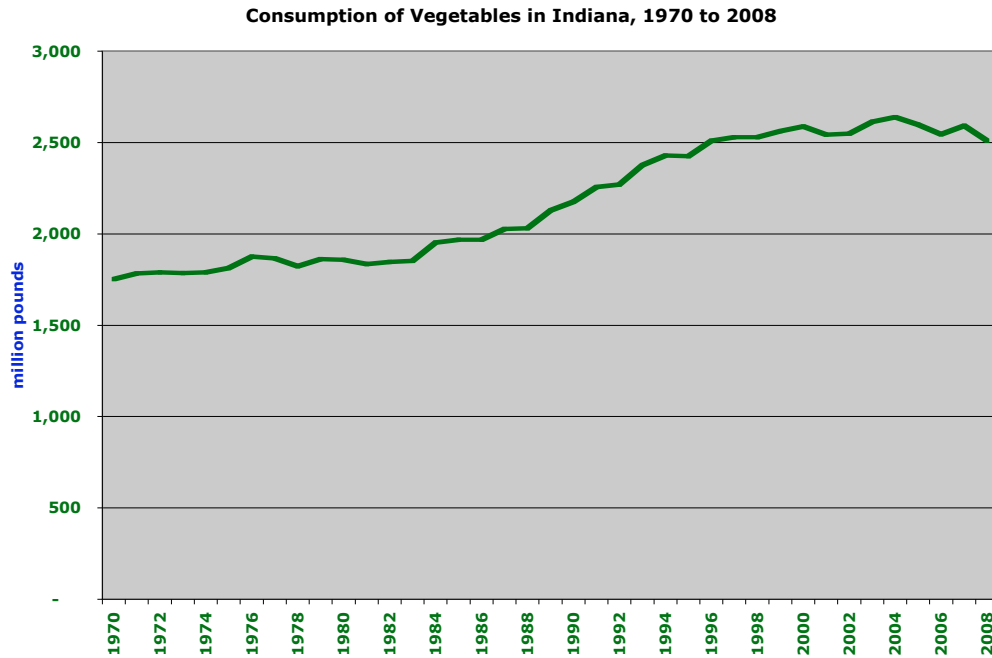


Chart by Ken Meter using data from the Bureau of Labor Statistics. Note that data used for this chart are based on national averages of per capita food consumption and do not reflect any regional variations. Still, this offers a solid approximation of Indiana food consumption.

Chart 11: Vegetable sales by Indiana farms, 1987 – 2007

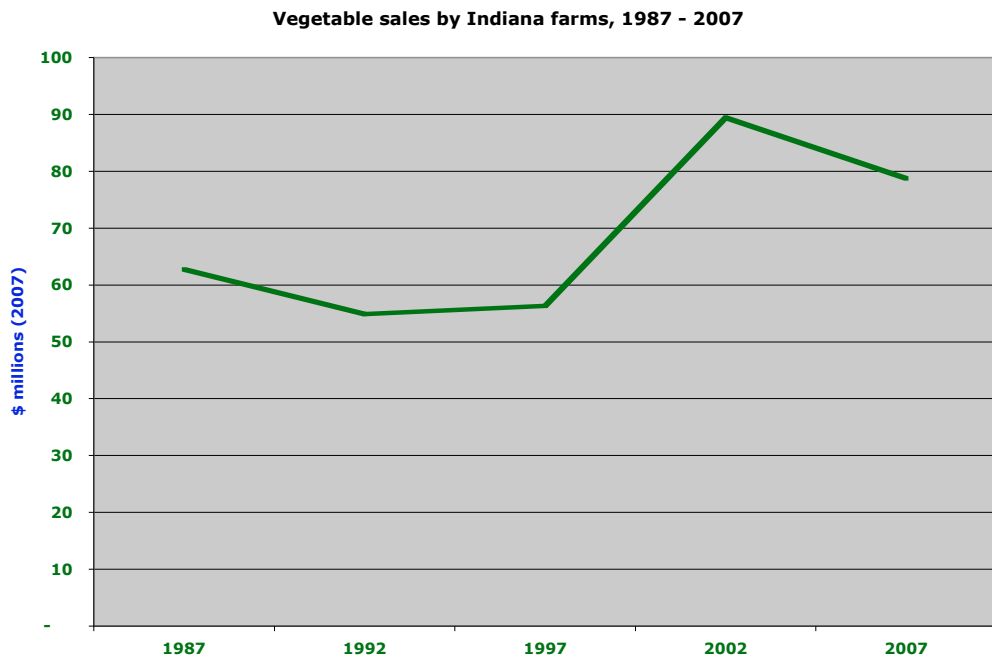


Chart by Ken Meter using data from the Census of Agriculture, 1997 & 2007.

Chart 12: Estimated consumer purchases of fruit in Indiana, 1970 – 2008

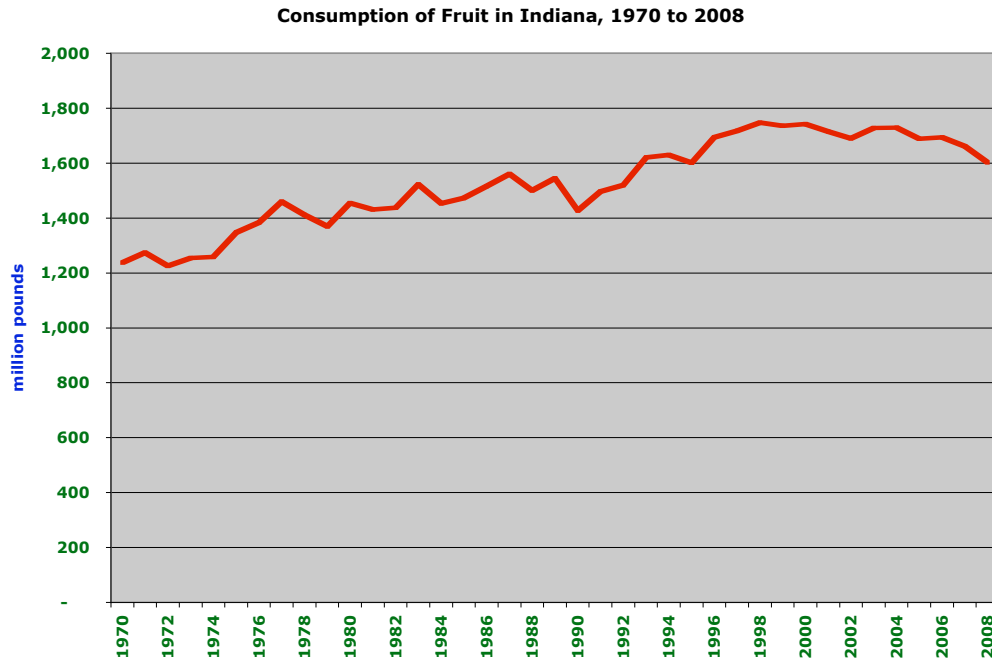


Chart by Ken Meter using data from the Bureau of Labor Statistics. Note that data used for this chart are based on national averages of per capita food consumption and do not reflect any regional variations. Still, this offers a solid approximation of Indiana food consumption.

Chart 13: Fruit sales by Indiana farms, 1987 – 2007

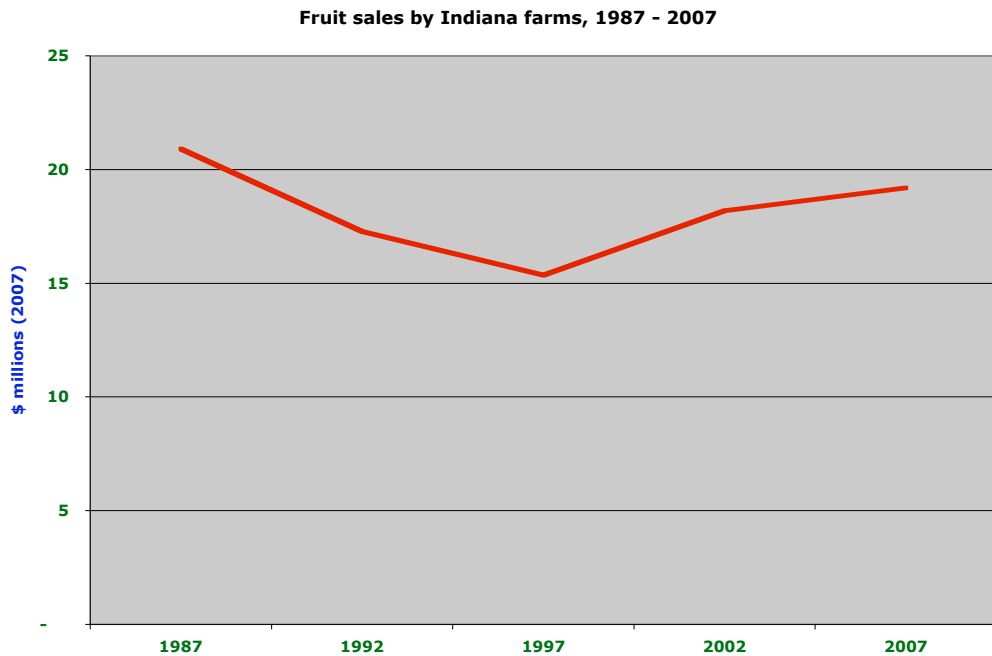


Chart by Ken Meter using data from the Census of Agriculture, 1997 & 2007.

These disconnects in the prevailing commodity markets have also sparked consumers to want to make closer connections to growers. Interestingly, as sales of the major commodities have waxed and waned over the past twenty years, direct sales from farmers to consumers have risen persistently. Sales in 2007 were 38% higher than in 1992, after adjusting for inflation.

Chart 14: Sales made by Indiana farmers directly to consumers, 1992 - 2007

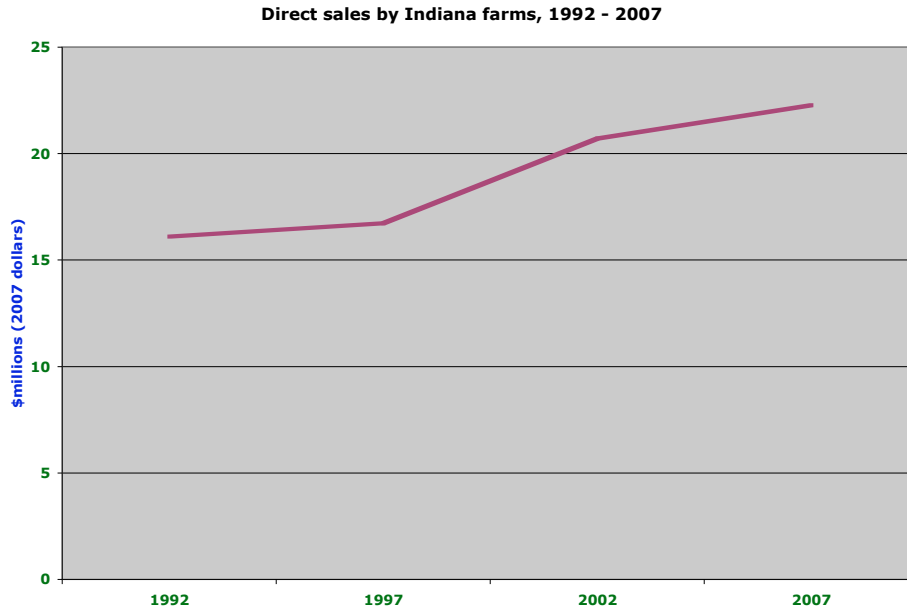


Chart by Ken Meter using data from the Census of Agriculture, 1997 & 2007.

Six percent (3,576) of Indiana’s farms sold \$22 million of food directly to consumers in 2007. This represents an increase of 24% over the past four years, or five percent per year. Direct sales in Indiana make up 0.3% of total farm sales, slightly less than the national average of 0.4%. Moreover, Indiana lags behind national growth in direct sales. Nationally, direct-to-consumer sales rose 10% per year from 2002 to 2007.

Table 1 below shows the top farm products sold by Indiana farmers. A glance at this table is enough to show that Hoosier farmers primarily grow commodities that are mainly used as raw materials for processing. Few of the items listed in the top 25 farm products are foods that could be immediately eaten by the consumer. Even those that could be consumed right away are often sold as commodities for processing, or in large shipments out of state.

If direct sales made by Indiana farmers were a single commodity, they would rank above the 13th-largest commodity, sweet corn, in economic importance.

Table 1: Top farm products in Indiana (USDA Economic Research Service, 2009)

Ranked by value of sales

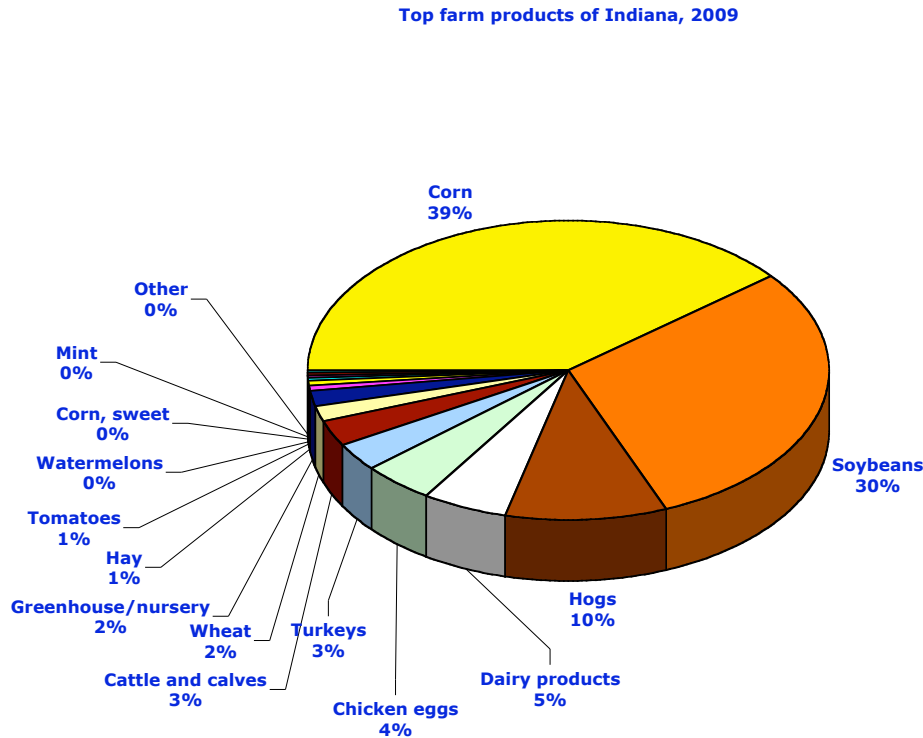
	\$ millions
1 Corn	3,288
2 Soybeans	2,516
3 Hogs	834
4 Dairy products	450
5 Chicken eggs	353
6 Turkeys	272
7 Cattle and calves	224
8 Wheat	144
9 Greenhouse/Nursery	132
10 Hay	64
11 Tomatoes**	46
12 Watermelons	24
13 Corn, sweet**	17
14 Mint	13
15 Apples	8
16 Muskmelons	7
17 Blueberries	6
18 Cucumbers**	4
19 Beans, snap**	3
20 Sheep and lambs	3
21 Aquaculture	2
22 Honey	1
23 Farm chickens	0

Note: Broiler chickens and mushrooms are also included in the top 25 farm products of Indiana, but sales data were suppressed by USDA in an effort to protect the confidentiality of the growers. The value of these two products may be as much as \$350 million, or four percent of total farm sales.

***Tomatoes, sweet corn, cucumbers, and snap beans listed here are largely grown at a commercial scale for processing, not for direct consumption.*

See chart on next page.

Chart 15: Top farm products in Indiana (USDA Economic Research Service, 2009)



Note: Broiler chickens and mushrooms are also included in the top 25 farm products of Indiana, but sales data were suppressed by USDA in an effort to protect the confidentiality of the growers. The value of these two products may be as much as \$350 million, or four percent of total farm sales.

Tomatoes, sweet corn, cucumbers, and snap beans listed here are largely grown at a commercial scale for processing, not for direct consumption (see Table 1 on previous page).

Unfortunately, farming these commodities has been less rewarding than many Hoosiers imagine. Certainly there has been strong growth in cash receipts over the past forty years, as Chart 16 shows. Yet production costs have more than kept pace with these rising markets. The red line on this chart shows what might be called the net cash income of farming, although this researcher prefers the term “farm production balance.” This is a measure of the backbone of the agricultural economy: the cash receipts from selling farm products less the expenses that were undertaken to produce those products. Except for the past few years, this has hovered at a low margin for most of the past four decades.

Chart 16: Cash receipts, production expenses, and farm production balance (net cash farm income) for Indiana farmers, 1969-2009

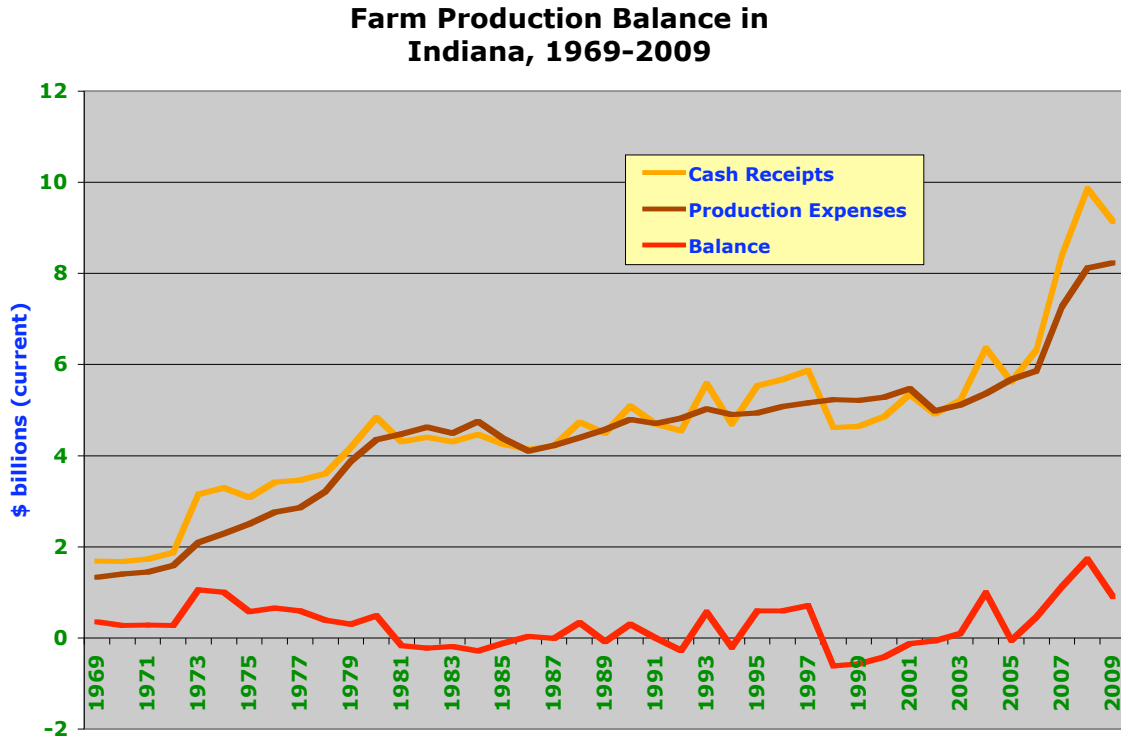


Chart by Ken Meter using data from the Bureau of Economic Analysis.

Yet this is only one way of looking at farm profits. To gain a more accurate picture of what the chart above shows, it is important to adjust the data for inflation. This is a way of measuring how hard a farm family has to work today to earn a dollar, compared with forty years ago.

After all, since 1969, the value of the U.S. dollar has shrunk considerably due to rising prices. All told the dollar was worth five times more in 1969 than it is worth today. Adjusting for this, we get Chart 17 (below).

Chart 17: Cash receipts, production expenses, and farm production balance (net cash farm income) for Indiana farmers, 1969-2009 (adjusted for inflation)

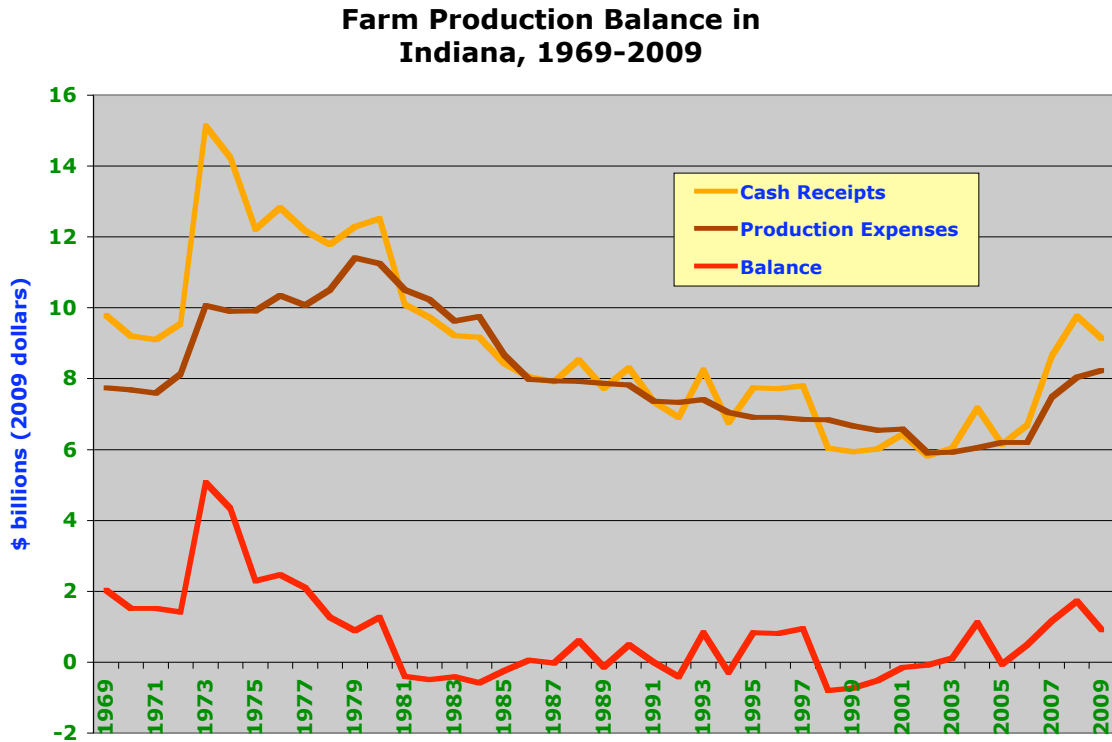


Chart by Ken Meter using data from the Bureau of Economic Analysis.

This chart shows a very different picture of the Indiana farm economy. Looking at the maroon line, it is clear that farmers have been reducing costs as much as possible since 1980. Yet the cash return has fallen even more rapidly. Many farmers abandoned agriculture. They cannot really afford the costs of production, sales are falling in real dollars, and they are unsure what to do to change their operations. Cutting costs further is not likely. Farmers apparently feel stuck with the infrastructure into which they trade; given declining revenues, they would reduce costs in any way they could if it were possible.

Luckily, Indiana farmers received somewhat of a windfall in 2010 when grain prices rose dramatically. Some farmers say this rise in prices will stay, and save grain farming. Others argue that commodity prices always cycle up and down, and that in any event, livestock producers cannot afford to feed their animals at current grain prices; this will apply downward pressure on farmgate prices.

In fact, Indiana farmers earned \$1.1 billion less by selling commodities in 2009 than they earned in 1969 (in 2009 dollars). Admittedly, 2009 was a bad year for farmers; nationally the net farm income was near zero. The speculative bubble that had artificially raised grain prices the year before burst when the fragility of the home-mortgage derivatives markets became clear. Certainly grain prices have risen since 2009 (the most recent year for which BEA data are available), but one look at Chart 2 (*page 30, showing national data*) is enough to show that this recovery is not all that strong overall, in part because rising income for grain farmers means larger costs for livestock producers.

Nor are these gains large. While Indiana farmers have earned a surplus of \$6 billion since 1981, this amounts to an average net income of only \$200 million per year — about \$3,000 for each farm in the state, and an overall return of about 2.6% of sales. Moreover, in 13 of the past 30 years, net farm income has fallen below zero.¹⁹

The next chart shows in more depth what changes have driven these shifts in agriculture. Chart 18 below shows the orange line from the previous chart broken down into sales of crops (green line) and sales of livestock (maroon line). Looking at the green line it is clear that farm cash receipts from selling crops are about the same now as they were in 1969 (if dollars are adjusted for inflation), despite the advanced technology that now fuels the grain industry.

What has really shifted for Indiana farmers is that their ability to generate wealth by raising livestock has eroded steadily since 1974. Farmers sold \$4 billion less of livestock and related products (such as milk) in 2009 than they sold in 1973. As mentioned above, this is due to declining margins in the cattle, hog, and poultry industries; this decline has been advanced by the advent of large-scale feedlots in the western states and by farmers abandoning their efforts to raise livestock. Significantly, however, this decline also has occurred despite the construction of larger dairies, confinement animal barns, and greater concentration of the livestock industry that remains in Indiana. It would appear that these more intense forms of farming may have, at best, staved off further declines in cash receipts — but they appear also to have contributed to the decline in livestock sales by lowering overall price levels.

¹⁹ Data from Bureau of Economic Analysis, regional income accounts.
<http://www.bea.gov/regional/reis/>.

Chart 18: Value of crop & livestock sales by Indiana farmers, 1969-2009

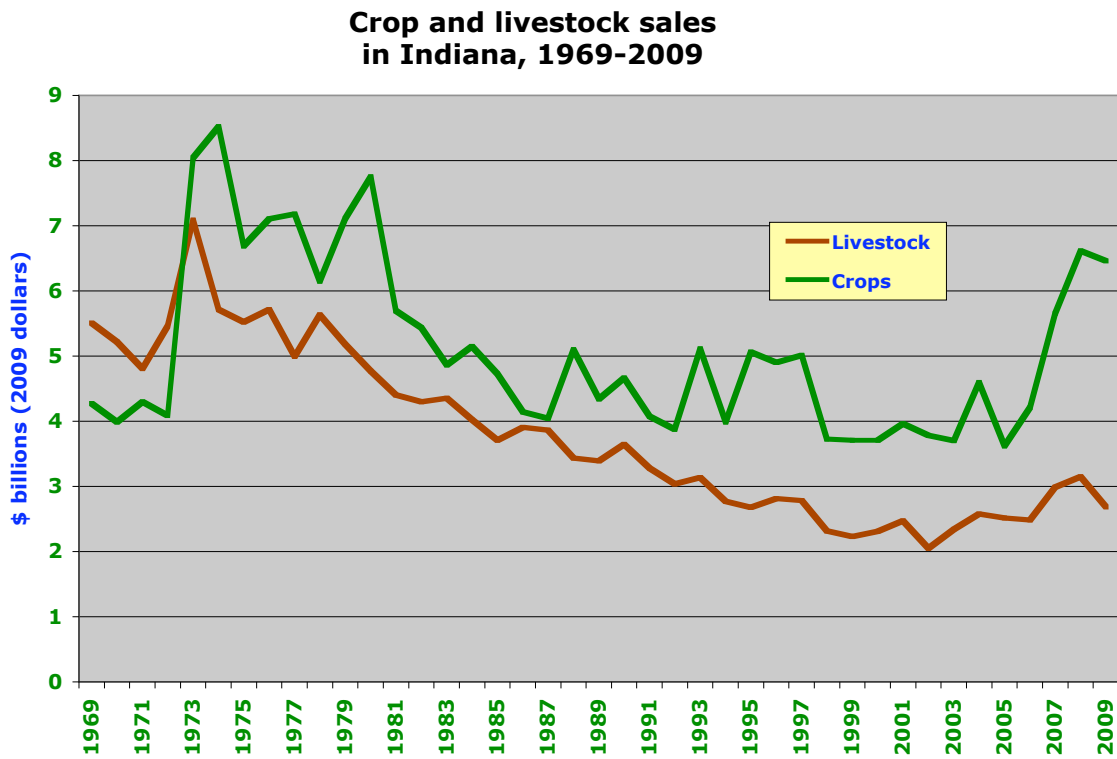


Chart by Ken Meter using data from the Bureau of Economic Analysis.

This chart also suggests that if Indiana wishes to become a more self-reliant state, it will need to restore the ability of livestock producers to build wealth by raising animals.

Chart 19 breaks down the expenses of farming (the maroon line from the farm production balance chart) into subcategories.

Chart 19: Production Expenses Paid by Indiana Farmers, 1969-2009

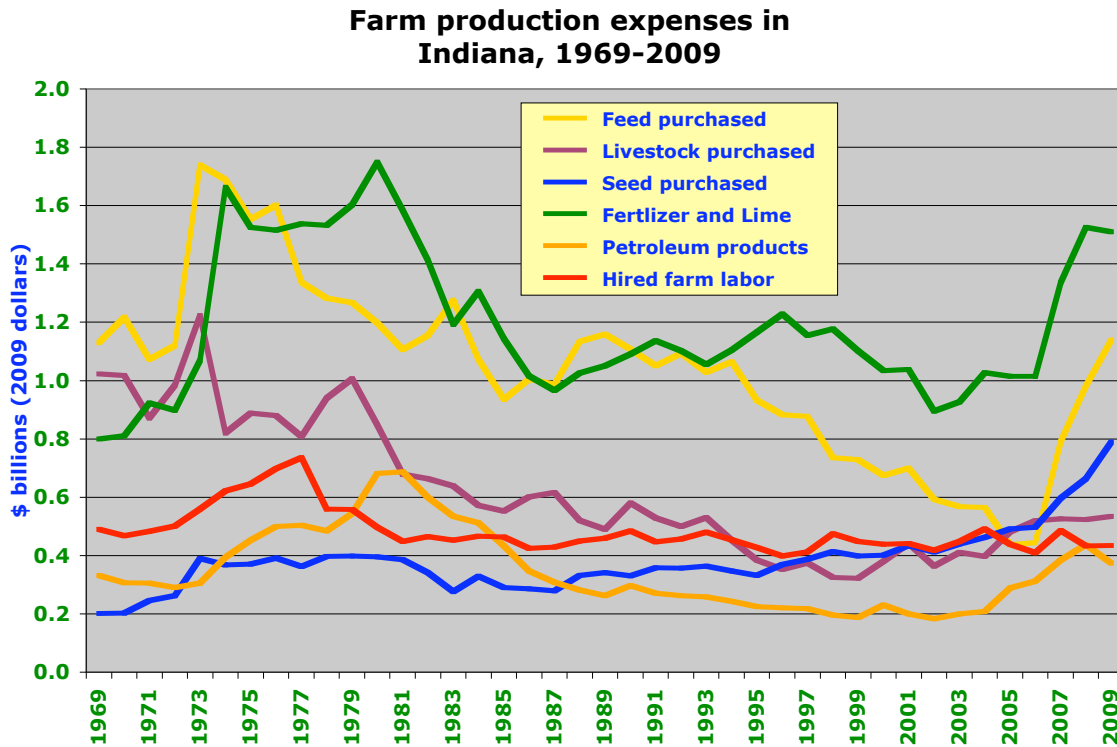


Chart by Ken Meter using data from the Bureau of Economic Analysis.

This chart shows that fertilizer costs are by far the largest expense item (although significant production expenses, such as equipment costs, are not shown here), costing \$1.5 billion per year. Feed purchases are rising rapidly and total more than \$1.1 billion: Declines in hog sales were offset by new poultry production. Seed costs rank third, at about \$800 million. Farmers also charge about \$608 million to depreciation (which is a kind of subsidy to the farm through the tax system, although certainly a legitimate farm expense).

Rather than dwell on individual lines on this chart, however, it is important to consider the impact of these purchases on the Indiana economy. Very little of the fertilizers or petroleum products used by Indiana farmers is sourced inside the state. Increasingly, feed and seeds are produced by companies whose owners are far away; as farms get dependent on externally raised hybrids and feed that is shipped to them from their aggregator, money flows out of Indiana as farmers farm.

All told, a conservative estimate is that Indiana farmers spend at least \$3.5 billion buying farm inputs that are sourced outside the state; this represents an immense flow of money away from Indiana, even in years when farmers make a profit.

In an average year, farmers earn \$200 million of net income yet ship \$3.5 billion out of the state while buying inputs. This is an average loss to the state of \$3.3 billion per year.

The following chart shows quite vividly that in 22 of the past 30 years, government payments have been the largest single source of net farm income. Farm-related income (such as cash rents for land, or custom combining for a neighbor's farm) has averaged \$257 million per year, often outweighing the net income from farming itself. Overall, 44% of the state's farms reported a net loss in 2007, according to the Census of Agriculture, although some of these losses are paper losses reported by savvy farmers or investors who want to reduce their tax burden.

Chart 20: Indiana farm income by type, 1969-2009

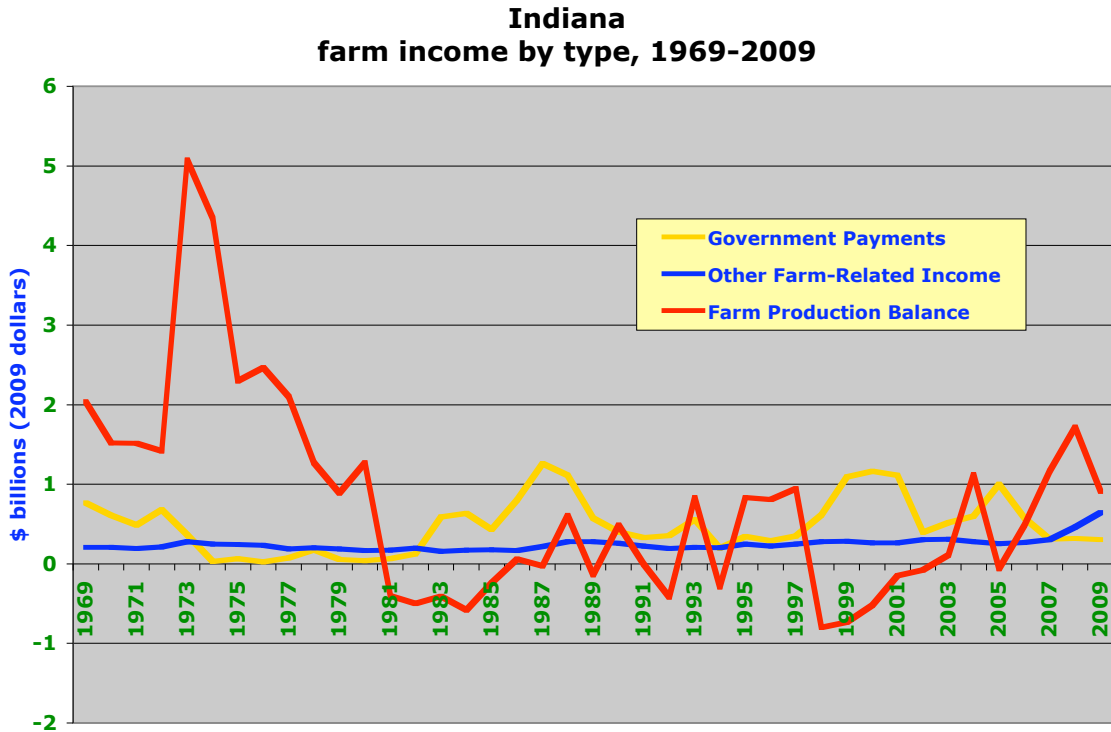


Chart by Ken Meter using data from the Bureau of Economic Analysis.

Finally, it bears mentioning that one more critical shift has taken place in Indiana agriculture: Farm families largely abandoned their ability to feed themselves in the 1970s, as they received more and more pressure from lenders and policy leaders to expand their farms. This was the end of a long-term trend that started in the 1950s as farms became more mechanized, and as youth felt more free to leave their home farms for other professions.

During this time many experts told farmers they could make more money by raising commodities and selling them in export markets; they should abandon their own gardens and stop raising livestock for themselves, because they would have more money available to buy more convenient packaged foods at the grocery store. Indeed, during the OPEC era, when Indiana farmers earned a net income of \$5 billion in a single year, this seemed like a good strategy. However, as the long-term economics have played out, this appears to have been a questionable strategy.

Clearly, many family farms are now returning to raising food for themselves and their immediate neighbors because they now seek more command over their food supply, and more knowledge of what they are eating, than they get by purchasing at stores.

Nor were the foods that farm families produced for themselves trivial economically. As the chart below shows, the value of food that farm families kept for their own home consumption in 1949 was worth \$470 million (in 2009 dollars) — more than the value of the state’s fourth-most important commodity today, dairy. Furthermore, this amount is nearly the same as the average amount of SNAP benefits now offered to low-income Hoosiers over the past thirty years,²⁰ and rivals the value of federal subsidies farmers now receive.

Chart 21: Value of food reserved by Indiana farmers for home consumption, 1949-2009

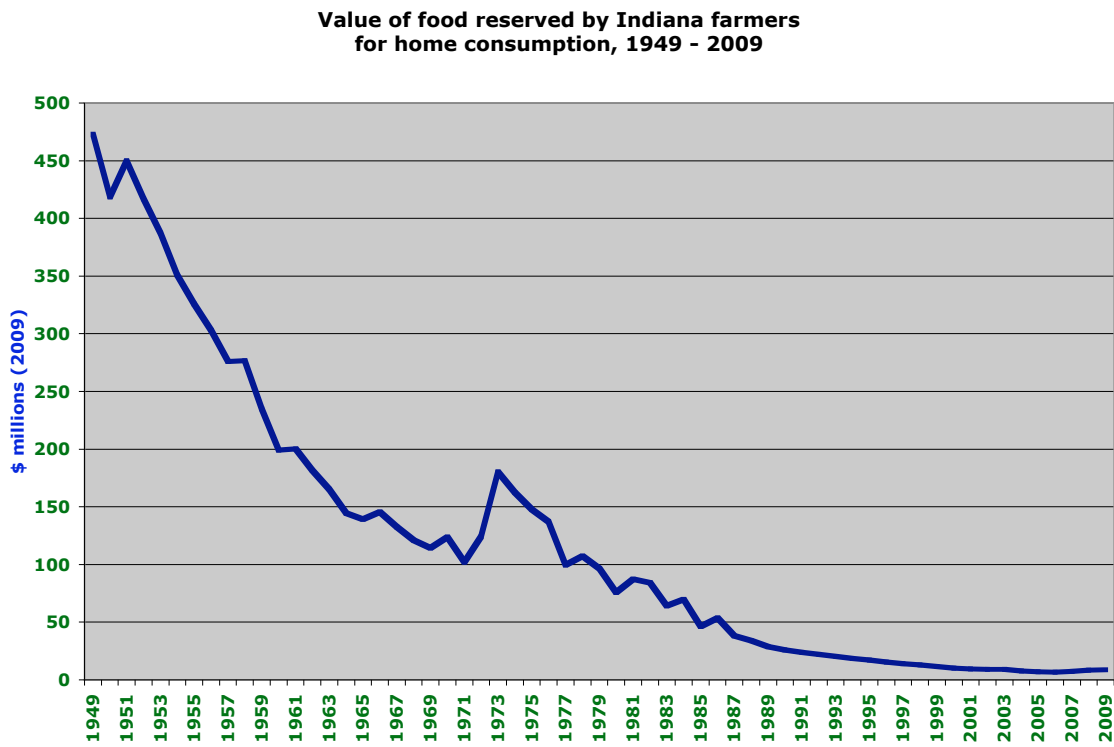


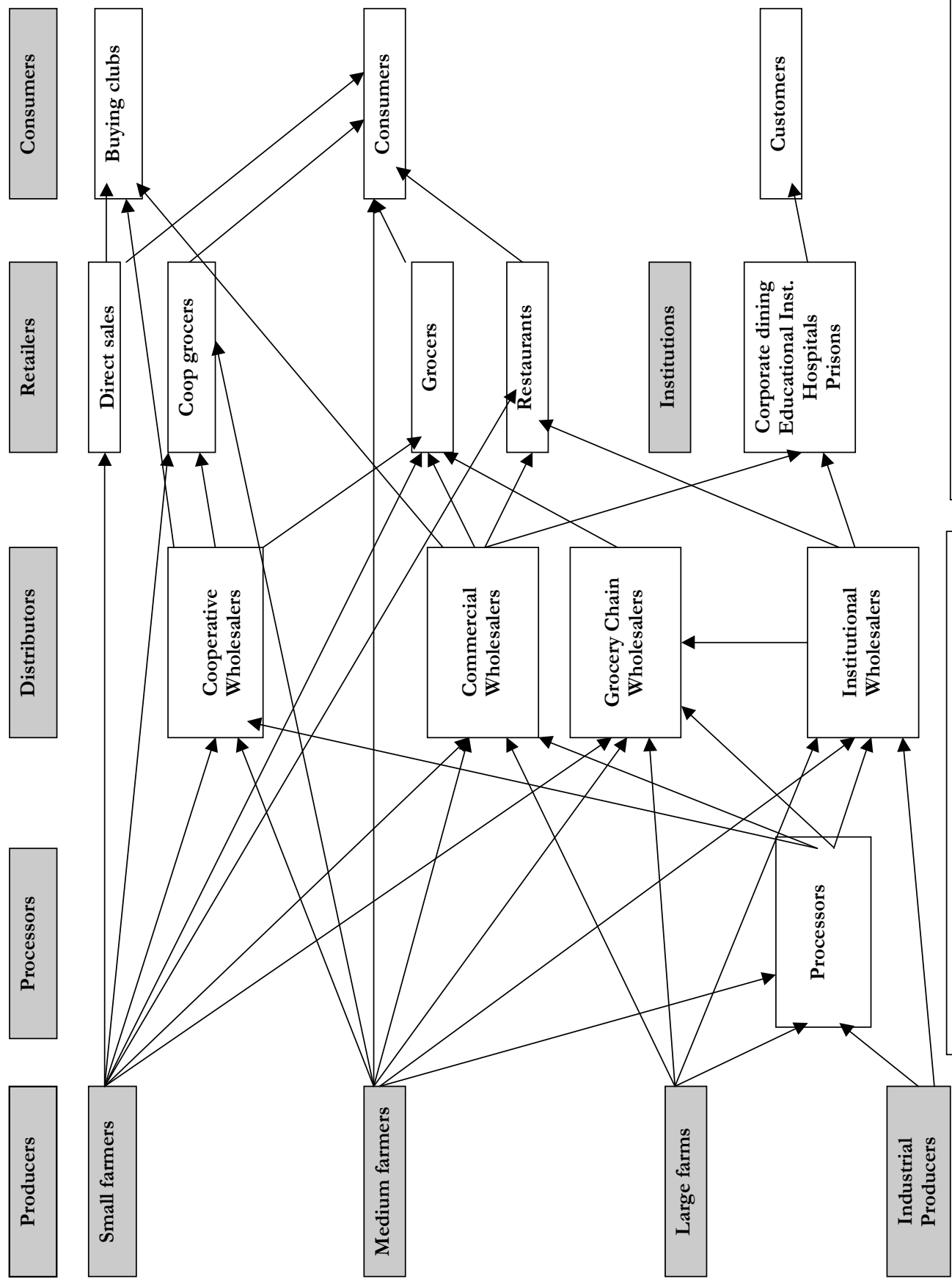
Chart by Ken Meter using data from USDA Economic Research Service.

The broader food industry in Indiana

Of course, the food industry in Indiana is not simply a matter of farms. It is also food processors and manufacturers, warehouses, distributors, and retail stores. It is institutional food buyers who serve large numbers of customers daily. A brief overview of this industry follows.

²⁰ Although it is only one-third the amount of SNAP coupons Hoosiers received in 2010.

Value Networks in Indiana's Food Industry



by Ken Meter, Crossroads Resource Center, October 2012

Representative transactions only — not all are shown

This begins with a diagram (*previous page*) that shows the various elements of the food system from farmer to consumer. This network of food transactions is often called a “supply chain,” though this analyst prefers the terms “supply web” or “value network.”²¹ This diagram focuses more on food that ends up in retail channels than it does on the overall commodity industry to which farmers now sell.

Food is an important business in Indiana, comprising 11% of all firms in the state, 13% of the state’s employment, and 6% of the total payroll. Table 2 below shows food-related industries in Indiana.

Table 2: Employment in food-related businesses in Indiana

Food-related business in Indiana (2009)	\$ millions		
	Employment	Payroll	Establishments
Support of Agriculture	n/r	n/r	169
Food Manufacturing	33,355	1,302	458
Grocery & Related Wholesale	10,663	420	441
Farm Product Raw Materials	2,299	113	206
Beer, Wine, & Alcohol	2,581	118	54
Farm Supplies, Wholesale	3,274	144	306
Food & Beverage Stores	48,103	841	2,470
Refrigerated Warehousing	1,863	74	22
Farm Product Warehousing		1	8
Food Services & Drinking	219,899	2,582	11,426
Totals	322,037	5,595	15,560
Indiana Totals	2,449,980	88,394	146,017

Source: Federal Census, County Business Patterns (2009). The entry “n/r” means not reported in an effort to protect confidentiality. The above data do not include farms, farm owners, or farm workers. Businesses in “support of agriculture” include input dealers, technical and professional experts, and others.

Note that these data cover only broad categories of food-related enterprises in Indiana, and cannot be considered a definitive tally of food-related employment. Clearly “refrigerated warehousing,” for example, covers nonfood items, and distribution services which carry a wide variety of products have been omitted since these data can not be tracked directly to food. Nevertheless, this is a good approximation that can easily be replicated year after year to track changes in the industry.

Major food manufacturers in the state include Red Gold, Clabber Girl, and Tyson.

However, while the number of food-related businesses has been rising for most of the past decade, employment has fallen off in recent years, and payroll is steadily declining (*see the next three charts*).

²¹ See Meter, Ken (2011). “Breaking our chains.” *Journal of Agriculture, Food Systems, and Community Development*. July 10. <http://dx.doi.org/10.5304/jafscd.2011.014.008>.

Chart 22: Number of establishments in Indiana’s food industries, 1998-2009

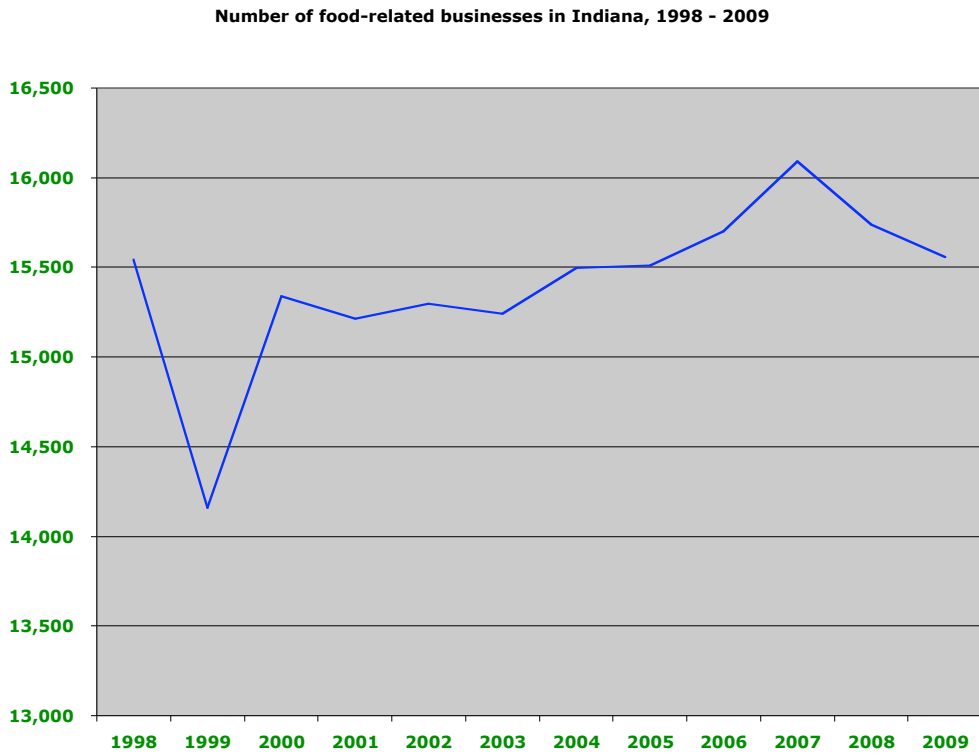


Chart by Ken Meter using data from the Federal Census, County Business Patterns (2009).

Chart 23: Employment in Indiana’s food industries, 1998-2009



Chart by Ken Meter using data from the Federal Census, County Business Patterns (2009).

Chart 24: Payroll earned by workers in Indiana’s food industries, 1998-2009

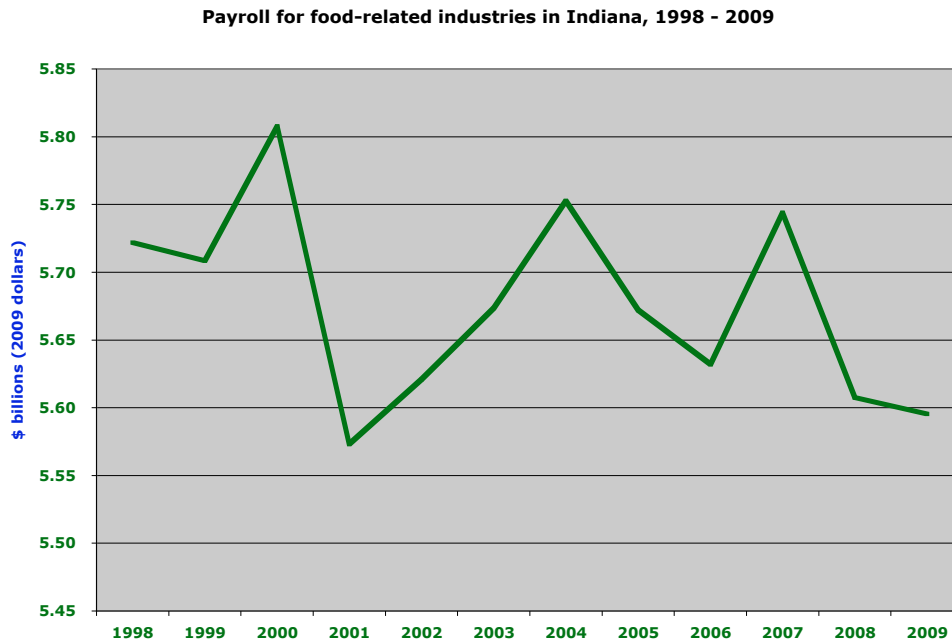


Chart by Ken Meter using data from the Federal Census, County Business Patterns (2009).

Using data from the Bureau of Economic Analysis, it is possible to see how personal income earned breaks down by type of food business. As Chart 25 shows, workers in dining establishments collect most of the personal income earned in the industry, but this is a matter of lots of workers earning fairly low wages. Personal income for dining establishments, grocery stores, and manufacturing are at best holding steady over the past decade; only net farm income is rising. This rise in farm income, as was shown in previous charts, shows an increase over the low levels of 2002.

Chart 25: Personal income earned by workers in Indiana’s food industries, 1998-2009



Chart by Ken Meter using data from the Bureau of Economic Analysis (2009).

Table 3: Percent distribution of food manufacturing employment in Indiana

	percent of jobs
Meat product manufacturing	26.2%
Bakeries and tortilla manufacturing	24.9%
Fruit & vegetable preserving & specialty foods	9.9%
Grain & oilseed milling	8.3%
Dairy product manufacturing	7.3%
Sugar and confectionary manufacturing	5.3%
Other food manufacturing	13.3%
Animal food manufacturing & seafood packaging	4.6%

Data compiled by Molly Mann, Associate Editor, Indiana Business Research Center, Kelley School of Business, Indiana University. Viewed at <http://www.incontext.indiana.edu/2008/february/5.asp>.

Molly Mann of the Indiana Business Research Center further points out that the two largest food industries in the state also happen to have the lowest payroll, with jobs averaging around \$30,000 per year, while grain and oilseed milling offers the best pay, with an average of \$56,000 per year. In all food industry categories, she adds, Indiana wages lag behind national averages.

Several farm observers noted that many of these lower-wage jobs are filled primarily by Latino and Burmese workers.

Food Consumers and Food-Related Health

This very brief treatment of the overall food industry should also be placed in the context of the overall consumer market in Indiana. Here, too, one finds some confusing trends.

Overall, Hoosiers earn \$218 billion of personal income each year. Moreover, this represents a 97% increase over the 1969 level of \$111 million, after adjusting for inflation. Note, however, that personal income began to decline in 2008.

Chart 26: Personal income for Indiana residents, 1969-2009

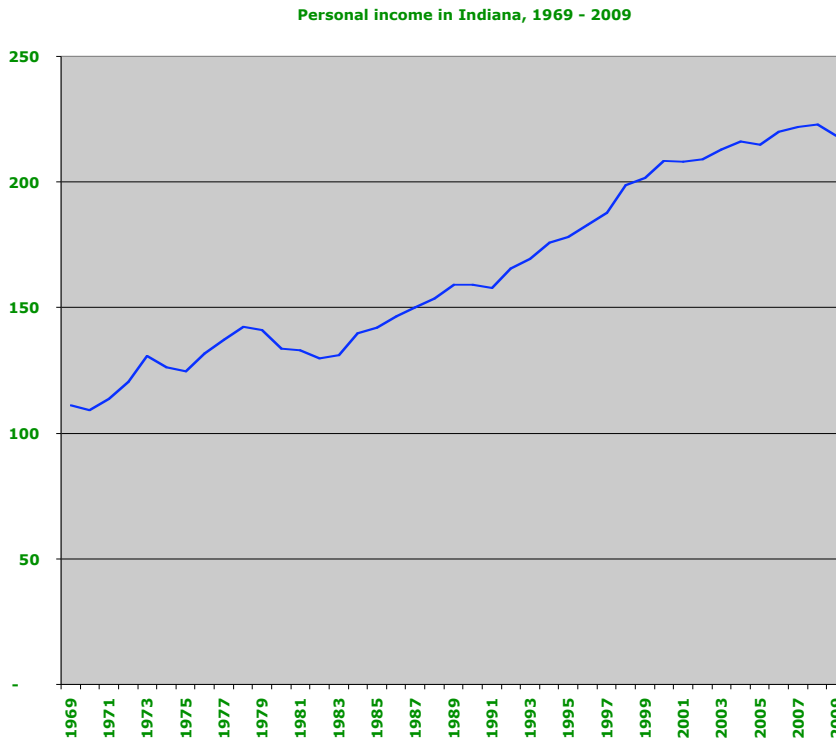


Chart by Ken Meter using data from the Bureau of Economic Analysis.

Despite this growth, Indiana is plagued by troubling trends. First of all, 28% of Indiana’s population lives below the poverty level at which children qualify for free or reduced school lunch (less than 185% of the “poverty line”).²² That is a total of 1.7 million Hoosiers.

These lower-income residents spend \$3.5 billion each year buying food,²³ including \$503 million²⁴ of SNAP benefits²⁵ (formerly known as food stamps) and additional millions in

²² Source: U.S. Census Bureau.

²³ Source: Compiled by Ken Meter using Bureau of Labor Statistics Consumer Expenditure Survey (2009), and Bureau of Economic Analysis (2009) data.

²⁴ This total is the 30-year average of benefits from 1980 to 2009; actual SNAP coupon use was far higher in 2010, at \$1.4 billion.

WIC²⁶ coupons (30-year averages, 1980-2009). The state’s 60,938 farmers receive an annual combined total of \$549 million in subsidies²⁷ (30-year average, 1980-2009), mostly to raise crops such as corn, wheat, or soybeans that are sold as commodities, not to directly feed Indiana residents. Moreover, 7% of Indiana’s households (over 456,000 residents) earn less than \$10,000 per year.²⁸

Chart 27: Household income in Indiana, 2005 – 2009

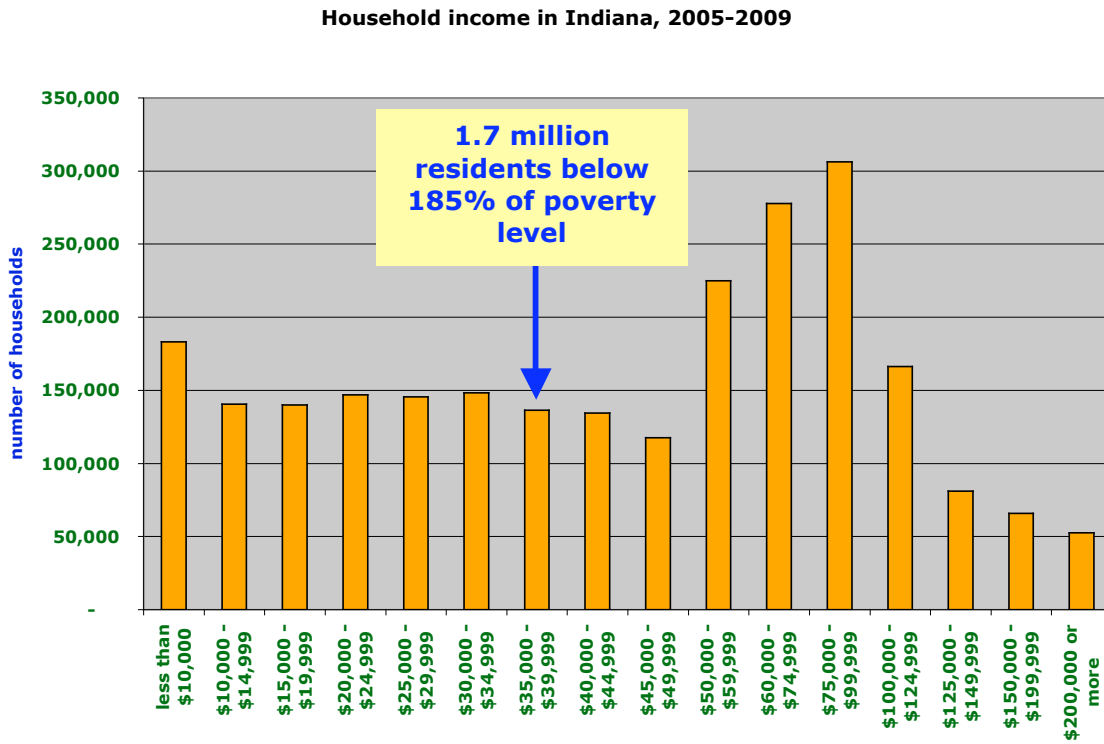


Chart by Ken Meter using data from the Federal Census. American Community Survey, 2005-2009.

Moreover, the Centers for Disease Control reports that 20% of all Indiana adults aged 18-64 carry no health insurance. This certainly makes a large proportion of the population vulnerable.

Yet even middle class and wealthier Hoosiers also face severe difficulties. In 2009 alone, state residents lost an estimated \$14.5 billion of net worth, because they took on debts far exceeding their assets. In a situation of rising personal income, this suggests that Hoosiers are trying to maintain their lifestyles by taking out loans. This is hardly a recipe for stability.

²⁵ SNAP means Supplemental Nutrition Assistance Program. Data source: Bureau of Economic Analysis (2009).

²⁶ WIC stands for Special Supplemental Nutrition Program for Women, Infants, and Children benefits.

²⁷ Source: Bureau of Economic Analysis (2009).

²⁸ Source: U.S. Census Bureau. American Community Survey, 2005-2009.

Moreover, these losses are part of a long-term trend. Over the past decade, as Chart 28 shows, Hoosier households have lost a cumulative total of \$150 billion of net worth.

Chart 28: Net change in household assets for Indiana residents, 1984-2009

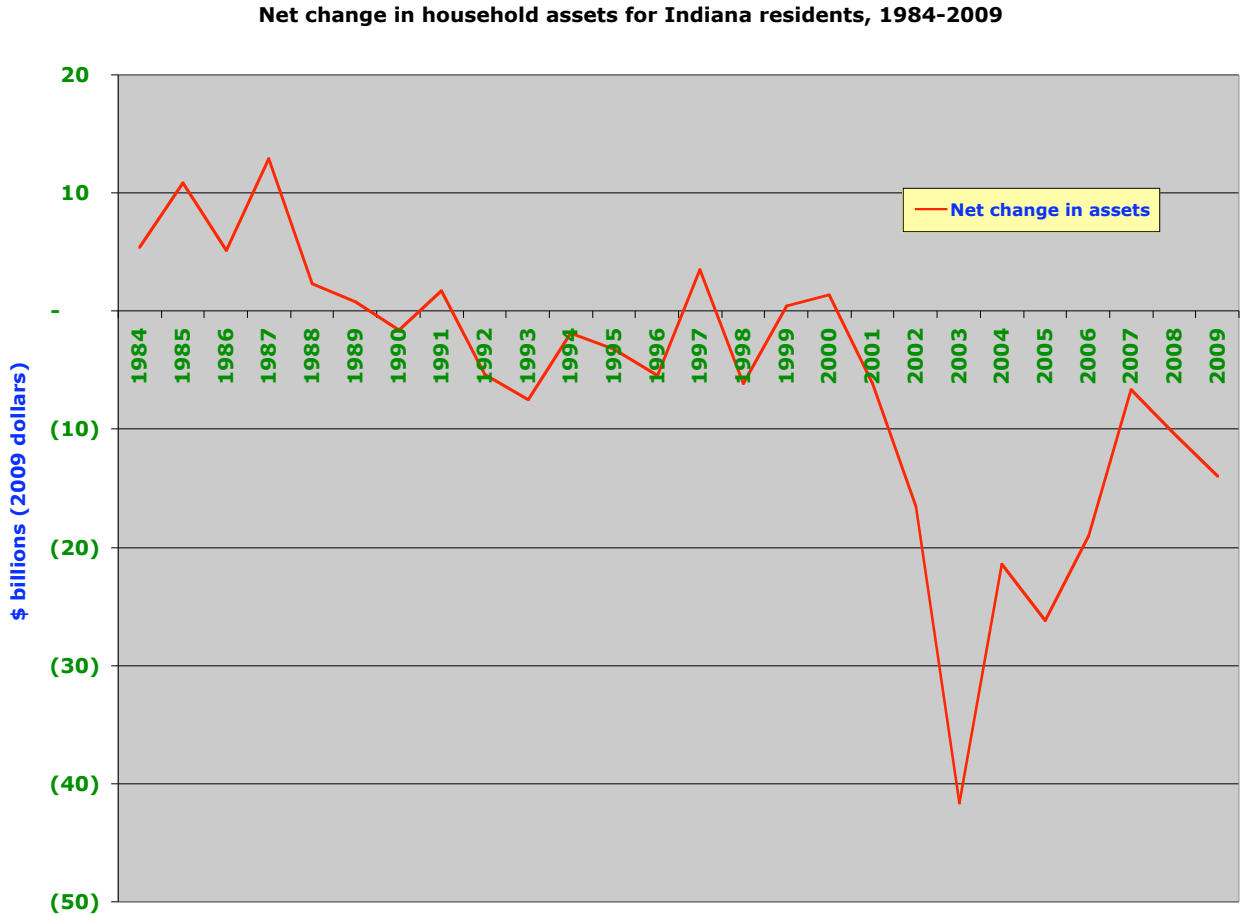


Chart by Ken Meter using data from the Bureau of Labor Statistics. Cumulative erosion of net assets totals \$150 billion since 2001. Note that these data are based on per-household averages for U.S. consumers reported in the Consumer Expenditure Survey. This is not regionally adjusted, and it assumes a constant household size over the period shown on the chart.

Nevertheless, Indiana consumers eat about \$16 billion of food each year. An estimated \$14.5 billion of this food is sourced outside of the state.

About \$10 billion of the food Hoosiers eat is purchased at grocery stores for home use. Home purchases break down in the following way:

Table 4: Indiana markets for food eaten at home (2009)

	\$ billions
Meats, poultry, fish, and eggs	2.0
Fruits & vegetables	1.6
Cereals and bakery products	1.3
Dairy products	1.1
“Other,” incl. sweets, fats, & oils	3.7

If Indiana residents purchased 15% of their food for home use directly from Hoosier farmers, this would generate \$1.5 billion of new farm income for the state. This level of purchasing is not a large shift — it would require each Indiana resident to purchase an average \$4.50 of food directly from Indiana farmers each week, or \$230 per person per year.

Food-related health conditions

As farmers cope with uncertain markets, as food manufacturers face a lack of growth, and as consumers wrestle with financial uncertainty, the American diet has taken a silent toll.²⁹

The Centers for Disease Control tracks a national epidemic of obesity that has broken out across the nation over the past two decades. In Indiana 66% of residents are overweight or obese, with 36% weighing more than they should, and 30% considered obese.

Diabetes has become a major health concern, as well, with 9.8% of Hoosiers diagnosed with diabetes. The medical costs for diabetes-related health conditions are estimated at \$3.7 billion for the state of Indiana — an amount that rivals the value of the annual corn crop.

About 48% of state residents report that they engage in 30 minutes of moderate or 20 minutes of vigorous activity 3 or more times a week. Only 21% of Hoosiers say they eat the recommended five fruits and vegetables per day, which is viewed by medical experts as a minimum diet to protect against cancer. Not all Hoosiers are covered by insurance, either — 18% of adults lack health insurance.

Meanwhile, food consumption habits contribute to the leading causes of death. A high-calorie diet, combined with a lack of exercise, accounts for one-fifth of the annual deaths in the U.S.³⁰ Six of the fifteen leading causes of death nationally are related to poor diet and low physical activity.³¹ Indiana certainly is part of these trends.

These conditions make all the more imperative the Indiana State Department of Health’s initiative to understand the connections between food, agriculture, and health.

²⁹ Unless otherwise cited, data in this section are drawn from the Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey, 2010.

³⁰ McGinnis, J.M. & W.H. Foege (1993). Actual causes of death in the United States. *JAMA* 270(18):2207-12; and Mokdad, A.H., J.S. Marks, D.F. Stroup, & J.L. Gerberding (2000). Actual causes of death in the United States. *JAMA* 291(10):1238-45 [with published corrections in *JAMA* (2005), 293(3), 293-294.]

³¹ Heron M., D.L. Hoyert, J. Xu, C. Scott, & B. Tejada (2008). *Deaths: preliminary data for 2006*. National Vital Statistics Report 56:16. http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_16.pdf.

Emerging Food Communities in Indiana

Interviews with Key Food Practitioners

The next six sections of this report offer commentary by seasoned food practitioners across Indiana. Experience has shown that insights from people in the field are essential in tracking food system dynamics, and that field interviews add considerable depth to the historical overview and economic trends noted above. Together, these offer a powerful overview of the Indiana food industry and critical trends or issues.

Each of the next six sections will present brief summaries of interviews with selected food system practitioners, organized around specific themes or business clusters. Early in each section, a map will show where interviewees work or live. Results from these interviews, along with findings from the historical and economic overviews, will be summarized in the final section, “Where does Indiana go from here?”

The Origins of the Local Food Movement in Indiana

Interviews included in this section:

Cooperation builds the movement

George Huntington, Bloomingfoods Co-op (Bloomington)

A talented chef

David Tallent, Restaurant Tallent (Bloomington)

Growth of the network

Local Growers' Guild (Bloomington)

The vision spreads across small towns

Debbie Trocha, Indiana Cooperative Development Center (Indianapolis)

Laura Gazarian, Orange County Homegrown (Paoli)

The Origins of the Local Food Movement in Indiana

By all accounts, the modern “local foods” movement in Indiana began, not on the fertile prairies of Lafayette, home to both the state’s best soils and its land grant university, but rather in an urban center among the gently folded hills of Bloomington, near Indiana University. At a very early stage, this city set about to create a host of programs that allowed residents to produce their own food, trained master gardeners in organic food production, and supported urban farming. It was this metro area, in other words, that understood as early as 1970 that it had to grow new farmers in a sustained and systematic way if it were to have better food options.

No one can recount a single incident that gave impetus to this movement. Certainly, university students and faculty came to question the wisdom of the war in Vietnam, arguing that the money it consumed was weakening Indiana society. Certainly, some food consumers decided their food choices were way too limited, and they sought whole grains, fresh fruits and vegetables, and higher-quality meats to eat. Certainly, some gardeners simply wanted to start taking action in ways that they could shape for themselves.

Michael Simmons, who currently coordinates many food initiatives for the city of Bloomington (a task that once included managing the city farmers’ market), credits an African-American resident, Willie Streeter, with being the spirit of the movement. Streeter made use of vacant city properties in the 1970s, performing what he called “guerilla gardening.”

Yet some of those vacant properties, the city feared, might have been contaminated with PCBs by pollution from a former Westinghouse factory. In an effort to ensure that gardeners were not threatened by these toxins, the city carved out a safe place for neighbors to garden together. Converting land in Winslow Woods Park into a community garden in 1984, the city created the nucleus of what is now an extensive community garden program. Today, the (officially named) Willie Streeter Community Gardens hosts nearly 200 plots including 116 organic garden plots.³²

The city also acted with great foresight, adopting policies that other urban areas are just now beginning to consider. City officials decided that residents who grew food on city-owned community garden plots could choose to farm commercially, Simmons adds. It was, in other words, permitted for residents to make private gain on city-owned land. Urban farming is not simply “permitted,” it is encouraged. Furthermore, to improve the quality of the soil, the city adopted standards setting out criteria for gardening organically on city property. The city also runs a “train-the-trainer” program to ensure that a core of master gardeners knows organic gardening techniques.

By 1996, this effort had seasoned enough that the Community Kitchen of Monroe County was awarded a small federal grant of \$40,000 by the USDA Community Food Projects in the

³² Of these plots, 68 are sized 10' x 20' and 48 are sized 10' x 10'. The garden also holds 54 conventional garden plots (10' x 20'), and 10 raised beds (4' x 8' x 2.5').



Map 2: Location of interviews with local foods pioneers

federal program's first year of operation. The money was awarded so that the Community Kitchen could launch the Crestmont Community Gardens, located near the city's largest public housing site, allowing residents to grow fresh produce for their own consumption, or for sale. Created in 1997, the garden was given to the city the next year, and refashioned in 2011 when the Butler Park gardens opened.

Butler Park Community Gardens, located in the Rev. Ernest D. Butler Park at the intersection of West Ninth and North Fairview Streets, has 45 plots that are used solely for organic gardening. On the site, Mother Hubbard's Cupboard Food Pantry also operates a hoop house (a light-framed greenhouse also known as a high tunnel or poly house) as part of a youth training program.

In 2011 the city's Community Garden Program, in partnership with Mother Hubbard's Cupboard Food Pantry, set out to test a new approach to community gardening at Crestmont, borne out of the rising economic uncertainty of our time. Rather than hosting individual rental plots as in past seasons, the site will become a collaborative garden, coordinated by Mother Hubbard's Cupboard. All gardeners at the site will garden the entire space together, sharing their harvest with residents of the Crestmont community. Surplus produce harvested from the gardens will be distributed through the Mother Hubbard's Cupboard Food Pantry.

Recognizing that good gardeners often learn their skills at an early age, the city also supports the Green Thumbs Garden at the Banneker Community Center. This project, at the site of a former African-American school on the city's west side, helps youth learn the art of organic gardening. Harvested foods are distributed to community members in need through the "Plant a Row for the Hungry" campaign.

This campaign, sponsored by a cluster of local firms including Bloomington Parks and Recreation, Worm's Way (a garden supply business on State Road 37), Hilltop Garden and Nature Center, Bloomingfoods Market and Deli, Mother Hubbard's Cupboard, and Hoosier Hills Food Bank, encourages gardeners to plant more than they need for themselves, with the surplus distributed through the food bank.

A young woman's senior thesis, presented to the city's forester, resulted in a planting of 60 fruit trees just south of the Willie Streeter Community Gardens. More than 100 people chipped in to help with the planting, Simmons says, adding that this was the first such endeavor in the U.S.

A second grant from the federal government in 2006, this one considerably larger at \$300,000, allowed the Middle Way House (a shelter for women) to create a rooftop garden, and to launch a catering business so residents could develop a new income source.

Now, Simmons adds, the city is taking more solid steps to formalize a more comprehensive approach to sustainability. This new initiative was sparked by the growing awareness that oil supplies are peaking, and that the city is very vulnerable unless it begins to produce more of its own essentials. As one tangible step in that process, the city hauls some of its organic municipal wastes to a local business, Good Earth Composting, which transforms a "waste" stream into fertility for local gardeners and farmers.

What is most notable is that civic leaders in Bloomington recognized very early in the process that the public sector needed to play a strong role in creating new food opportunities for residents. In particular, it was recognized that market mechanisms would not be sufficient in themselves to ensure that low-income residents could gain access to quality food; this required public action. This has also been very responsive public action by a city government in a relatively small urban center. Higher levels of government have done little to support the city. “I’m not aware of any state support for this work,” Simmons adds. The federal government has limited itself to providing small grants that helped local leaders achieve a local vision; it did not attempt to dictate the terms of success.

One of those public actions by the city government was to open a farmers’ market in 1974. Starting out in a small space behind the old City Hall, it has blossomed into a social center in the parking lot of the new City Hall. Farmers, entertainers, and food preparers all sell their wares here. The Saturday market now attracts growers from over a dozen counties surrounding the city, Simmons adds.

A winter farmers’ market is held in the Harmony School gymnasium from December through March, and weekday markets are also held during the growing season at two of Bloomingfoods Co-op’s suburban locations.

Cooperation builds the movement George Huntington, Bloomingfoods Co-op (Bloomington)

Bloomingfoods Co-op itself is a key element in creating the local food economy of Bloomington, but its importance centers on unleashing and responding to a civic interest in eating healthier foods, many from local farms, and in creating a solid local economy. Launched in 1976 with a \$30,000 loan from a local resident, Cathy Canada, and smaller investments from 150 founding members, the co-op opened in a vacant carriage house near downtown.

Today, Bloomingfoods boasts 9,200 members — nearly ten percent of the city’s population — and counts itself among the city’s top 20 employers. With 250 full- and part-time employees, the co-op supports a payroll of \$4 million per year. Having expanded into two new stores on the eastern and western sides of the city, Bloomingfoods now contemplates opening a fourth store.

That is remarkable growth, given that Bloomington, after all, had many grocery stores before the co-op was opened, and that some considered the effort too small to matter. Yet the deliberate expansion of the co-op also shows how slowly such growth occurs. To Americans accustomed to a fast-paced business style, it is a reminder that truly lasting work often requires exceedingly patient base building.

George Huntington, general manager for Bloomingfoods for seventeen years, says he was not involved in the co-op’s early days, but he credits a back-to-the-land movement that erupted in the 1970s as a main motivation for the birth of Bloomingfoods. “Folks here

became the farmers. They wanted to produce fresh foods, not commodities. There was also a committed group who decided they could make a good living by farming.”

That impulse to return to the land was hollow, however, unless there were places to sell and buy food. Here, Huntington adds, both the co-op and the city-owned farmers’ market (initially directed by Michael Simmons) played a key role. “We now have the largest producer-only farmers’ market in the state, with 10,000 people shopping on a peak Saturday.”

Third, Huntington credits the city’s commitment to supporting local foods businesses. “This was all embraced by the city fathers,” he adds. “The market is run by the city’s Parks and Recreation Department, and civic officials recognized this was an important part of the economy.”

Still, the co-op itself also opened its doors to the entire community. This was not always practiced by upstart co-ops in their early days, and even falls outside of the business model of some contemporary co-ops. “One of the co-op principles we take very seriously is that we are responsive to the concerns of the community,” Huntington adds. “We try to be present at community events, and we try to give back. We work with every possible group and demographic.” This support might range from a food preparation workshop to a choral performance or support of a marching band, he says.

Despite the growth of all of these food stores over the past 35 years, Huntington regrets that his store and many of the others are forced to rely upon established food distribution channels. He would like to see more of this business fall under the umbrella of cooperatively run businesses. “We’re asking, what if we could supply the other stores across the state ourselves with our own trucks, and bring food from farms across the state into our network?” One model, he adds, is a similar distribution effort run by La Montanita Co-operative, headquartered in Santa Fe and Albuquerque, New Mexico.³³ Bloomingfoods now operates a central food production facility, and has acquired a few refrigerated trucks as a result. “This would allow co-ops in the smaller towns to start up without having so much capital, because we could carry the trucking cost.”

Huntington also sees farmers who raise livestock encountering immense obstacles due to a lack of meat processing facilities with surplus capacity to handle farm animals. The co-op has explored whether a mobile processing unit would make sense, given this need.

Ultimately, however, Huntington recognizes that, although the Indiana co-ops are likely to play a leadership role in strengthening local foods businesses, the challenge is larger than the co-ops themselves can underwrite. Just as the growth of food businesses in Bloomington required civic action by responsive local governments, Huntington adds, the state of Indiana will have to play a strong role in building a new “regional system of production and manufacturing” — for food as well as for other consumer items.

³³ See Meter, Ken (2009). “Tipping the Scales for Local Foods: Co-ops play a vital role in economic recovery.” *Cooperative Grocer*, Nov. – Dec. Available at <http://www.cooperativegrocer.coop/articles/2009-11-19/tipping-scales-local-foods>.

“My grandfather used to tell me,” Huntington concludes, “ ‘The food I ate, the clothes I wore, and the furniture I sat in or slept in — it all was basically made within 100 miles of where I lived.’ ” Huntington would like to see that day return.

A talented chef

David Tallent, Restaurant Tallent (Bloomington)

Certainly, Bloomington understood the importance of residents producing food for themselves, and also understood that expanding retail access for consumers was critical. Yet another element of the local foods picture involved eating local meals at restaurants. This took a bit longer to take root, but it attracted a native Hoosier who now focuses on a local menu in downtown Bloomington after being trained at the Culinary Institute of America in Hyde Park, New York.

David Tallent admits he was slow to grasp the opportunities that local food could provide. He never went to the farmers’ market in his early days as a chef, before he went to culinary school, he says. “I just called Sysco, and they delivered,” he recalls. “That was just the way it was.”

Yet after eight years working as a chef, Tallent decided to get formal culinary training. As a student cooking for a gourmet restaurant in the Hudson River Valley, Tallent noticed that the head chef stopped at the local farmers’ market frequently. When Tallent finally had a chance to run his own restaurant (Tallent’s in downtown Bloomington), he made a priority of heading to the market to develop connections with the growers. At the end of the market day, he offered to buy what was left unsold so they would not have to dispose of it. As he got better acquainted, he asked a few farmers if they would supply his restaurant.

Actually, the farmers were reluctant to sell. “I tried that before,” they’d say. These seasoned farmers realized that restaurants do not buy in large volumes. These farmers had never received the price they felt they deserved as farmers. Tallent admits it was a tough sell. “It is a little like getting married to someone,” he emphasizes. “You are in with them for better or worse.”

By forming close relationships with the growers, Tallent managed to develop strong mutual loyalties, which helped create business opportunities. “Whether the farmer came in with five pounds or five thousand, I would buy all I could.”

Now, Tallent’s restaurant features an exceptionally inventive menu with offerings from about a dozen local farms. “Most of this food is delivered directly by the farmer to the restaurant,” he adds. In addition, “There are a few larger farmers who can supply tomatoes, squash, peppers, greens, corn, or sweet potatoes through commercial distributors.” He relies on Piazza Produce in Indianapolis (*see page 76*) for these shipments. Yet Tallent still goes to the farmers’ market to find out what is new, and to supplement what his suppliers provide.

Even with all of these options, Tallent wants to do more. He would like, for example, to buy through an Amish and Mennonite produce auction west of Louisville. For now, he is focused on some specific items that he finds hard to get; he likes to use root crops but

cannot get as diverse a selection as he would like of turnips, rutabagas, parsnips, beets, or potatoes.

Toward this end, he is holding discussions with several staff at Bloomingfoods about distribution. “We could bring more restaurants into local foods if we had broader reach with our distribution. Most chefs would like to make only one call,” and have their order arrive. In addition to the notion of an Indiana distributor, there have been discussions about a long, circular distribution network that would run all the way from Indiana to Arkansas. The idea would be that the southern states can ship food north early and late in the season, and Indiana can ship foods to the south on an opposite cycle, so trucks could be full traveling both ways.³⁴

Locally, growers Andy and Amy Hamilton have begun to distribute food for other farmers part-time, and have purchased a van with a cooler to carry winter squash. Tallent sees potential in Community Supported Agriculture (CSA) farms in the region pooling their distribution efforts through such informal channels.

Another very practical step he has taken has been to use the restaurant’s kitchen in off-hours to prepare foods during harvest season for later use. Last year, he put up two dozen quarts of persimmons, 30 quarts of corn, and quantities of strawberries and tomatoes that he could serve in the off-season. Tallent has also found hoop house growers that can source local microgreens in the cold months, replacing former suppliers in Ohio.

All told, however, Tallent admits that this work does not bring an immediate harvest. “It’s definitely going to take a long time,” he adds. Still, he takes pride in the fact that he has nurtured several young Bloomingtonians by hiring them to work at his restaurant, where they can learn more about the source of their food and develop an emotional connection to the land and to the farmers. “I see these things get ingrained in them,” and he knows there will be benefits decades down the road.

When asked what kind of role the state could play in advancing his vision, Tallent said, “It’s all grass roots. The state has not helped at all.”

Growth of the network Local Growers’ Guild (Bloomington)

Knitting all of this activity into a more coherent vision is the Local Growers' Guild, which calls itself “a cooperative of farmers, retailers, and community members dedicated to strengthening the local food economy in southern Indiana through education, direct support, and market connections.”

³⁴ Some state leaders point with great pride to an expanded proposal that would link Florida growers to Chicago by rail, often called the “Green Line.” Its purpose would be to convey fresh produce to Indiana and Chicago on a dedicated rail line to be built by CSX. It is also hoped that Indiana produce would be shipped to Florida when the weather is too hot in the south for proper growing conditions.

To this end, the Guild publishes a Local Growers' Guide every spring that lists local growers and shows consumers how and where they can buy local foods. At an annual Winter Guild Gathering, growers and buyers connect with each other, and also take part in educational workshops. The Guild also runs the Bloomington Winter Farmers' market, and sponsors a Going Local Week.

Food co-ops take root across the state

Bloomington is not the only Indiana town where food co-ops have taken root. Others, inspired by this example, have followed suit. In fact in most of the larger cities of the state, groups of people have formed to gain access to better foods. Bloomingfoods itself devotes considerable attention to growing new food cooperatives. For the past two years, the co-op and the Indiana Cooperative Development Center have joined forces to host an annual conference to improve the practice of those who start new co-op stores. They are now planning their third annual gathering.

When this analyst visited Stone's Throw Co-op in Troy, Ohio, in 2010, the energetic organizers there had searched the U.S. for co-ops they wanted to emulate. Bloomingfoods was their most beloved model. Bloomingfoods has also partnered with a national "Co-op 500" campaign that has raised funds to foster new co-op groceries.

"There is a huge desire in the state of Indiana to open new businesses related to food," Huntington continues. "When things get rocky economically, people look inward. They realize, once they think about it, that if people are going to have any control over food [trade] they have to own it." He also finds that these reflective Hoosiers begin to realize that for all of the promise America holds of feeding the world, "We may be perilously close to not being able to feed ourselves in a sustainable way in this country."

Bloomington certainly is not the only place to grasp the potential for local and sustainably raised foods. Cissy Bowman credits Clinton Goins, who farmed organically long before there were any certification programs, with being the pioneer of organic agriculture in the post-War era. The first farmer to get certified, she recalls, was Orvil Shrock, who raised organic soybeans for a manufacturer of soy sauce.

Just as Bloomingfoods opened in 1976, a food buying club formed in Fort Wayne. Assistant General Manager Sheila O'Rourke says that the club was formed by residents who wanted "cleaner food — organic when they could get it." Its first drop-off site was a church basement. Now open as Three Rivers Natural Grocery, the co-op has 1,000 members, and has expanded twice into what O'Rourke considers a mid-sized retail location. She adds, "we try to sell 75% or more of our food from local sources during harvest season. But this was a rough year," due to weather.

Five years later, in the town of Goshen, Maple City Market organized. The co-op's slogan is, "Maple City is about growing closer — closer to the food you eat by knowing more about its ingredients, closer to the Earth by realizing your impact, closer to the people who provide that food by buying local or fair-trade, and closer to those around you by becoming a member or the Market's community." Its website adds, "You vote with your every dollar —

shopping at the co-op puts your money back into the community and supports local and organic producers.”

It took more than two more decades for the next wave of Indiana co-ops to emerge. Evansville’s River City Food Co-op was organized in the fall of 2005. Its 25 founding members wanted “a place to buy high-quality organic, natural, and bulk foods,” the co-op’s website recalls. The store opened in the rent-free backroom of a house known as the “white house” at 116 Washington Avenue, and has since expanded. It was a bold step, given that many view Evansville as a prime test-market for fast-food chains.

That same year, a group of residents held a meeting in Paoli to address their “inability to purchase healthy, organic food grown locally.” Ultimately they founded the Lost River Food Co-op, which formally opened in 2008. Now Lost River purchases products and services from over 90 businesses in the area, including more than 40 farmers and food providers. According to the co-op website, 67 cents of every dollar spent by Lost River customers is channeled through local suppliers.

Almost simultaneously, members of the Earlham College community near Richmond formed a buying club to gain access to healthier foods. Due to slow growth, the group ultimately decided they needed a storefront in the city of Richmond if they were to attract sufficient members and customers. With \$19,000 of start-up capital the new store was opened in 2009. Now the co-op board is exploring reorganizing themselves as a nonprofit in order to have greater access to grant funds for expanding their facility.

Larger towns are now joining in on the trend. In the fall of 2010, Pogue’s Run Grocer opened in a lower-income neighborhood of Indianapolis. Decorating its remodeled storefront with bold, colorful paintings, the co-op has established a welcoming tone and offers a limited selection of local and sustainably raised foods.

Terre Haute is also building the foundation for a new cooperative food store, to be called Terre Foods Cooperative Market. Its founding board has completed a business planning process and is now entering its effort to open a storefront.

Still another co-op, The Columbus Cooperative Grocery & Market, is modeling itself directly after Bloomingfoods. What is most unique about the Columbus story is that interest was so high in bringing locally raised foods to Columbus that two separate groups began meeting independently of each other, and without even knowing of the other’s existence. Advisers from Bloomingfoods helped unite the two groups into a single effort.

The Purple Porch Co-op in South Bend says its goal is “to make our community stronger by focusing on local resources.”³⁵ Run by volunteers, the co-op operated as a buying club starting in May, 2009, delivering food through a Montessori school until an old warehouse was purchased by several community members to provide the co-op a more permanent home. One of the co-op’s first priorities was to establish their capacity to accept SNAP

³⁵ Knapp, Anna (2011). “Looking for local, organic or fair trade food? Purple Porch Co-op is the place.” South Bend *Examiner* / Green Living, May 29. Viewed August 17, 2011, at <http://www.examiner.com/>.

benefits [food stamps] so low-income consumers could more easily buy food from local farmers at the store.

A second South Bend cooperative, the Monroe Park Grocery Co-op, holds an even stronger focus, seeing its mission as “helping low-income families afford organic food.”³⁶ Thus, the grocery offers a limited supply of goods, including “healthy staples from each food group and a few essential household items.” News coverage of the co-op states that “All foods are low-cost and will be available to those who use SNAP benefits [food stamps] and WIC [Women, Infants, and Children] coupons.” Not only does the co-op purchase food directly from local growers, it also allows shoppers to special order from local farms. The store also purchases second-quality produce from local growers at a lower cost, and buys wholesale shipments when possible. A nearby community garden also provides food to the store for sale at its weekly market day.

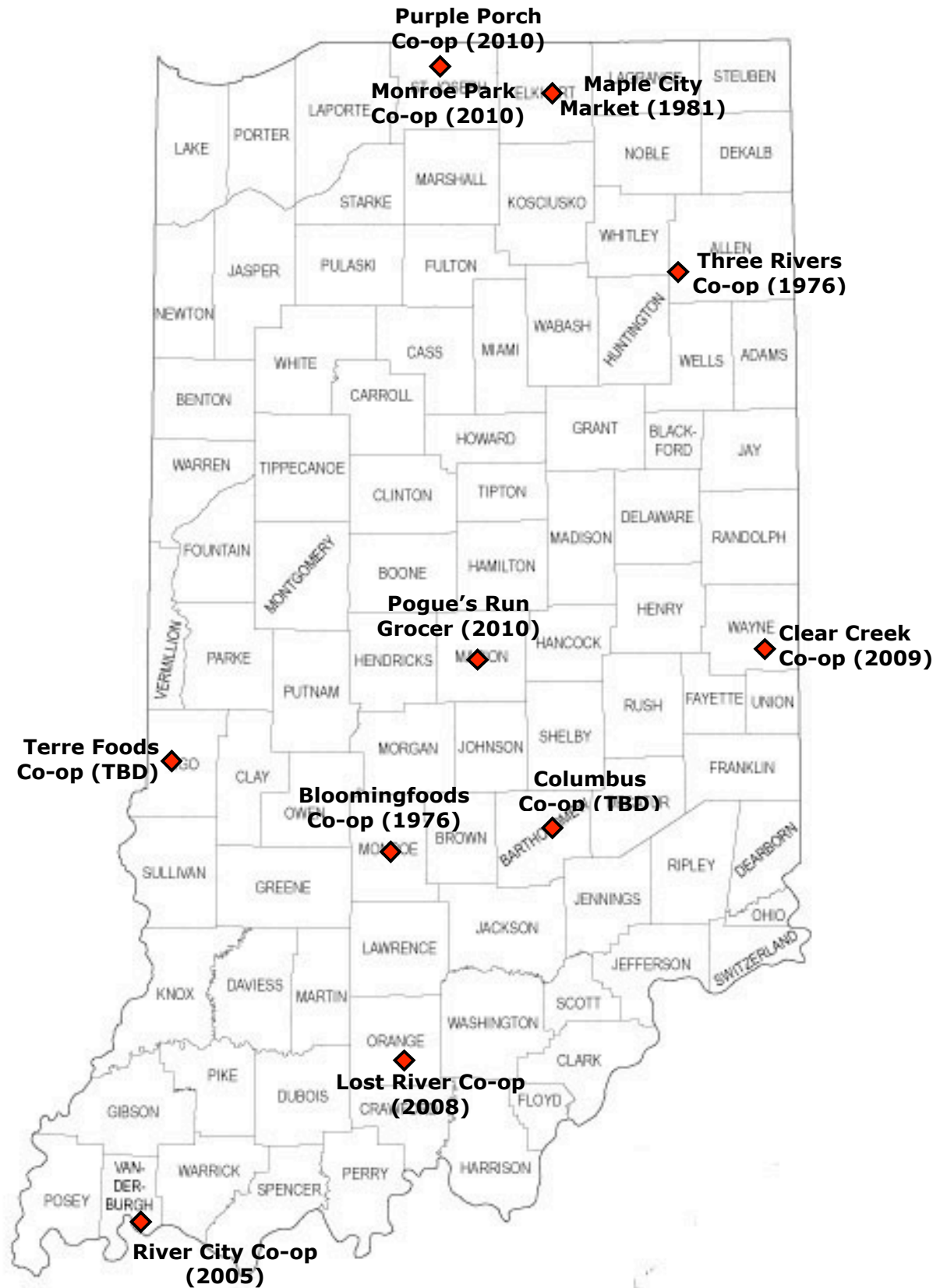
Indiana Food Cooperatives:

(See Map 3 on next page)

- Bloomingfoods Cooperative – Bloomington (1976)
- Three Rivers Natural Grocery – Fort Wayne (1976)
- Maple City Market – Goshen (1981)
- River City Food Co-op – Evansville (2005)
- Lost River Food Co-op – Paoli (2008)
- Clear Creek Co-op – Richmond (2009)
- Pogue’s Run Grocer – Indianapolis (2010)
- Purple Porch Co-op – South Bend (2010)
- Monroe Park Grocery Co-op – South Bend (2010)
- Terre Foods Cooperative Market – Terre Haute (still to be opened)
- Columbus Cooperative Grocery & Market – (still to be opened)

Note: Another cooperative planned for Mooresville appears to be on hold.

³⁶ Knapp, Anna (2011). “Monroe Park Grocery Co-op, a great way to get affordable organic food.” South Bend *Examiner* / Green Living, May 14. Viewed August 17, 2011, at <http://www.examiner.com/>.



Map 3: Food Co-ops in Indiana, 1976 - 2011

The vision spreads across small towns

**Debbie Trocha, Indiana Cooperative Development Center, and
Laura Gazarian, Orange County Homegrown**

Debbie Trocha, executive director of the Indiana Cooperative Development Center (ICDC, whose offices are located inside the state headquarters of the Indiana Farm Bureau), says “I see a groundswell of interest in local foods. People are not necessarily looking for organic food. They are asking, ‘Where did my food come from? Who grew it?’ There is an emerging interest in taking in the whole experience of a farm,” she adds, with people asking to visit the farm, meet the farmers, see animals first hand, and perhaps even volunteer to help with the chores.

She points to the Lost River Co-op as an example of a small co-op that has persisted against great obstacles in tapping into this consumer interest. “This effort was led by transplants into Indiana. They did everything right. Even though their formal feasibility study said it would not work, they kept going. Four years later, after having been told they ‘shouldn’t be here,’ they are doing three-quarters of a million dollars in sales, and have nine staff, both part-time and full-time. They have really defeated the odds.”

Moreover, Trocha adds, the community has opened a variety of cooperative businesses that add to the grocery’s presence. “Orange County has a wonderful farmers’ market with up to 100 vendors. They have a recycling co-op and an artists’ co-op.”

The county has also organized a collaboration called Orange County Homegrown (OGH). While it is not a cooperative, OGH maintains close ties with Lost River Market & Deli. The story of how it grew shows how building strong community connections can help magnify local food work.

Orange County Homegrown has two paid staff: Laura Gazarian, market manager; and Alicia Wilson, event & volunteer coordinator. Gazarian and her husband recently moved from California, and she is eloquent in her praise for those who came before her. “I inherited a wonderful gift. Orange County got it right. I was lucky to land in a place that had built such great groundwork.”

The Gazarians were drawn to the community due to the presence of the food co-op and the farmers’ market. They liked the idea that “anyone can help make this happen.” Another draw was having a brother and sister-in-law in the area.

Prior to moving to Indiana, she followed the progress of the farmers’ market online via social media and the website. After she arrived, a job opened up and she quickly applied. Orange County Homegrown, combined with the farmers’ markets in both Orleans and in the Valley, weave a solid fabric of community among the residents through an interlaced set of activities, she says.

For example, Orange County Homegrown hosts a lawn chair concert on the first and third Thursdays of every month. This rotates between Lost River Market & Deli, and the French Lick Hotel area. Most of the performers are local, she continues, but some bigger names

also come through. This brings residents together. The group has also sponsored murals on buildings, and a river watch project to protect water quality.

Currently, Gazarian's goal is to open new farmers' markets in the county. "It isn't feasible for many county residents to come to the Saturday market (in Orleans) and likewise, to travel to the Tuesday market in the Valley. For many people, it is too far to drive." So, Homegrown will launch a third market in Paoli itself. "I am amazed at the diversity of people who shop at these markets," Gazarian adds. "It is amazing for such a small county."

Homegrown asks farmers who sell at the market to report their sales anonymously, so they can track the economic impact of the market. Last season, the combined markets logged \$90,000 in sales over 24 weeks, and only one-third of the growers reported their sales. "That is a lot of economic activity in a small county like this. Even better, it means people don't have to leave our county to do their shopping." With Louisville an hour away, and with Indianapolis a little over two hours' drive, it is critical that the county keep local consumers shopping at home, she adds.

Gazarian sees more young families showing up as vendors as the American economy flounders. "People tell me, 'I'm using my garden to save my house.' By this, they mean the money they earn goes to their house payment. They keep some of the harvest to put food on their kids' plates."

Yet the markets also play an important role in attracting visitors from outside, as well. "As we gain more stability," Gazarian continues, "We have more repeat customers. People who come to the resorts here network back to us, and tell their friends to buy local when they are visiting local."

Using a USDA Farmers' Market Promotion Program grant, the Orange County market hired a market manager for two years to build the market's presence, and also to offer electronic access (Electronic Benefits Transfer, or EBT) to low-income residents. "Some of the recipients tell me they are so pleased they can buy higher quality meats and vegetables by using their SNAP [food stamp] benefits at the market." The market also sets out donation boxes, so farmers with surplus produce at the end of the day can donate it to nearby food shelves. "Once, we were given a huge bin of cucumbers that were left at the end of the market day, along with other produce. The gift was so large that the food-bank driver's van was completely filled with donated produce."

Gazarian and her husband raise a variety of livestock, including registered Nubian dairy goats from their California farm, Dorper and Katahdin sheep, pigs, chickens, and Kiva Turkeys. They also have a large-scale garden and orchard project.

Striving for critical mass

ICDC's Trocha thinks the discussion about local foods in Indiana hasn't reached a critical mass. "Although Hoosiers across the state are actively involved in local foods, there is no state-wide initiative or policy."

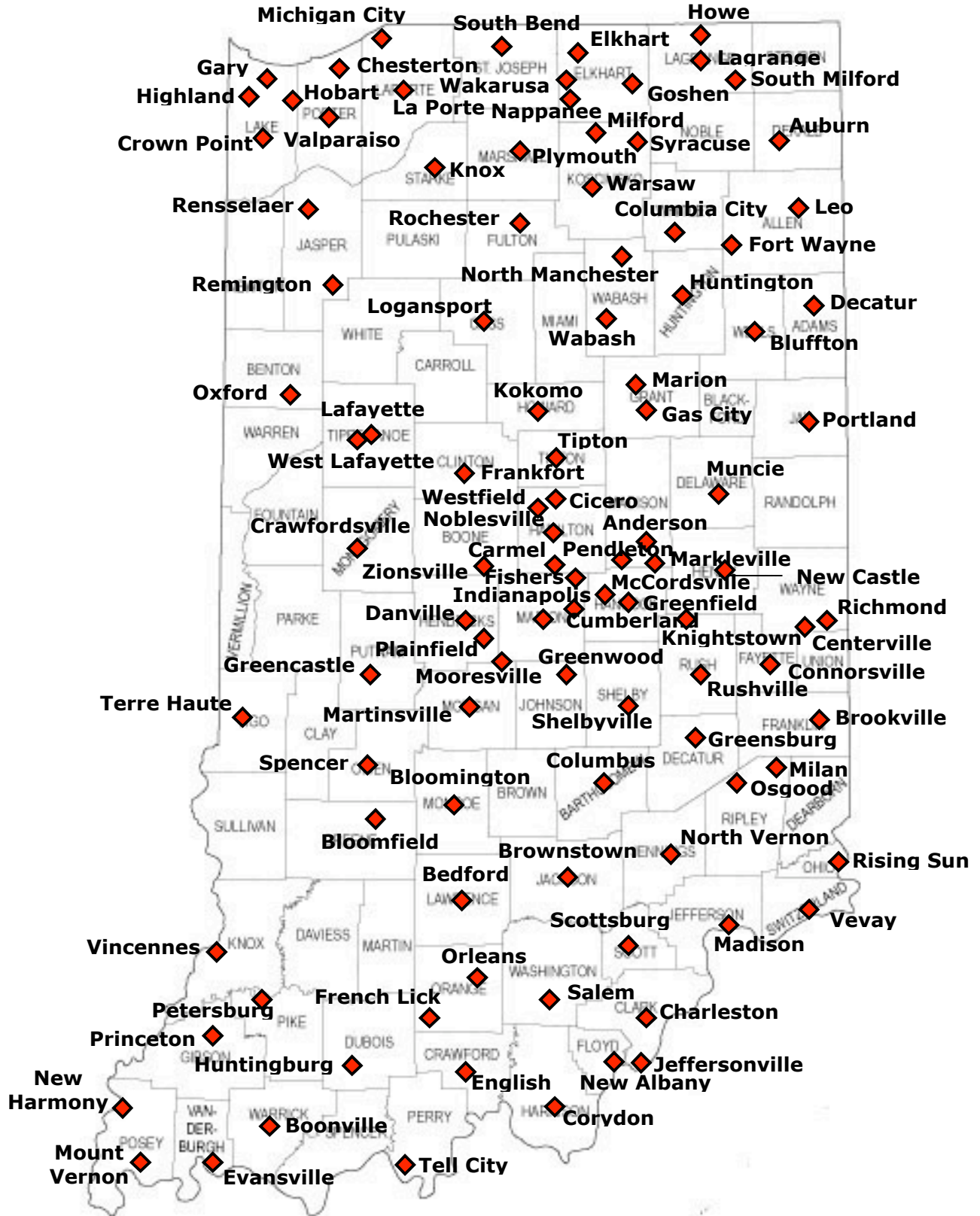
Leadership in local foods and groceries has come from Bloomingfoods Co-op, which she calls the “grandfather” of the co-op movement. “Their leadership is awesome,” Trocha adds. “They are so integrated into the community. If there is a big event in Bloomington, you can bet Bloomingfoods was part of it. I would hold them up as a model.”

Yet Trocha recognizes that the emergence of interest in local foods is severely limited by a lack of funding. “Who will fund this work? The USDA? Wealthy individuals?” It was a question that kept recurring across the state.

Farmers’ Markets also spread

In many Hoosier communities without the resources to form their own retail food store, farmers’ markets have become a prime way to promote economic development, create opportunities for emerging farmers, foster civic cooperation, and bring visitors to urban areas.

In fact, over 100 farmers’ markets have sprouted across the state, as Map 4 on the next page shows. Almost every county has one — 72 of Indiana’s 92 counties — and 64 of these are located in a county seat, showing their importance as civic gathering points.



Map 4: Indiana Towns with Farmers' Markets (USDA)

Indiana’s Diverse Produce Industry

Gina Sheets, Indiana State Department of Agriculture Director of Economic Development, estimates that “98% of the fruits and vegetables we eat are imported into Indiana.” She sees many opportunities for producing more of those essential foods inside the state. Her department is exploring the construction of a facility — possibly mobile — that can freeze fresh fruits and vegetables rapidly, immediately after harvest, to retain their nutrients. Devising this processing capacity will make it easier for Hoosier farmers to find markets for their produce, she adds.

Interviews included in this section:

Setting a high safety standard

Mike Lewis, Piazza Produce (Indianapolis)

Produce by the hundreds of acres

Levi Huffman, Huffman & Hawbaker Farms (Lafayette)

Growing produce at a large scale

Norm Conde, Melon Acres (Oaktown)

Offering technical advice to produce growers

Dan Egel and Shubin Saha, Purdue Extension (Vincennes)

Raising produce in a small greenhouse

Abe Graber, Jr. (Loogootee)

Produce auction helps Amish families recover from factory layoffs

Clear Spring Produce Auction (Lagrange)

From hog barn to greenhouse

Neil Moseley, Pleasant Acre Farms (Clarks Hill)

Indiana's Diverse Produce Industry

Setting a high safety standard

Mike Lewis, Piazza Produce (Indianapolis)

While all of this local activity flourished across Indiana, an efficient, well-honed machine has reliably transported produce on a daily basis, from farms across the U.S. to Indiana consumers through larger commercial channels. Indeed, all of the people who are chronicled in the co-op section above relied at some point upon produce sourced by three firms who convey millions of dollars of product very reliably.

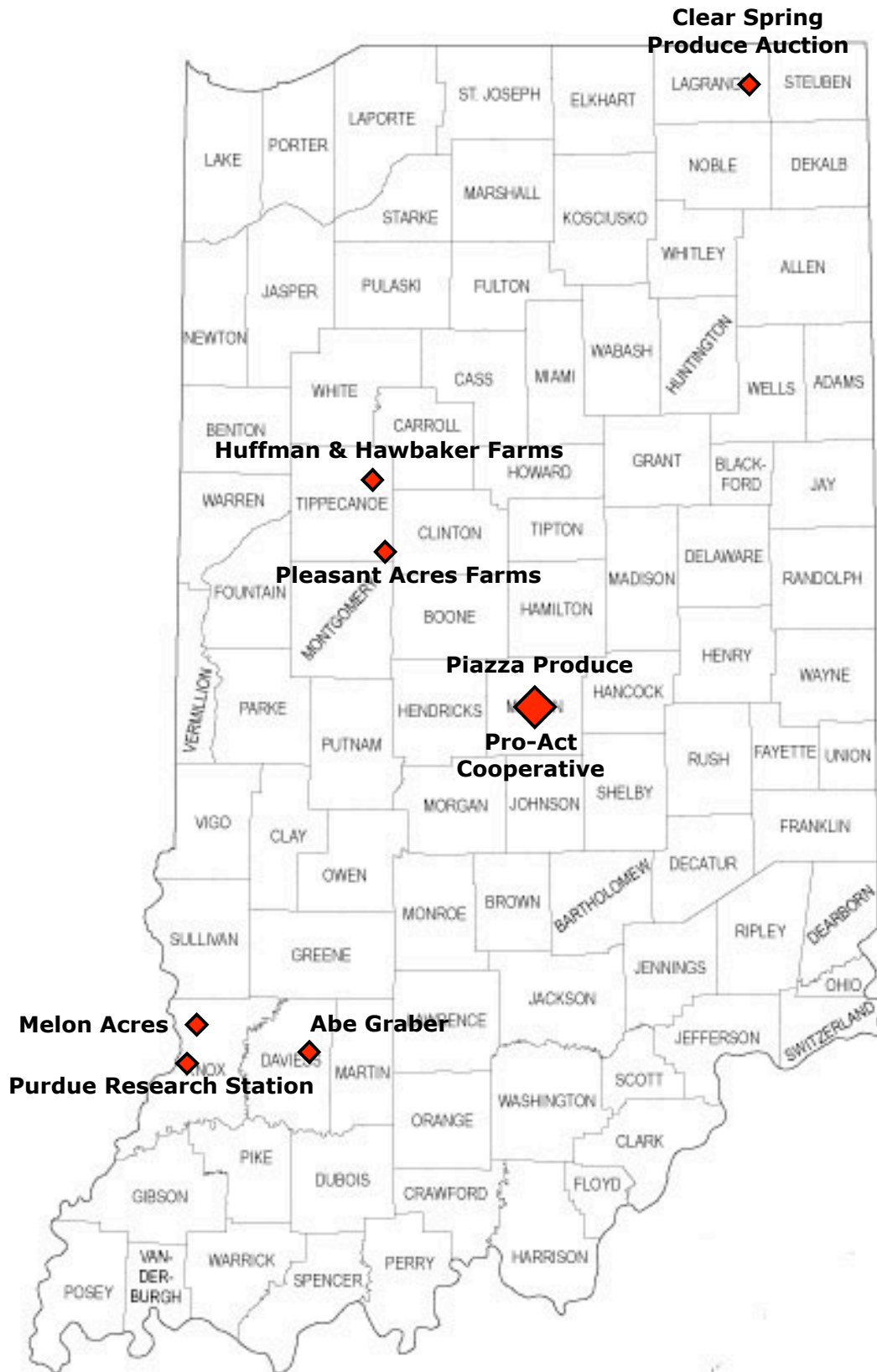
These three firms act as one unified company, IF&P Foods. This includes Piazza Produce (which distributes to food services in Indiana, eastern Illinois, northwestern Kentucky, Michigan, Wisconsin, and parts of west central Ohio), Indianapolis Fruit Company (which distributes fruit to retail food stores from central Michigan and Wisconsin to central Alabama and Mississippi), and McCartney Produce (a stand-alone retail sales firm which covers ten states, many in the South).

Interestingly, Piazza Produce, founded by Pete Piazza and his father Paul, was launched in 1970, nearly the same era in which Bloomingfoods was conceived. The trajectory for Piazza has been far different than for the co-op, yet the stories are also interlaced. It would appear that some of the ability that Bloomingfoods has enjoyed to source high-quality foods from California and other regions is due to shipments from produce distributors like Piazza. Moreover, Piazza's ability to provide this service is in large part due, the company's website says, to Pro-Act, a wholesale cooperative that supplies Piazza with high-quality produce.

Based in Monterey, California, at the southern end of the fertile Central Coast, the wholesaling cooperative Pro-Act was formed only 20 years ago when six independent food-service distributors decided to merge their efforts. They would gain a competitive advantage, they reasoned, by purchasing together, and by marketing collectively. The firm's website boasts that Pro-Act is now the "leading distributor of fresh produce to the foodservice industry," sourcing 50 million cases of produce annually.³⁷ It promises one-call service to buyers who can, through Pro-Act, draw upon more than 70 third-party inspected distributors across the U.S. and Canada (*see Appendix, page 158*).

Pro-Act, in turn, relies upon a specialty supplier, Harvest Sensations, based in Miami and Los Angeles, to ship gourmet food items to commercial chefs from national and international sources. Harvest Sensations can provide high-quality processed foods such as hand-peeled baby vegetables, and fresh-shucked peas and beans. The firm also offers a line of heirloom vegetables including tomatoes, potatoes, citrus, stone fruits, specialty lettuces,

³⁷ <http://www.proactusa.com/news.htm>, viewed August 18, 2011.



Map 5: Interviews covering the produce industry

fresh herbs and micro greens. Harvest Sensations is closely committed to high standards of food safety, with all of their foods processed in certified facilities. These foods can be shipped overnight from one coast or the other to chefs across the U.S.

Brands shipped by Pro-Act include: AndyBoy, Dole, Earthbound Farms, Grimmway, Mann's, Naturipe, New Star, Ranier Fruit, Sunkist, Wada Farms, Bonipak, Driscoll's Fruit, Fresh Quest, Foxy, Gills Onions, Mission Produce, Miranaka Farms, The Produce Exchange, J.C. Watson Company, and Fresh-Link Consolidation.

With such a broad distribution network, IF&P realizes that documented food safety is of prime importance. Piazza's website offers an emphasis on safety that is the vision of all three firms.

"We are proud to meet or exceed all rating requirements in annual audits from organizations such as NSF Cook & Thurber, and regular, unannounced inspections from the Indiana State Department of Health. We also have a fully documented Food Safety Program that minimizes the potential for food contamination to occur during receiving, storage and shipment of our product:

- "We believe in cold chain security from the field to our customer.
- "The moment the produce arrives it is inspected and then stored in climate-controlled areas specifically designed for the unique temperature, humidity and ethylene-level requirements of each item.
- "When products leave our facility they do so in trucks continuously monitored for the temperature of the load.

"Our food safety plan covers personal hygiene, sanitation, a documented HACCP [hazard and risk assessment] program, facility maintenance, crisis management, food defense, a formal recall plan, security, extensive employee training and more. We understand the safety of the food you serve your customers is critical....We'll be happy to answer your specific questions and share copies of our latest audit reports."³⁸

Growers and experts all across Indiana encouraged this analyst to contact Piazza's Mike Lewis, because of the central role the firm plays to produce in the state. When asked what was emerging to create a new way of trading food in Indiana, Lewis focused strongly on food safety. Money, he says, is being "thrown" at the Food and Drug Administration (FDA) in Washington to institute these food safety policies and procedures.

"Food safety has received a lot of publicity lately. Every time there is a food recall, it is a very big deal, and it should be a big deal, whereas twenty years ago such news barely made a scratch. After all, government data show there are something like 7 million food incidents each year, but only about 50,000 of these are reported. A long time ago, few noticed. For the last decade it has become really huge."

³⁸ <http://www.piazzaproduce.com/food-safety.aspx>, viewed August 18, 2011.

Large firms like Wal-Mart, he adds, are holding suppliers' feet to the fire, saying, "You *will* do these things if you are going to supply our stores."³⁹ These buyers are formulating a Global Food Safety Initiative to set unified standards for auditing. "The industry wants to do this for ourselves, so the FDA does not have to tell us what to do." He adds, "We would all be better off if everyone audited to the same standard."

"Traceability of food is also a tremendously big deal right now," Lewis says. "We are striving toward a day when we can ensure that customers can trace products shipped from distant farms through long supply chains to Indiana customers." Lewis hopes that this Produce Traceability Initiative⁴⁰ will reduce the need for federal oversight. By launching their thrust proactively, he reasons, they can instill higher standards than the FDA itself would require, with less red tape. "We believe that the produce industry working along with the FDA (or any regulatory agency) is better able to create food safety policies and procedures than the FDA working alone."

In Piazza's case, this means being able to trace each case load of food through their system from farm to final sale. Using a UPC bar code (the same kind of coding found on many commercial labels), each case would get a unique code. Some of the more advanced growers can actually trace these case lots back to a specific row on their field where the item was produced, and can track it all the way through their system, "but this is not industry-wide yet," Lewis says. This is quite useful in the event of a potential recall. As technology develops, Lewis adds, "we will even be able to know which customer bought the product."

He adds that the critical steps of food traceability are "all dependent on the producer. It is difficult for us to do it, unless the producer participates." His firm codes each item they sell as to whether it is locally sourced or not — and "local" is defined as coming from Indiana, Illinois, Michigan, Ohio, or northern Kentucky. "Lots of our produce comes from Michigan, from huge farms. Some wouldn't even define these as local; they are too dang big."

He estimates that about 5% of what Piazza sells could be considered local to this geography. "It may be as low as 2% in December and as much as 15% during the harvest season." Yet Lewis is not optimistic that small growers will be able to meet the required standards. "When you start talking about local growers, most of these guys have not historically had any kind of audit. Many can't afford one."

Lewis says his role with such producers is often to serve as a "devil's advocate." As he puts it, "I try to get them to understand that if you want to sell to me, to groceries, and to institutions, you are going to have to get involved in third-party audits and traceability. I've got customers who will not buy from a farm that has not implemented a documented food-safety program."

³⁹ See also Meter, Ken (2011). *Ohio's Food Industry: Farms at the Heart of it All*. University of Toledo Center for Urban Affairs. Available at <http://www.crcworks.org/ohfood.pdf>. This includes an interview with an Ohio produce distributor.

⁴⁰ See the website for the Produce Traceability Initiative, <http://www.producetraceability.org/>.

He believes steps should be taken to reduce the costs of audits to levels that are more reasonable for small growers. “It gets down to an indemnity situation. We’re placed in a position of risk.” He adds that unsafe foods are not always apparent. “No visual check would ever identify unsafe foods. Safety is mostly about the procedures followed on the farm.”

Lewis wonders if the state could develop an internal GAP (Good Agricultural Practices) audit program that would reduce costs to growers but also assure food buyers that their supplies are safe. “Purdue Extension is working on this,” he adds. All the same, he predicts, “some of the small farms will be weeded out” because they won’t meet the tougher standards.

The restaurant firm Darden, which purchases from Piazza, offers the “Cadillac” of food-safety and traceability systems, Lewis says. “Darden has set the pace most of the time,” he adds. “They are the most stringent in the industry; they require regular audits and inspections.” One of their restaurants, Seasons 52, features local growers.

Lewis also considers Garwood Orchards, near La Porte, as a prime example of a firm that has instituted such traceability. The Garwood family has lived in La Porte since 1831, where it takes advantage of the Lake Michigan climate to produce 200 acres of apples, and 150 acres of peaches, raspberries, pumpkins, strawberries, cherries, sweet corn, peppers, cucumbers, and a variety of other vegetables. Its farm stand and u-pick operation started in the 1950s.

Interestingly, Garwood, which relies a great deal on direct contact with customers, does not market this capacity on their website, but does focus on making a direct connection with the family. “We are family owned and OPERATED,” their site says. “That means when you come out on the busiest of fall days, you’ll find a Garwood working right along side the staff. It means when you stop in on a rainy winter day, you’ll find a Garwood or maybe even pass one out pruning trees. But be assured, they are here and that’s something you don’t find at a Superstore, and it means you can expect the care and concern an owner would put into their investment.”

Even these tracing efforts, however, are not foolproof, Lewis adds. “I have to have faith in the producers. I know our suppliers have solid standards for their pest control, that they train their employees to work safely, and provide proper restrooms, and do sufficient water testing. You can come up with a long list of what they need to do. The point is, can they prove it? The audit is about creating this paper trail.” Still, he continues, “The guy who is doing all the right things can still have a problem, and the guy who does it wrong may never have a problem.”

Produce by the hundreds of acres

Levi Huffman, Huffman & Hawbaker Farms (Lafayette)

Growing vegetables at a large scale is a challenge that Levi Huffman enjoys, despite some uncertainty he has faced in building up his business, and some questions he carries about the future. Yet, standing amid an expanse of tomato plants, he exudes a strong sense of calm.

Huffman farms with his son, Aaron, and son-in-law, Jim Hawbaker, east of Lafayette. Their 3,000-acre farm raises “400 to 500 acres of vegetables, depending on the year,” Huffman says. The farm has adapted to both changing markets and new family members since Huffman settled here in 1970. It now hires 67 employees.

“We raise hogs, corn, soybeans, tomatoes, cabbage, Indian corn, mini gourds and mini pumpkins. Our new crop is peppers. We are always looking for new crops to grow. I am always looking for an opportunity for the children to make a living,” he adds. “We basically found hogs to be a cash drain,” he recalls. The family leases their hog barns to another producer, but uses their manure for their fields and checks on the animals daily.

Huffman says the family embraced specialty crops when Jim Hawbaker joined the farm. Adding to the corn, beans, and hogs that had already been established, “We started by raising fresh cabbage,” Huffman recalls. “We made the switch with the help of a specialty crop grant from the state of Indiana. We raised cabbage for three years, but we could not find a good enough market. We worked with a good broker in Michigan. He sold to smaller, independent grocers, but we never made the profit we wanted.”

Later, “We started producing tomatoes for Red Gold [a processing company]. Then we signed a contract with Wal-Mart to produce all the Indian corn they sold west of the Mississippi.”

The farm still supplies Red Gold, yet trading with Wal-Mart proved to be a disappointment. “Wal-Mart kept squeezing us down to where we decided it wasn’t worth growing for them. The price they wanted to pay was less than our cost of production.” So, the family took their crop elsewhere.

Two years ago they began to raise tomatoes for Italian Rose in Florida. “We wash and pack the tomatoes for them,” Huffman adds. The farm also sells cherry and steak tomatoes by the half-semi-load to brokers in Indianapolis. “One thing that is missing in Indianapolis is vegetable processing,” he adds.

They are also eager to explore their new products: bell, banana, and jalapeño peppers. “We’re still trying to make them work,” Huffman adds. “We sell to Bay Valley Foods [a broker based in Platteville, Wisconsin].” The farm also sells to a group of Mexican restaurants. “We sell mostly for chain stores,” Huffman says, “on a semi-load basis. We’re a dependable, consistent supplier, and we offer quality. We also get more efficient over time.”

What keeps this from becoming an undifferentiated commodity sale, he says, is “certification.” The Huffman-Hawbaker farm sees this as the next frontier. “We have

invested \$2,400 per acre to get our tomato fields certified, and about the same with peppers.”

“Our hope is that we will be the first in the area to have certification.” This requires about two hours per day to complete the paperwork needed to pass a third-party audit, he adds. “We’re working with our buyers to come up with a food safety plan. We need to have documentation for Red Gold, and we need to have documentation for Sysco.” Yet he adds that certification costs can run as high as \$60,000 to \$70,000. “Unfortunately, it’s going to throw a lot of the smaller guys out [of the market].”

Among the accommodations the family makes to this certification process is that they will not grow vegetables on any field that has been manured until one year has elapsed. “From the standpoint of the crop, it is not good because you can’t control the nitrogen rates. You get all vine growth when you have too much nitrogen. But it is also a food safety issue,” due to the risk of bacterial contamination from the animal waste.

Huffman-Hawbaker Farms is also pursuing traceability programs that would allow them to track every item of produce they sell back to within a couple of acres on each field.

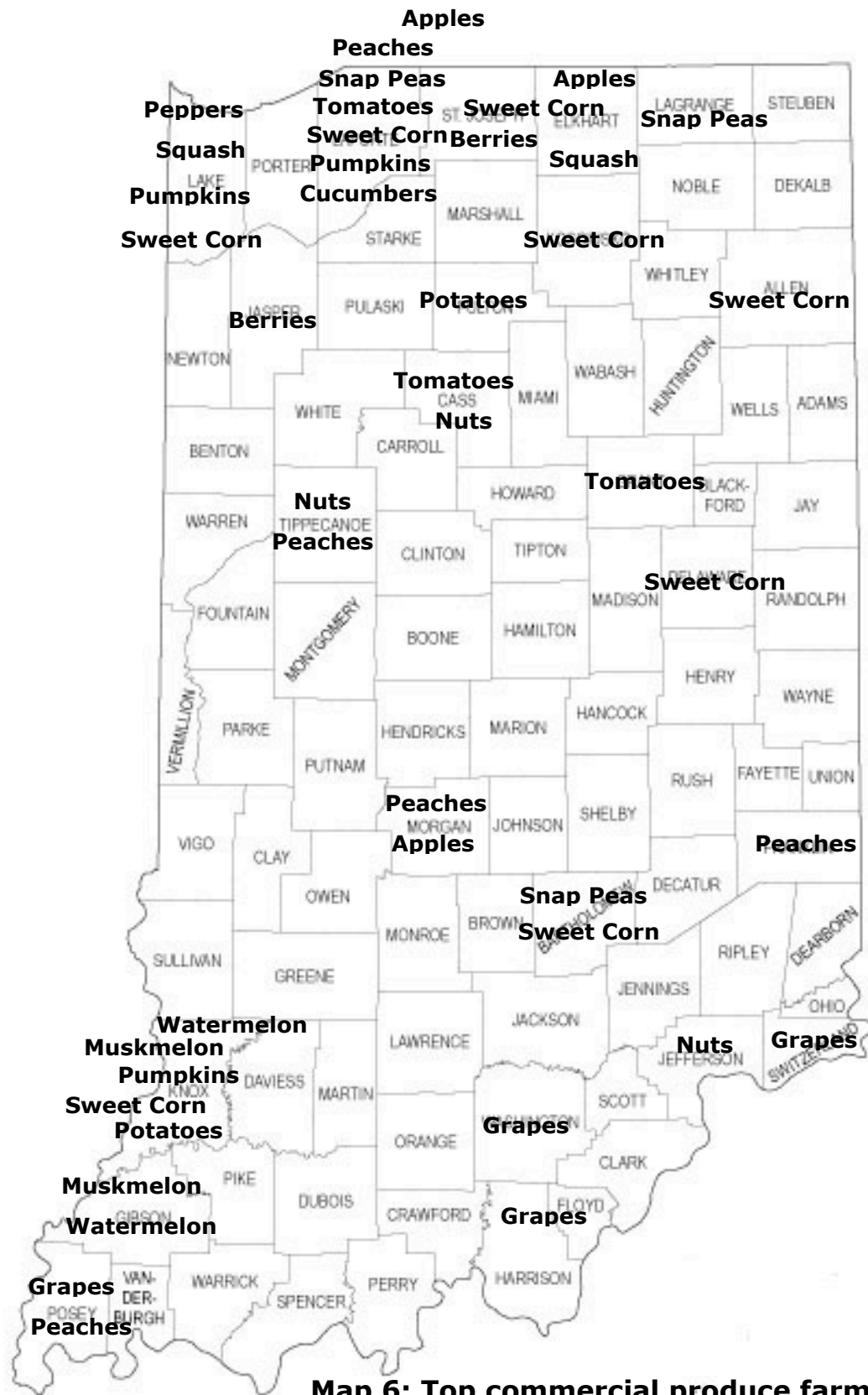
However, Huffman adds that “there is hardly enough income in 3,000 acres for three families. If we don’t get up to farming 10,000-15,000 acres, we could do corn and beans, but we would need jobs in town. Or we’d have to buy really good ground, but that is running \$10,000 per acre. I don’t know if farmers at that level can pass on their farms to their kids or not. Still, I see farmers getting bigger and bigger” in the future.

Huffman adds that “it is not hard to find labor as of yet, but they are making it harder. I am 100% behind knowing who is here legally, but if America sent all the illegals home we’d starve. Very few of them are doing a job that White people want to do. The top guys get \$14 to \$16 an hour. Many earn as little as \$9 per hour.” He says he has hired neighboring youth, but “most of them don’t want to work that hard. Still, it fascinates them. They get nosy. They ask, ‘How much money are you making?’”

Huffman adds, however, that even the vegetable markets that typically reward the farm better than cash grains may wither over time. “As things get tougher and tougher in the future, Wal-Mart and others will want our stuff at cheaper and cheaper prices.”

Growing produce at a large scale Norm Conde, Melon Acres (Oaktown)

While Indiana may depend deeply on produce shipments from Georgia and California, the state also hosts several farms that grow large acreage of produce for export to other parts of the U.S. One such farm is Melon Acres, located in Knox County in the heart of Indiana’s historically strong melon country.



Map 6: Top commercial produce farming areas in Indiana (USDA 2007)

This farm also traces its history back to 1976, when Abner Horrall and his wife Frieda launched a melon farm. Their son Mike now runs the business; he is bringing in a third generation of family owners, and to do so Melon Acres is diversifying into local produce markets.

Expanding steadily through the years, Melon Acres operates a total of 2,500 acres of land, about one-third of which is planted to fruits and vegetables. This includes approximately 230 acres of cantaloupes, 475 acres of watermelon, 110 acres of sweet corn, 50 acres of cucumbers, and 230 acres of asparagus;⁴¹ these are sold through brokers as far away as Florida, Massachusetts, Iowa, Alabama, and Georgia. The remainder of the land is planted to row crops like corn and soybeans. The farm hires 150-200 workers on a seasonal basis.

Early adopters of technology, the Horralls have mechanized the cantaloupe harvest with a harvester that can handle twenty rows at a time. The family has added forced-air cooling to its packing lines to slow ripening and extend their melons' shelf life. Yet Melon Acres is also investing in a whole new set of opportunities.

Project Manager Norm Conde says that Melon Acres is determined to diversify. "There is stability in diversification," he adds. For example, "We added asparagus in 2000. It was a good crop to add to our melon production, since it was an early harvest that did not interfere with our existing production. Further, selling the crop brought us income during a part of the season when we had been borrowing. Third, it gave us some protection against yearly cycles. In any given year, one or two of our crops are not going to do as well as the others." The family never knows which crop it will be, because this depends entirely upon unpredictable conditions during the growing season.

Asparagus also proved to be a way that the family could distinguish itself as innovators. The company's website recounts, "In 2003, after a research process that took Mike and his daughter Whitney to Australia and New Zealand, Melon Acres installed the first computerized asparagus sorter and sizer in the eastern United States. This amazing piece of equipment takes 12 pictures per second, photographing each spear to determine its width, and then drops the spear down a chute containing other spears of the same width.

"After the correct weight of asparagus spears has collected against a door at the bottom of the chute, the door opens to let the spears drop down for a worker to bundle and box. This apparatus ensures that each bundle is a uniform size for our customers while adding the benefit of a minimum of handling by Melon Acres employees."

Norm Conde also points out that Melon Acres is one of three U.S. farms that have joined together to create their own watermelon brokerage. Their two partners are the Lewis Taylor Farms in Georgia, and the Flowers Farm in South Carolina. This brokerage firm presently sells seedless and personal-sized seedless watermelon, but plans to market a wide variety of produce in the long term. Again, this venture is an attempt to diversify while maintaining the connection to the farms' roots in the fresh produce market. "Wisdom dictates that as a company expands, it stays rooted to its area of expertise," Conde says.

⁴¹ <http://www.melonacres.com/history.html>, viewed August 18, 2011.

With this production and brokerage firmly in hand, Melon Acres is diversifying anew, responding to the heightened demand for local produce. “We’ve had a farm stand for 30 years,” Conde recalls, “Our concept of retail used to be fairly simple. We thought that if people came to our farm to buy our produce they will eat it, and come back for more.” Conde adds that adding retail also involved a savvy business decision. “Mike’s father, Abner, understood that people driving by the market area would be attracted to stop after seeing 15-20 large wagons of cantaloupe and watermelons waiting to be processed and loaded. Therefore, he decided to have a retail stand primarily to keep them away from the areas where trucks and tractors were operating. Obviously, this was a ‘win-win’ situation, increasing income while reducing liability.” But this was definitely a sideline to a large wholesale business that focused on shipping food to distant regions. “We have not taken the local market very seriously so far.”

That is changing now, with the family adding 3.5 acres of high tunnel greenhouses in 2011. “We want to be the first into the market in the spring, and the last to sell in the fall,” Conde says. “Ultimately, we want to have a retail distributorship of our own,” to sell products into the Evansville, Terre Haute, and Bloomington markets.

The high tunnels, 24 by 400-feet in their footprint, now host luscious crops of tomatoes, cherry tomatoes, tomatillos, zucchini squash, yellow squash, acorn squash, spaghetti squash, cantaloupe and honeydew melons, asparagus, eggplant, hot and sweet peppers, flowers for fresh-cut sale, and perennials. High tunnel manager Melanie Ellis also showed visitors beehives placed inside the high tunnels to assure the plants would be well-pollinated.

“The nature and cost of transportation means that local business will become more important,” Conde continues. “We have had to remind our brokers to include the cost of gas in their estimates — we took some losses last year since that was not figured in.”

“We have sixteen high tunnels now, and I don’t see that as the end of things,” Conde predicts. “I would not be shocked if we were up to 12-15 acres of vegetables in a few years. This could become its own truck farm. The expense of the high tunnels dictates we need a higher price for the crop, and we can get that higher price locally by increasing retail sales.”

Conde paused to recall that this is a very different market for local sales than the one he had experienced in earlier years. When he started with Melon Acres in 1981, working summers while continuing his schoolteaching career, “the small independent grocers would send out a small truck” to pick up the melons for their stores. Soon after he joined the farm (as a second career after retiring from the school district), “we started binning [putting a large number of melons into a bin for easier long-distance transport]. The market was already there. We were closer than other growers from California.” As the firm expanded into sweet corn, it found it could sell early shipments to Minnesota and Nebraska before local corn was ripe.

Safety is of course a prime concern for Melon Acres, and the firm proudly points to its adherence to good agricultural practices (GAP). Conde adds that the family was one of the first in the region to irrigate with a nutrient solution (“fertiligation”), and was a leader in using Integrated Pest Management (IPM) practices. This includes making use of satellite

technology to determine the need and timing of fungicide sprays, which the family says has reduced usage by 25% over the past five years, by allowing more precise application.

Yet Conde also points out that food safety is a complex issue. “Food safety is expensive, and it adds nothing to the value of the crop. It comes out of our bottom line. Moreover, buyers still buy from farms that don’t follow the safest practices, so our sale price stays low. Prices will not go up until the supply drops.”

ISDA Director of Development Gina Sheets adds that “the main export market for Knox County melons is Canada. There is a railway line that runs right through Knox County that heads in that direction.”

Offering technical advice to produce growers Dan Egel and Shubin Saha, Purdue Extension (Vincennes)

Dan Egel, researcher at the Southwest Purdue Agriculture Center in Vincennes, explains from his research lab that Southwest Indiana is uniquely suited to melon production. “The soils here are sandy and rolling. Muskmelons like a soil that is well-drained. We ship to St. Louis, Chicago, and Cleveland, mostly within 600 miles of Vincennes. We ship routinely to Florida in the summer months, when it is too hot down there to grow. Last year, we even did the incredible: We shipped watermelons to Texas [a prime melon producing state].”

According to the most recent USDA totals, Southwest Indiana hosts 9,700 acres of melons, about 7,300 acres of watermelon, and 2,400 acres of muskmelon. Yields compare well with competing regions, too: “Most farmers can harvest 40,000 to 60,000 pounds of watermelon per acre,” vegetable specialist Shubin Saha adds. “Muskmelon and watermelon production in the Midwest is not plagued with many of the diseases that limit production in southern states,” Egel adds.

Egel says the region once hosted a wealth of apple orchards and grape vines. However, when motorized vehicles made distance transportation easy, “People moved away from growing those crops. Now, the reason people raise grapes is primarily agri-tourism,” not for people to eat. Southwest Indiana is also a prime area for raising popcorn, he adds.

Both see a growing interest in local foods, but only small steps have been taken by producers to respond to consumer demand. “A lot of farmers want to sell to local restaurants, and schools are trying to get involved now,” Egel says. “But to the farmer, that is less about making money and more about supporting the schools,” since schools are so cash-strapped.

Saha adds that as high tunnels have become more popular, “more farmers are getting involved in local markets.” The high tunnels may give early adopters a seasonal edge for a few years. Yet he adds that the new entrants into local markets may produce too many items for local use, flooding the market and lowering prices.

Egel and Saha focus their efforts on supporting local growers in their commercial pursuits. “Ninety-nine percent of the calls we get are questions about Integrated Pest Management (IPM),” Egel explains. The station plants sentinel crops, to monitor pests that may be

flourishing in the region, so they can alert growers to take precautions. “We give the growers information about the economic threshold for applying insecticides. Just the presence of a pest is not in itself a reason to spray; we use weather forecasting systems to estimate at what point it becomes cost-effective to apply.”

The researchers also test the impacts of fungicides, and maintain organic test plots to help organic growers. However, interest from local growers in organics is still low, the scientists say. They are also working to determine which watermelon rootstocks are best to use in the southwestern region using grafted transplants. They also seek to identify other viable production practices using the grafting technique.

Egel and Saha partner with Melon Acres with a sense of great admiration. “Melon Acres is just so progressive and innovative,” Saha says.

Raising produce in a small greenhouse Abe Graber, Jr. (Loogootee)

For the 1,000 Amish families who worship in 26 parishes in Southwest Indiana — only a few miles from Melon Acres — raising produce will inherently be a matter of small-scale farming. One Amish grower, Abe Graber, Jr., generously offered to meet with an “English” researcher to show the greenhouses where he produces vegetables for sale through the local produce auction — which is also owned and operated by the Amish community.

In fact, Graber says, it was the opening of the auction barn only a few years ago that allowed him to consider raising produce commercially. “I’ve always enjoyed farming,” Graber adds, “You have to enjoy it or it doesn’t work.” Still, he adds, “I didn’t think I would have the drive or the knowledge to look for a market where I could sell vegetables.”

Then, he learned the community was considering opening up its own auction barn, a step many Amish communities have taken in the Midwest. The auction is a favored Amish strategy because it attracts food buyers from many firms, who bid against each other to buy the best produce. This competition keeps prices relatively high. “We’ve seen success in the other [Amish] communities, so we wanted to start one here.”

“We were involved in planning the auction [Davies County Produce Auction near Montgomery],” Graber continues. “The knowledge we shared during the planning process was a big asset to me. The auction opened a door for me,” he says, because he could focus on what he likes to do — farming — while letting others worry about the marketing.

“It would be my preference to sell everything I raise at the auction as long as the prices are good,” Graber adds. “You get known as a grower, but that will take several years.” Once a grower like Graber shows he can produce quality items, buyers will bid a bit higher for his products.

“I raise everything, but the bulk of my sales are tomatoes, cantaloupe, sweet corn, onions, and watermelon.” He is now in his fourth year of production, and tends two greenhouses (planted in late February and early April to command the early market) and an outdoor

garden he plants in mid-April. The fact that he has family who can help him with the labor helps him maintain an advantage over other producers who have less access to help. “We can farm this way because of the labor it takes.”

Graber tried raising heirloom tomatoes, but stopped because he could not get the same yield he gets from hybrid seeds. “We could get a real good price for the heirlooms, but we couldn’t get the numbers [production per plant].” He applies horse manure to his fields in the fall, and then uses both irrigation lines with fertilizer, and foliar sprays, to feed his plants as they grow. He relies upon expert help from Daviess County Extension educator Scott Monroe as well as the research station in Vincennes.

He is one of about one hundred growers who sell through the Daviess County auction, although Graber adds that fifteen of those farmers make about 90% of the sales. The main buyers are from Bloomington and Louisville. Overall, the auction sold about \$420,000 worth of products in 2010, and expects sales to rise 25% in 2011 — enough to keep Graber and the other Amish families farming.

Graber adds that he has had some concerns about food safety inspections, but that his main strategy is to “do good recordkeeping. It’s something I would do anyway.”

Produce auction helps Amish families recover from factory layoffs Clear Spring Produce Auction (Lagrange)

In the northeastern corner of the state, near Lagrange, an Amish auctioneer plies his trade at an even larger and more established produce auction, the Clear Spring Produce Auction. Auction day is a curious blend of commerce and compassion. Auctioneer Eli Miller looks intently at a small group of buyers assembled on a weekday morning. Eli obviously knows how to create the proper sense of urgency that encourages bidders to get into the game. Yet there is very little hype in his voice, and his words are understated. At each bid he accepts, his large eyes seem to ask, “Is it OK if we go ahead?”

On this market day in early June, a local nursery has shipped hundreds of plants that had not yet sold to Clear Spring to open up space for new inventory. The flowers and bedding plants were attractive and colorful, and the prices tended to be low. One small group of Amish women clustered together, wearing simple cloth fabrics, bidding for houseplants to take home. Other commercial vendors shopped for bargains they could resell over the weekend. About 50 fifty vehicles sprawled over the auction parking lot.

“Anyone can sell here, and anyone can buy,” order buyer Perry Miller explains. He says the auction was launched 11 years ago after community elders realized the small Amish farms of the area needed a sales outlet. A small group of 12-15 local investors each put up \$5,000 toward the construction. “They built the building, and we rent from them,” Miller adds. The auction itself is run by a nonprofit corporation.

Buyers come from northeast Indiana grocery stores, as well as from Battle Creek, Michigan, and Gary, Indiana. Miller estimates sales to be about \$1 million per year. Miller himself can place an order for any buyer who wants a given product, but cannot make it to the market

during the sale day. Not only does Eli Miller make his way through carts lined along the floor of the auction barn, Clear Spring also features a drive-through auction where growers can pass without unloading their trucks; the entire load can then be sold to a buyer who wants larger volume.

He says 25-30 growers sell here, including local vegetable and flower producers, and watermelon and pumpkin growers from as far away as Quincy, Michigan. “We have a lot of tomato greenhouses among the Amish. We started that about five years ago, because the farm stands wanted tomatoes.” When they are grown inside the greenhouses, “tomatoes have a better flavor, and longer shelf life,” he adds. Over time, the Amish growers “learned they would harvest better-tasting vegetables if they used less spray,” Miller says.

Miller estimates that 75% of the people who live in the immediate area of Clear Spring are Amish families, who worship at 150 churches. He said his is the second-largest Amish community in the U.S., after central Pennsylvania.

Purdue Extension educator Steve Engleking adds that Lagrange County ranks first in Indiana for organic food production, with 29 farms reporting \$1.3 million in sales to the Census of Agriculture. That represents 12% of Indiana’s organic farms, and 16% of the state’s organic sales. One reason this is true, he adds, is the presence of the national co-op of cooperatives, Organic Valley, which buys milk from local dairy farmers and bottles it for sale at largely metro area stores.

The landscape near the auction barn is unusually flat for an Amish settlement, since Amish communities often settle on hilly soils that can be worked by horse, and where the competition from mechanized farmers is not so stiff.⁴² This appears to be one of the few parts of the U.S. with table-flat land and also a large number of well-kept houses densely packed along small highways.

One of the reasons the community has been so prosperous was the men had found work in a recreational vehicle (RV) factory nearby. The men liked the steady work with decent wages. But in 2009, after FEMA stopped ordering emergency shelters it had needed for hurricane Katrina, the RV industry struggled, and these men found themselves out of work. One of the few ways they could make a living was to raise produce. Many fathers also preferred returning to the land, and having more time with their children.⁴³

Simultaneously, Miller adds, “we saw a real increase in growing foods for local consumers.” For many families the extra income was essential. Still, there are some concerns about price. “Most of these guys want a constant price. It is hard to do, really. With an auction, the price varies.” Nevertheless, Amish grower Neal Lehman, who was selling at the market that day, said he gets “sale prices as large as what I can earn through direct sales.”

⁴² Meter, Ken (2011). *Ohio’s Food Systems: Farms at the Heart of it All*. University of Toledo Center for Urban Affairs. Available at <http://www.crcworks.org/ohfood.pdf>.

⁴³ Mertens, Richard (2009). “Indiana’s Amish, laid off from RV factories, return to their plows.” *The Christian Science Monitor*, May 26.

To extend its sales capacity, Clear Spring once located a refrigerated truck on the auction site so they could store more produce, particularly cantaloupe that ripen and spoil quickly. Yet that truck is not in place in June, and Miller adds that “so far we have not been able to justify installing a freezer” for longer-term storage. So far this year, he adds, “things have been moving pretty good. I’m not looking for the auction to grow any faster than it does now.”

From hog barn to greenhouse Neil Moseley, Pleasant Acre Farms (Clarks Hill)

Neil Moseley, 28, a young farmer starting an operation near Clarks Hill, has set out to make his Pleasant Acre Farms “cutting edge for the U.S.” Working closely with his father Jim, he chose farming after starting out as a draftsman because “I like fixing problems and taking on new challenges.” He considered following his father in farming “but I didn’t see a new niche that I could fill” until he researched the growth of the local food movement and expansion of farmers’ markets. Then he started selling vegetables directly to consumers.

“I didn’t like the idea of wholesaling,” Moseley says. He wanted a direct connection to the consumer, not only for himself, but also to benefit the person who buys his food. “Most people have no idea how their food is produced,” he says. Now, “People are changing their thought process about food. I think people got sick of not knowing where their food came from. People almost got scared.” Even now, he adds, “I have customers who want to pick up their food at the farm,” even though the farm would deliver to a farmers’ market near them. “They want to visit us. They go way out of their way to see the farm.”

“I want to step it up one step higher, but to stay in direct connection with the consumer,” Moseley says. He is looking for a balance between wholesale and direct sales. “I’d like to stay on the smaller scale, to sell to local restaurants but not the larger chains. I like that I can call up a local chef on his cell phone, and we can discuss what we both need. When it gets too big, you have no idea where the food goes. Educating our customers is very important to us.” He hopes to diversify, rather than getting large, to find new sources of income.

While Moseley primarily grows peppers, tomatoes, sweet corn, and eggplant in the fields, he is also converting a former hog barn into hydroponic vegetable production. “Animal production has taken a big hit,” Moseley says. “We foresee that there will be a lot of animal facilities empty over the next ten years. So, we’re asking ourselves, ‘what else can you do with them?’ We think we’re creating a model. We think our hydroponic operation will give the local foods movement some legs. This will help solve the problem of supplying markets year round.” Moseley hopes to sell his produce to nearby restaurants and small wholesalers such as This Old Farm (*see page 114*), and at two nearby farmers’ markets, in addition to a Community Supported Agriculture (CSA — in which consumers purchase shares at the start of the season and receive produce as it is harvested) operation he runs. Through the Alliance, connected to This Old Farm, he also sells produce to Green Bean Delivery.

So far, he has successfully raised greens, broccoli, beets, carrots, radishes, cauliflower, and green onions indoors. Moseley believes that “Hydroponics has benefits over hauling in dirt for raising greens. First, there is the lack of weeds. Second, when you grow in water, it is easier to change the water than to bring in new soil and remove the old. Third, you get a

cleaner product. The leaves don't touch dirt." He does use a mix of topsoil and compost for some crops, but is still experimenting to find the right formula for each product.

Recognizing that other greenhouse operations have failed because the costs of heating with fossil fuels became prohibitive, Moseley installed a propane heater. Then he added a stove that burns, among other fuels, dried corn stalks from his brother's fields. "We can burn straight corn stover, after it is cubed and densified, but we have not perfected that. Right now, we burn wood shreds from a local pallet factory." As the fuel burns it heats a water boiler, and the water is then transferred into the greenhouse through a heat exchanger. He adds that the burner is from Poland. "Europe's been doing this for years." Yet he is on the lookout for an even more efficient stove.

Moseley received a grant to help build the system, but his calculations showed that even without the grant, the equipment would have paid for itself in three years. Even after considering the costs of removing the corn stover from the field, hauling it to his farm and compacting it, Moseley says, burning either wood shreds or corn stover costs the same as burning liquid propane at 69 cents per gallon.

He is also determined to gain new efficiencies in any way he can. He has contracted with a firm that collects all of the paper waste from the Indiana State Fair, and then mixes fuel blends for Moseley. Moseley says he is looking for the right mix of fuels that will provide the most heat for the least work.

Speaking of the produce operation, he adds, "The main challenge for me is balancing marketing versus production. You can't sell if you don't produce, and yet you can't produce if it doesn't sell. It's especially a challenge during the busy time of production. You are always in survival mode, so caught up in daily details you can't plan for the future.

"We're not yet required to do a GAP (Good Agricultural Practices) audit, but next year we plan to get certified. For 95% of the stuff that is required, it is something I'm doing already. It is just a matter of documenting our practices." He adds, however, that "I'm one of the few smaller guys who thinks there ought to be unified safety regulations. I don't think we need traceability for direct sales, but we do when you have third-party sales."

Moseley also sees diversifying in new ways as he gains more experience. "We want a commercial kitchen on the site. Our goal is mainly to deal with overproduction, or a bad market day," Moseley adds. "We can also turn seconds into a value-added product." Still, he has questions about how it will work in practice. "Will our customers come over? Will they buy more of our produce so they can put it up themselves?"

Moseley and his wife Tashney cooperate closely with his two brothers and their father Jim, former U.S. Deputy Secretary of Agriculture. "Dad is instrumental in putting this together. Our whole farm is one big picture, with several businesses on the land." Jim owns the land, and the brothers farm it.

A Local Infrastructure for Livestock Emerges

A better investment than a combine?

Adam Moody, Moody's Meats (Ladoga and Indianapolis)

Finding niche markets for meat

Greg Gunthorp, Gunthorp Meats (Lagrange)

The farmer who caters

Chris Birky, Birky Family Farms (Kouts)

Staying small: milking 25 cows

Pete and Rhonda Scherf, Scherf Farms Dairy & Creamery (Michigan City)

Waiting for the inspectors

Stan Skillington, Skillington Farms (Lebanon)

Bottling organic milk

Jane Elder Kunz & Fritz Kunz, Traderspoint Creamery (Zionsville)

Creating a regional tourist destination

Pete Eshelman, Joseph Decuis Restaurant & Farm (Roanoke)

Investing in a neighborhood

Christopher Eley, Goose the Market (Indianapolis)

A Local Infrastructure for Livestock Emerges

A better investment than a combine?

Adam Moody, Moody's Meats (Ladoga and Indianapolis)

A fifth-generation farmer near Ladoga, west of Indianapolis, Adam Moody has found that one path toward greater prosperity is to own a greater share of the market structure in which he trades. This is a huge break from farming the way he grew up; by making this shift he believes he is now close to far greater rewards.

In early 2010, Moody told *Successful Farming* magazine a soulful story that encapsulates why he made this shift.⁴⁴ As the story goes, Moody and his wife Lucy were sitting in their car outside of a grocery store in the spring of 1996, trying to make sense of what had just happened to them.

At the time, he was farming with his father, raising row crops, beef, and hogs. Even as they watched their neighbors expand, with some opening confinement barns, the Moodys had continued to farm on a relatively small scale. “My dad and I had just maintained our farm size,” Adam said. Even though they farmed with minimal use of chemicals, “We struggled to get by on two incomes on just a little over 300 acres.” One night, when farmgate prices for hogs had fallen to only 9 cents a pound, Adam and Lucy walked into their local grocer’s and discovered, to their horror, as pig producers, “We couldn’t afford a ham.” Although farmgate prices were well below cost of production, the retail price was rising.

Adam says he went back to the car, dejected, and thought hard. “It made no sense,” he said, “It dawned on me I wasn’t raising food, I was raising commodities. I said to myself, ‘I’m going to take the farm toward raising food.’”

In less than a year, Adam Moody had made extraordinary changes to the farm. On land that had once produced corn and soybeans, he began to raise free-range chicken, eggs, beef, and pork. He began to sell directly to nearby consumers, even driving to farmers’ markets in Zionsville and Lafayette to do so. Adam also came to understand that owning a sustainable farm meant using as few external inputs as possible, reducing the farm’s dependency on external suppliers.

After four years, Adam was presented with an extraordinary opportunity. The state-inspected processing plant where he had been taking his beef, 15 minutes from their farm, came up for sale. Adam bought the plant, seeing this as a strong way to build closer connections with his customers. To do so, however, he sold off ninety-five acres of his land, “knowing there was much more of a chance of keeping the family on the farm by adding value to the farm’s products.” He says he also enjoys working alongside his employees, as a change from the solitary nature of farming.

Once he had the plant running smoothly, processing beef, pork, and lamb, he took another bold step: He decided to open two retail stores. These storefronts would connect him even

⁴⁴ Gullickson, Gil (2010). “Farmers for the Future: Purpose-driven farming.” *Successful Farming*, March 10. Quotes in the first part of this section come from this article.



Map 7: Interviews covering meat infrastructure

more closely with urban customers, but would also give Moody much more command over the ultimate quality of the meats he sold, and the prices he would receive.

In 2003, Moody opened a storefront in Avon. Sales at that store are now growing 26% per year. Six years later he opened a second store in Zionsville. The processing plant itself also features a retail outlet. Now they plan to open a fourth store. Moody also arranged with Green Bean Delivery to carry his meats directly to customers' doors in select routes.

By the time this researcher interviewed Adam in March, 2011, at the Zionsville store, he had reduced the farm's size to 250 acres, and was making far more income than before. He has moved into a seven-year rotation, with at least one fallow year to give his land a rest.

Despite his prominence in beef, he says, "Chickens are the centerpiece of the farm." The Moodys raise 1,200 laying hens which produce 50 dozen eggs per day, and 8,000 broilers per year. All are sold through their retail outlets. He adds that he earns a net of \$43,000 on the layers, and \$24,000 on the broilers. Meanwhile, the chickens produce fertility for his fields at no extra cost.

He keeps small chicks inside until they grow feathers. Then he lets them range over the land, where they eat insects, aerate the earth, and nibble grass. He has built portable shelters they can use at night, and to hide from predators. As he moves the shelters through his fields, the chickens fertilize the land.

Moody is now beginning to work with Purdue University and Purdue's New Ventures Team to develop curriculum that better fits this form of management-intensive, agricultural production. "We expect the outcome will be a short course, or even a minor," he says.

The Moody's Meats website outlines his family's belief that "Agri-business promotes the commodity production of bins and bushels of grain for the purpose of the dollar. [We] believe True farming is the sustainable production of quality food from the soil for years to come with as few off-farm inputs as possible."

By vertically integrating their own cluster of processing and retail firms, the Moodys have created exceptional efficiencies. "Thirty percent of the sales in our storefronts derive from meats we raise on our farm," he says. "We do zero advertising. We count on word of mouth. We have three key elements that define our approach: (a) we differentiate (by using non-traditional production and processing protocols and the family name on the label), (b) we build strong relationships with our customers, and (c) we have the ability to control the process all the way through."

That said, Moody's Meats does sell some of its meats wholesale to Wabash College in Crawfordsville, as well as to various restaurants in the Indianapolis area. "It helps balance our cash flow," he adds.

Yet he cautions that his was an uncertain path. "Every one of these steps takes infrastructure," he adds. In his case this meant making exceptional personal investments at considerable risk, to bring all these businesses into operation. He also finds this to be a far more rewarding path. "I have less invested in this storefront than my neighbor who buys a

new combine.” His neighbor only uses that combine a few weeks each year, while “this store hires nine people full-time.”

Another way he calculates a return on his investment takes him back to his land. Overall, Moody says, Moody’s Meats creates one job for every ten acres of farmland he works. He also compares his return on investment (ROI) to that of a bank: “Right now, we are getting an ROI of 3.5 percent. That’s better than the banks are doing right now, as far as investment opportunities. By 2012, we hope to be up to 12-13%. If I can earn 10% on \$3 million of sales I can stay in this a long time. And I will employ about forty people.”

By vertically integrating his cattle production, processing, and sales components under a single owner, Moody is able to emulate on a micro scale the strategies of larger monopolies. He trades with his own companies, and keeps the margins at each step. As a farmer, he might sell a steer for \$1,200. Once he subtracted his costs, he would know his margin. As an integrator, he estimates, he can earn from \$4,500 to \$5,800 off that same animal, with the outcome depending on how his artisanal meat cutters merchandise the carcass. Moody also carries higher costs, of course, but he has some choice about which costs he takes on, and how he markets his end product for the best return. He also finds that by having direct contact with his customers, he can offer personal service in ways the monopolies cannot, so he expects to keep strong consumer loyalty.

One reason Moody has worked so strenuously to get away from the prevailing commodity system is that he found it to be a dead end. “Being a commodity producer works if you are the biggest and the cheapest. Thanks to free-trade agreements, we’re now competing with farmers in Brazil, Vietnam, and China, [who have lower costs for land and labor and work under less regulation for production and processing]. Due to these lower costs, the United States will have difficulty remaining the ‘cheapest’ food. Therefore we must differentiate our products all the way through. This will increase the margins to our producers, increase revenue and employment for our state. Our state is importing 85 to 92% of its food. Agriculturally, if we [Indiana] limit ourselves to commodities, we are destined to become a Third World state.”

Moody adds, the business that succeeds at what he calls an “authentic relationship market paradigm” will be “treating the public like a ‘person’ not a ‘statistic,’ and like a ‘customer,’ not a ‘consumer.’ This can be done by *innovating the entire system* toward the wants of these customers, not toward the efficiencies of the industry.”⁴⁵

Isaac, 26, one of the Moodys’ four children, is carrying the farm into the sixth generation of ownership. “One of my goals,” he says, “was to raise my kids and grandkids (now 3) the way I was raised — on a farm.” But it has taken more than mere farm commodity production to help him envision that future.

⁴⁵ Reding & Moody (2011). *Sustainable Local Food Initiative Report*. Prepared for the Indiana Office of Community and Rural Affairs by a grant through the Indiana Cooperative Development Center in coordination with Purdue University and Indiana Farm Bureau, February.

Finding niche markets for meat

Greg Gunthorp, Gunthorp Meats (Lagrange)

In the far northeastern corner of Indiana, Greg Gunthorp has also assembled a highly integrated production and processing business, tapping vastly different markets than Moody has. For one thing, Gunthorp is content to let others carry the retail trade, while he focuses on direct-marketing to high-end customers, including gourmet restaurants in Chicago.

At core, however, he is seeking to make the same transition Moody made: to transcend the commodity market. “My family raised pigs the same way for four generations. We always sold them as commodities, but as commodities we got the low end of the market.” For years, the family was able to survive even while tapping these low-end sales. But in 1998, Gunthorp recalls, farmgate prices for pigs fell to “lower than during the Great Depression. I told myself I would not be the last Gunthorp to farm.”

He took a closer look at farm magazines to see how other producers were responding to low prices. Many were going back to simpler ways of raising pigs, “the same techniques my family had been using all along.” Gunthorp decided that since he already produced the quality consumers were seeking, he would market his pigs directly.

“No longer would I grow a shipment of pigs only to find out what price buyers would give me at the end of the process,” he recalls. “I spoke directly to consumers to find out what they wanted, and what they would pay.” One reliable outlet was the Green City market in Chicago, more than a two-hour drive from his farm, but located in a prosperous section of the city, where he could find customers willing to pay a higher price. He watched what his neighbors at the farmers’ market did to adapt. “I saw the vegetable guys, how they kept growing, evolving, based on what they learned their customers want.” He adapted this flexible strategy to his pork operation.

“Local food is going crazy in Indiana right now,” Gunthorp says. This meant he had to adapt to a growing market. Among the customers who came to Green City market were chefs of white tablecloth restaurants. They were looking for higher quality meats than the commodity system offered, and they could pay premium prices.

Gunthorp’s specialty hogs, largely of the Duroc breed, but including some Berkshire genetics, offer the taste qualities the chefs were seeking. Gunthorp says they are “very uniform in the cooler,” which chefs also like because it means each plate they serve has a similar appearance. Yet these specialty hogs also cost a bit more to produce because they require more care during maternity.

Gunthorp sells these specialty meats fresh for the most part, to help retain their taste qualities. He estimates that two thirds of his sales go to restaurants and grocers in Chicago including Frontera Grill and a Doubletree Hotel near the loop. Jeff Muldrow, who once owned an Italian restaurant in Evanston, brought several other chefs to Gunthorp, and is now the executive chef for the Whole Foods delis in the Chicago region. Gunthorp also sells to restaurants in Fort Wayne, and to Joseph Decuis Restaurant in Roanoke. Indianapolis’ Goose the Market also purchases Gunthorp hams for curing, turning out a delicately flavored product for their deli counter.

Building a customer base has “just been about building relationships,” Gunthorp adds. “It has to be a sustainable relationship. That is what has been wrong with our food supply in the past. The food trade has all been at the expense of farmers, of rural communities, and of eaters. We are out to develop an entire food system that is sustainable for all of us.”

He also acknowledges that he has been “quite fortunate,” as these relationships have brought him to new clients. “One day I was attending a Sustainable Earth conference in Lafayette,” he recalls, and he fell into a conversation with another farmer in the back of the room. “He was raising milk-fed pigs in Oregon, and it was going great. He said that one of the Chicago restaurants he was selling to was interested in getting more pork than he was able to deliver. So, the Oregon farmer gave him the name of the chef. When Gunthorp called the chef, and explained what he could offer, the chef simply said, “Bring me a pig.” Greg and his wife Lee placed a live pig into a plastic tub in the back of her car, and drove to the restaurant right away. Greg recalls feeling “We were a little out of our league here,” but the chef had the animal butchered, cooked the meat, and called back with a steady order for more.

In addition to these high-end clients, Gunthorp supplies about 80 customers who regularly buy half a hog direct from the farm’s processing plant, which is located on the farm. “We can sell our animals for something like two to three times the commodity price,” he says.

Building the place to process his own meats, even at a small scale, has proven daunting, he adds. “It’s often a black hole, but today I am just now thinking it is not simply a necessary evil, it is important to our vision.” Nor has the path been straightforward. At first, the Gunthorps invested in a processing plant in Union City, Michigan. “It was the only plant that did what we wanted,” he adds. “It didn’t work out, but we learned a lot.”

This experience persuaded him that he had to process for himself to get the quality and schedule he needs. Gunthorp has built a small operation, but it is enough to carry the volume he handles.

He says he has had excellent cooperation from state officials. The plant has been USDA-certified for five years (which is required in order to sell across state lines) and has also been inspected by the state for three years. “This was the hardest investment of any kind I have ever made. Usually, you invest and then reduce your labor costs as much as possible. In this case, we made a huge investment in equipment, and then had lots of labor costs to take on, and lots of regulation.”

Scattered around Gunthorp’s 65 acres are small plastic shelters; these offer the pigs a covering when they choose to head indoors, but also leave them free to sprawl out on the earth as they wish. The pigs roam the pasture as they like, and root in any mud they find. On another corner of the property, separated by a small woods, chickens and turkeys stroll near separate wood-and-metal shelters.

Gunthorp’s farm sells 1,500 pigs per year, and 100,000 birds, including chickens, turkeys, and ducks. He hires two Mexican workers to run his fields and his processing plant, and

they in turn bring on part-time help as needed. Gunthorp also hires three sales representatives who drum up new accounts in Chicago, Michigan, and Indiana.

All in all, Gunthorp seems happy with the intense flow of new opportunities. Yet, he admits, “It was way bigger than I expected. Some days it is more than I want.”

The farmer who caters

Chris Birky, Birky Family Farms (Kouts)

Another pork producer has carved out still another path toward a more sustainable farm. For Chris Birky, who farms near Kouts, south of Valparaiso, this involves moving directly into the food preparation arena. He seems poised to make more money cooking food than he can by farming. This also helps out his own farming operation since he produces much of the food he cooks.

“This is the land where I grew up,” Birky says of his farm outside Kouts, south of Valparaiso. “This was land my grandfather and father also farmed.” His brother Greg began farming here in 1976.

When Chris started a separate farm in 1990, he said, “I was stubborn enough to keep raising hogs.” Falling into financial trouble because of low hog prices, Chris joined his brother on the family farm. They realized they needed to diversify, so they opened a “country market” on the farm.

Although the brothers supplemented their livestock and meat sales by selling specialty items like sweet corn and pumpkins, it was not enough. Birky was caught up in the same price debacle that had trapped Adam Moody. Unlike Moody, Birky ended up with debts he could not pay, so he mortgaged his home so he could consolidate his debts and make a plan to repay his creditors. His determination to repay these debts was in a very real sense a blessing, he says, since it forced him to find more profitable ways to use the farm.

The Birkys’ natural talents also gave him additional options. As a young farmer, Greg sold farm-raised and commercially processed pork sausage direct from the farm to earn money. Chris sold cooked frozen pizzas, soda pop, Little Debbie® bars, and yogurt out of his dorm room to his fellow students at Goshen College. The family had also been involved in a pork producers’ effort — that ran from the 1970s to the 1990s — to sell grilled pork chops raised on Indiana farms. That project floundered as more and more farmers left the industry due to consolidation, but Chris adds it also “opened an opportunity for us to start our catering, and then to continue the service.” Unfortunately, their children lost interest in running farms. Chris took over the catering and market business as Greg’s kids graduated from school.

This gave the Birkys the foundation of what would become a catering business. “We took the equipment from the grilled pork project and started our own catering firm,” he adds. “We found markets such as the Porter County Fair, where we sell out of our own trailer.” The Birkys now offer pulled pork, roast pork, and Italian beef sandwiches. At their on-farm

store, they also sell local baked goods, their own barbeque sauce, and the products of nearby farms.

The catering business grew slowly and organically, based on small opportunities that came Birky's way. About six years ago, Chris bought out his brother and his mother, so he could focus the entire operation on the new direction he had set. He then had an opportunity to purchase a commercial kitchen. This gave him a much bigger reach.

"We do meals for lots of local events," he adds. "We'll have ten young people in here and we will work like crazy. We sell at a nearby country market, and we do hog roasts. We cook for field days, for wedding receptions, for the local expo center, and for a dinner theatre. Our goal is to have a full store of our own, with a banquet facility and a drive-in, a bakery, and a butcher shop all in one." Chris is talking to a nearby school about providing meal service. He sought out the Euro Market in nearby Chesterton because his nieces and nephews wanted summer work one year. "We've just had a tremendous response. We never did much advertising."

Still, he finds limits to what he can do. "I don't look at this as a business I am going to get rich on," but the catering does augment the income he earns from selling hogs, and also balances his work load. He sees a clear path to getting his finances resolved over time.

All the same, he has lost several opportunities because it has been difficult to get regulatory approval to prepare food with federal inspection. "We had conversations with one school district that wanted to buy our barbequed pork, but we would have to have more reliable state inspection to do that. The state cut inspections at the plant where my meats are processed, down to one day per week, due to budget cuts. That means I have to plan my entire year of processing in January," so he can fit into narrow scheduling windows at the processor. "Yet our sales are growing 20-30% per year." To meet some of these new opportunities, Birky says he needs to have access to processing at short notice, almost any day of the week. "The state should not be ignoring us on this."

He adds, "Indiana has very high standards, and we have a beautiful facility, so we also think state processing should be equivalent to federal standards. We had an offer from Chipotle to sell at Lincoln Park in October, and we can't go. We cannot sell at the Chicago farmers' markets." Birky says he has worked with the state Farm Bureau trying to put this case to policymakers.

All told, despite these setbacks, Birky has expanded his operation so it hires about six people full-time, and many others who work part-time for 20-30 hours per week. That includes one full-time catering director, one full-time assistant, and part-time backup cooks and servers.

This is a considerable expansion from a hog farm that sells about 1,200 animals per year. He adds that he farms much differently than his father. "We no-till everything. We have different genetics for the pigs." He has established a specific genetics he likes, crossing one-quarter York Landrace females with one-quarter Chester Boars to get a hog that is one-half Duroc, but with attributes of the other varieties. For processing when fully grown, he takes them forty miles to the Monon Meat Packing Company, in Monon, or twenty miles to Butcher Block, in Lowell.

Birky says the local context on his farm south of Valparaiso also creates some constraints for him. “We have very strong urban sprawl here. You have to have more than 10 acres to build a home here, but there is still strong financial pressure. We have aggressive farmer neighbors who do specialty crops, and that makes it difficult for me to gain more land. It is also not clear that increasing hog production works” in this suburbanizing area, due to potential complaints about the odor from neighbors.

In the future, Birky says he would love to bring in a “guy who does produce,” so the catering could purchase home-grown produce from his own farm. He would like to help his nephew set up a chicken and egg operation. “I’d also like to do other meats, like goat or lamb, and process our own chickens.”

A Mennonite, Birky also speaks eloquently of his spiritual draw to farming and feeding people. “If we build a store, then I want it to be a blessing and an enjoyment to my neighbors. I don’t want to be a slave to it. I like our products, the homemade, old-fashioned products. They really get my juices flowing. I just look at what we are involved in, and I say, ‘bless and refresh.’ That’s what God’s dream is for me.”

Staying small: milking 25 cows

Pete and Rhonda Scherf, Scherf Farms Dairy & Creamery (Michigan City)

Less than thirty miles away, on flat sandy land near Lake Michigan, Pete and Rhonda Scherf have taken an entirely opposite approach to raising livestock — to make their operation as small and compact as possible. In fact, Pete says his current quest is to avoid getting “too big too fast” as he did with his current business, Midwest Waterjet. “We planned too much for expansion,” he laments. “We took on extra debt to pay for new machinery.”

Midwest Waterjet does custom design cutting for industrial firms, using water under pressure as the cutting medium. Pete points with pride to a photo of metal ornaments Waterjet made, now installed on security gates at the White House. That business still carries a good bit of his vision, and is located on one corner of the Scherf farm. Now the income he earns from Waterjet helps support Pete’s transition to farming. The industrial firm is simply not where he wants to focus himself in the long run.

But Pete also describes how his decision was really fueled by an extended period of soul-searching, in which he settled on an occupation that would please him more. “I like hands-on work where I can manipulate material and make something. But I also decided I wanted to rely a lot less on employees. I wanted a ma and pa operation where Rhonda and I could do most of the work for ourselves.”

Since he already owned property in a rural area, it was not difficult to imagine farming as one of the choices. “I love farming. It is something I usually enjoy. There is a satisfaction in farming you cannot get from industrial work. I used to cut day in and day out, and I would have no idea where the things I made would go. I like to shake the hand of the guy who will eat the food, to make the connection.”

So, the Scherfs are starting a dairy herd of only 25 cows. Their milking barn will have only four stalls, so it is comparatively inexpensive to build. It is scaled so that the two of them can work with the animals intimately, and have some time to relax, rather than pushing all day long to pay off debt. The Scherfs will bottle their own milk, once again using a fairly small set of equipment scaled to their operation, and will retain most of the value of the milk and its bottling for themselves.

Ironically, Pete says his son works for a nearby dairy that is quite large. “He would milk 1,500 cows a day if he could. He tells me, ‘You’ve got to get big.’ I’m saying, go small. Go for high quality, and give the animals excellent care. We can feed, milk, and take care of our cows without killing ourselves,” he adds. “We don’t want to go any larger.”

Scherf traces his interest in farming to his upbringing in a farming community about 50 miles away from his current farm. “I started raising chickens, it was easy to do. A buddy of mine even found a restaurant that wanted pasture-raised chickens. I tried it. I had never imagined raising 2,000 chickens. It turned into a real job real fast, and I had to haul the chickens once a week to Chicago. It was more work than my wife and I wanted to do.” So, the couple scaled back production, and now sell at several nearby farmers’ markets, where “we sell out every week.”

Pete adds that he almost stumbled into the idea of dairy, primarily because his three children raised dairy cows in 4-H. Working alongside the animals with his children, Pete began to realize, “I really enjoy the cows. This is something I could do.” Yet he searched for a formula that would work. “I knew I did not want to milk 100 cows, that was too many. I thought about milking 10, and the [milk] co-op said they would pick up the milk, but we would not make any money.” They started making cheddar cheese, thinking that would allow them to add value to their milk. “We did OK. But we realized this is already being done by others, and it is more an art than a science. I am not an art sort of guy.”

He found bottling milk “complicated,” but rewarding. “It was a science, not art,” he says. Then he still had to face the ordeal of getting licensed to do so. “I called the state [Board of Animal Health]. I won’t say they gave me the cold shoulder, but they were not overly informative. In retrospect I probably wasn’t asking the right questions.” Scherf says he assumed they thought he was too small to bother with. However, “After a dozen phone calls to one office, someone must have decided I wasn’t going away. Finally, they looked at our plan. They called back and said, ‘Your plan is OK; it seems to meet the rules and regulations.’ They offered some alternatives to the plan that would satisfy the regulations at a reduced cost, or that could be more simply implemented. We are now about ready for our final inspection as a working dairy.”

Next, he identified his market: primarily people over thirty, who live in Chicago and have a vacation home near his farm. “I have a market that has a pretty good idea what they are looking for. They want quality, and they want to know the guy who made the milk.” He sells at two farmers’ markets locally, one of which is open four days per week. By selling direct to this customer base, he adds, “I will gross three or four times the money as the guy selling the same amount of milk to the co-op.”

Despite this hope for a direct connection to his customers, Scherf says he has already been contacted by someone who wants to handle his milk wholesale. “A couple of others are waiting in line to see what comes next.” His wholesale buyer is Stan Skillington (*see next profile, page 103*), who was forced to close his poultry processing plant because the state would not pay for inspections every day, and because he could make more money selling processed foods than selling frozen meats. “He started making yogurt, and he wants to buy our milk,” Scherf adds.

To obtain financing, Pete drew up an exhaustive business plan, covering 100 pages. “It was very detailed. That is really what sold this to everybody. We listed very specific goals, and we had plenty of collateral, and we had lenders who knew us.” Still, he had to contact several lenders. “The ag lenders were happy to loan us money to buy cows, but they didn’t want to touch bottling the milk. One bank thought we were so far out there they gave up. They put on all these restrictions and asked for even more collateral.”

At one point, Scherf imagined he would have to split the farm into two separate businesses, one asking for a farm loan, and the other asking for an industrial loan. But at last he reached an official at the Farm Security Administration who got excited about Pete’s plan. “He arranged for a loan for the animals and for the creamery, plus a line of credit, and at fantastic interest rates. He will apply for federal money for a Value-Added Producer Grant, for purchasing plastic bottles and for marketing the milk.”

He says that right now, as he sells meat from the farm direct to his neighbors, “We are the best kept secret around.” He does not want his milk to suffer the same fate. “I really want to have a visible presence in the market.”

Scherf’s cows will be largely grass-fed, but will be given grain supplements twice a day. “Our cows are never going to produce as much as they would in confinement, so it will cost a bit more.” On the other hand, since he will not homogenize the milk, he will be able to pass along some savings to customers for equipment he will not need to purchase.

Of course, Scherf is also cognizant of the fact his farm sits very close to a large population in Gary, Indiana, who may not be able to afford his product. “How do I sell to low-income people who can’t pay the price I need? I don’t want to be like the guys we had delivering milk here in the 1940s and 1950s. We used to have nineteen dairy farms, each with its own delivery route. They said they couldn’t stop delivering milk, even though they were losing money each time. Their customers could not pay a higher price. ‘Our customers need the milk,’ the dairies said. One by one, they all went out of the bottling business and began selling their milk to the co-ops,” as the larger bottlers took over.

Waiting for the inspectors **Stan Skillington, Skillington Farms (Lebanon)**

Like many Indiana farmers, Stan Skillington has an ambivalence about state meat inspection. On the one hand, he knows that inspection gives consumers who have not visited his farm a sense of safety when they buy his meats. On the other hand, Skillington believes that his

care and skills in raising and processing animals qualify him to be recognized as a safe producer.

Yet ironically, he has been forced to shut down his commercial meat processing business, not because of any failed inspections — there were none — but because the state of Indiana both mandated inspection and then could not pay for it. He had to scale back to personal processing only, because he could not get inspectors to come to his farm.

In a telephone interview, Skillington described what happened to his poultry operation. First, he gave me some background on his farm. “Like many farmers, we started small. We started in 1999 as a hobby farm. We had only 200 birds, and we processed them by hand.” State regulations allow a farmer to process a small number of birds on the farm to sell directly to customers, without inspection.

“We home schooled our kids, and we joined a network of families that home school their children. From time to time, we would sell them some of our meats.” The Skillingtons also raise pasture-grazed lamb, beef, and pork. “People kept coming back to us and saying, ‘Your product is phenomenal. You should raise even more.’ After six or eight years, we had developed quite a following. It was taking a great deal of time, and we were up to about 1,000 chickens. We decided we had to either take it seriously as a business, or stop doing it altogether. Ultimately, we were raising 10,000 chickens per year.”

They developed their own processing plant and asked the Indiana State Board of Animal Health to certify their operation. “So far we had avoided inspection since we were selling right off of our farm. But when we wanted to start selling at farmers’ markets, we needed to be certified. The law requires farmers selling at a market to get state inspection.”

Skillington holds misgivings about the policy, but he complied. “I understand the concept of inspection if the meat goes through a middleman. You want to know it is safe, and you cannot always tell where it has been. But when I am selling direct to a customer at the farmers’ market, they know exactly where the product came from.”

There was a catch, however. After Skillington set up regular inspection schedules with state inspectors, the legislature trimmed the budget for meat inspection. This meant that many inspectors cut an entire day off of their work week since they were not paid enough to cover more. In Skillington’s case, it meant scheduling for inspection was impossible.

“We process birds on Saturday. We do that because we need a lot of teenage help to process our birds, and the kids are only available on Saturdays. For a while, we had an agreement with the inspectors that they could come out every other Saturday from 6 am to noon. It all worked well.”

“Then, after a round of budget cuts, the inspectors told us they could not send any inspectors on Saturdays. Well, we are unable to process on weekdays, since we don’t have the help. I said I can’t do that. If you can’t afford to do the inspections, then change your laws.”

Since then, he has spoken with the State Board of Animal Health, who he found somewhat flexible in trying to come up with a solution. “Actually, the State Board was more reasonable. We really had the most trouble with county health officials.” The state has a custom exemption for poultry farmers who raise fewer than 20,000 birds per year, and process them on the farm to sell to customers who come to the farm to buy for home use. However, state law also considers any sales off the farm, including farmers’ market sales, as “retail” sales. This meant the county officials were demanding a full inspection that the state was unwilling to pay for.

Once his ability to process birds for broader use was taken away, Skillington decided to stop producing quantities of birds. “I don’t know if we are ever going to return to it,” he added. For one thing, high grain prices (as much as \$7 per bushel of corn, for example) make the costs of raising poultry quite stiff. “If I pass on the costs of feed to the customers, it would double the price of the meat.”

Moreover, he says, “The teenage work ethic is not very good. They all get money from their parents so they do not always feel like they need the work. To have a dozen people come on any given Saturday, I need a list of 30 people I can call.”

Skillington adds that he has also scaled back his beef production drastically, also because of escalating grain prices. However, he added, “pork is still going strong.” With few animals on the farm, he is exploring production of yogurt, using Pete Scherf’s milk.

Bottling organic milk

Jane Elder Kunz & Fritz Kunz, Traderspoint Creamery (Zionsville)

Jane Elder Kunz and Fritz Kunz, co-owners of Traderspoint Creamery, sit at a long table inside an immense and impeccably furnished wood barn they built on her ancestors’ land. Newly built, with massive wood beams, some curving masonry walls, and large windows, it is not an ordinary barn. It is, however, the showcase of Traderspoint Creamery in Zionsville, northwest of Indianapolis: the home to what Fritz Kunz calls the “only organic restaurant in the state of Indiana.”

They see the restaurant, and the gourmet cheese and yogurt they produce at Traderspoint, as a community gathering center for the greater Indianapolis region. Accordingly, they have set up a number of activities that attract their neighbors. On Friday afternoons, they host a farmers’ market in their garden, attracting 25 farmers who sell to hundreds of homemakers who are planning their weekend menus around what is market fresh. Festive music heightens the spirit of the gathering. In the evening, the restaurant features organic cuisine that people will drive miles to experience. Behind the glass wall to the left of the restaurant counter is a brightly lit aging room showcasing the creamery’s hand-made cheeses.

The view from the barn showcases a compact valley with lush grass, and homes scattered under distant trees. Persistent cows lower their heads to graze the pastures, producing the raw milk that courses through the creamery twice a day. It is a rare view of farmland and rooted community amidst suburbia, and Fritz is careful to highlight its appeal with a history of the farm.

“We worked with our neighbors to create a Rural Historical District here in Zionsville,” Fritz says. “It encompasses 2,500 acres. It is a federally designated National Parks Trust, and also protected by the Indiana Department of Natural Resources.” This public designation safeguards the district from certain development.

“We want to create a community of people who want land like this,” Kunz adds. “We are a farm close to a metro area. We want to attract people who enjoy green space. We want to attract youth who want to be farmers. We want to educate people about our farming practices.”

The property once belonged to Jane's grandmother, Fritz explains. She and her sister both had dairy farms. Fritz recalls that both sisters lived long, one to 109, and one to 103. “One would only drink raw milk, and the other would only drink pasteurized milk,” he says with a playful smile. “The one who drank raw milk lived the longest. She also insisted on double-clotted cream and organic food.”

Jane's grandmother made as her last request that the land should not be sold out of the family. Her son, Jane's father, took ownership, and then acted a bit bemused as Jane and Fritz suggested a major reworking of the property to create a contemporary dairy farm and education center. As a banker he had some means to help them carry out the vision. Once again, Fritz' eyes turned playful. “We worked a long time to persuade him, and he did not always believe our business case for the dairy. But finally, he agreed.” Combining 160 acres of Jane's family's land with another 160 acres of a neighbor's gave the family enough pasture to launch the dairy.

Central to the business case for Traderspoint was the concept that a sole dairy would have difficulty turning a profit if it sold milk to the commodity stream. It seemed clear that the dairy would have to bottle its own milk, but even that would not be enough. It would have to attract high-end shoppers in major metro areas who would pay for a quality product, and would have to have the marketing reach to find them.

To further tempt these customers, and to provide additional sources of income, the Kunz' also bottle a dense, semi-sweet yogurt, and cure Dutch-style cheeses including a soft *fromage blanc*. The yogurt recipe is based on a fairly spontaneous discovery by a cousin traveling in Holland of a lush yogurt sold at a street market. Using special cultures, Traderspoint emulated that product to create its own recipes.

Even these product lines would not be sufficient, however, to create the educational campus the Kunz' aimed to develop. Clearly the restaurant and farmers' market would play a key role in attracting urban consumers, and others who wanted to gather with like-minded food devotees. Yet the farm would have to do still more, offering through its nonprofit organization educational programs such as farm tours, and outreach campaigns making the case for organic and community-traded foods.⁴⁶

⁴⁶ That is, foods traded through community-based business networks.

Thus, Traderspoint is a highly integrated cluster of businesses, nonprofits, and educators that depend closely on each other and take advantage of the cows' milk, the ability of the farm to bring in guests, and the competence of those who create value-added products. The creamery stands as yet another reminder that the commodity pricing system is not kind to those who try to merely farm.

Like the other farms raising livestock in this section, simply having a business plan is not enough, unless there is also a good story to sell. In each case, Indiana farmers have tailored their own farms to their personal interests. Jane and Fritz Kunz are no different. Fritz explains that as a medical doctor (a practice he still maintains), he wanted to help create a healthy dairy. "I was taught in medical school that adult males should not eat dairy products, because milk is intended as food for young calves to help them grow fast. We were told the saturated fat was bad, that the nutritional value was low, except for children and nursing mothers. Yet I became skeptical about this advice because people who followed this advice were not getting any healthier. When I realized that my practice at home was different than the advice I was giving in my professional office, I was obsessed with finding a better answer."

Feeding cattle grass, their natural food, rather than corn, seemed to provide an answer. "We feed 100% grass," Kunz says. "We have found that adding even five or six pounds of grain to their diets alters the cows' biology enough that they produce fewer CLAs (conjugated linoleic acids, which are viewed by many nutritionists as useful in protecting human hearts from disease). On the other hand, adding grain to their diet does mean that the cows produce more milk." This increase in production is what attracts commercial dairies to feeding with grain — but Traderspoint keeps the cows on a grass diet for health.

The Kunz' obtained organic certification for their pastures, and then set about building a herd. Following the advice of a colleague, they purchased animals they liked, rather than limiting their choice to Holsteins (a breed that is often chosen for dairy because it has been bred to produce high levels of milk per cow). The Kunz chose a Brown Swiss stock, purchasing young animals from creameries and farms in Vermont, Montana, and Wisconsin. These cows now produce over 10,000 pounds of milk per year.

Sales and Distribution Director Craig Sanders describes how Traderspoint has been able to tap larger markets despite its interest in local trade. "We like to focus on 250 miles from our farm. That includes Chicago, Cincinnati, St. Louis, Columbus, and Louisville, in addition to Indianapolis," so it offers many substantial metropolitan markets. One distribution service, Goodness Greenness, carries Traderspoint products to Chicago, while Indianapolis Fruit conveys their dairy items to smaller towns across Indiana. Caito Foods in Indianapolis hauls to Pennsylvania and Ohio. United Natural Foods, Inc., carries Traderspoint products to Whole Foods nationally (to stores from California to Florida to Maine), as well as a few select co-op groceries, and to 100 Fresh Market stores in Atlanta.

A neighboring farmer who runs Traderspoint's Green Market (giving up a six-figure salary with Eli Lilly to do so), Maria Smietana, described what she feels is the biggest obstacle to Traderspoint's growth. "It is entrenched Hoosier attitudes. Some people feel organic is not affordable. Others tell me 'we can't feed the world with organic food.' Still others say 'we don't want to know what is in our food.'"

Obviously, Smietana does not agree with these sentiments. Yet Traderspoint staff are very hopeful that by providing an educational venue with quality food, their cluster of food firms can not only feed people organically, but also foster a shift in Hoosier attitudes. According to others on the staff of Traderspoint, it is Smietana's work as a connector that is playing a key role in making this possible.

Creating a regional tourist destination

Pete Eshelman, Joseph Decuis Restaurant & Farm (Roanoke)

As this researcher began to get acquainted with emergent food initiatives in Indiana, one of the names that was most frequently mentioned was Joseph Decuis Restaurant and Farm in Roanoke. Former professional baseball player Pete Eshelman, his wife Alice, and his brother Tim founded this multifaceted culinary business while dedicating themselves to the revival of a small Indiana town near Fort Wayne. Eshelman envisions Roanoke becoming an even stronger regional and international draw, centered on the opportunity to enjoy a Hoosier-style, world-class culinary experience. This, in turn, will inspire regional economic growth and development, he adds.

Actually, the full list of business faces Joseph Decuis already puts forward includes (a) an award-winning gourmet restaurant (recently featured in *MidWest Living*, and the first culinary staff in Indiana to cook dinner at the legendary James Beard House in New York City), (b) the Emporium, a retail store that offers casual dining featuring local foods, (c) the Inn at Joseph Decuis, which provides accommodations to out-of-town guests, and (d) the Joseph Decuis farm, that grows much of the food served in the entire cluster of firms. Most significantly, the farm produces Wagyu beef raised in the Japanese style⁴⁷, making Joseph Decuis the only restaurant in America to serve traditional Wagyu beef raised on its own farm.

Eshelman begins his overview of Joseph Decuis by pointing out that “I turned farmer at age 50.” In his younger years, he had pitched in the minor league for the New York Yankees. He learned the business of sports in the Yankees front office, taking George Steinbrenner's suggestion of insuring the contracts of star players and turning it into a thirty-year business. This resulted in the birth and expansion of two insurance companies that are now part of public companies.

Twenty-five years ago, his family moved to Indiana, and it has established deep roots in the region. Roanoke, he explained, was founded in 1845 as a lock on the Wabash and Erie Canal connecting Lake Erie to the Ohio River. When the Eshelmans moved their new insurance business to Roanoke, he adds, like many small towns in Indiana twenty years ago, it was in a state of decline. Eshelman says, “We could afford a building and it was close to the airport. We could also see that with some work the turn-of-the-century buildings in

⁴⁷ The term “Wagyu” means Japanese cattle. Intensely marbled with fat due to distinctive genetics, it is prized for its rich flavor and tenderness. Proponents also say its meat is rich with healthy omega fatty acids. In the U.S., this beef is often called “Kobe” beef since it was first known on farms near Kobe, Japan, but several regions of Japan have created their own regional branding.

town had great potential to be restored.” As the Eshelmans’ insurance business grew, they purchased additional buildings, expanding their restoration efforts while protecting the historical character and integrity of the town.

The Joseph Decuis Restaurant started as a private dining room for the Eshelmans’ business guests from around the world, and quickly gained a reputation for world-class dining. Yet the family noticed something amiss. “We have three kids, and two of them are vegetarians,” Eshelman explained. “When we would go to Fort Wayne, most restaurant choices were franchises or fast food. Since we are discrimination eaters⁴⁸, we couldn’t eat.” As he thought about this, Eshelman says, he realized that the region needed a larger gourmet restaurant to provide a different dining choice, but also show that Indiana could offer a great dining experience beyond franchised restaurants. The town had underutilized property, at relatively low prices, and a landscape that invited tourists who might value an opportunity to eat food that grew in the region. “I began to see that the region had strong potential to develop arts and culinary businesses. People here want our businesses to succeed.”

Eshelman says his family’s vision is to turn a small Indiana town, supported by local farms, into a bustling destination. He adds that he has seen similar destinations flourish in other regions, such as his birthplace, New Orleans, Napa, and several small towns in Europe. He believes that to become more successful and sustainable, the entire region must become the draw — not simply Joseph Decuis or Roanoke. “While we enjoy serving customers from the Fort Wayne region, many guests arrive from large cities like Chicago and Indianapolis, or from other nations. Those visitors help us to define what’s special and attractive in our Hoosier culinary experience.”

As an identity for his business, Eshelman selected a name from his father’s side: Joseph Decuis, who was born in 1753. “Our restaurant logo is taken from Joseph’s signature on his last will and testament in 1822,” Eshelman continues. “Joseph represents to our family the essence of the American dream. He was the grandson of one of the original colonists of Louisiana territory, became a successful businessman, fought in the American Revolution, and was the patriarch of a large family. We credit him for our family’s love of great food and dining together.” The name was also a celebration of his great, great grandmother, a descendent of Joseph. “My great, great grandmother’s family was very poor,” Pete adds, “But every Sunday she served a great meal on a white tablecloth, to an extended family who enjoyed dining together. The food was so good, as a little kid I couldn’t stop eating. Dining together was a bonding experience for our family.”

Launching a gourmet restaurant in a small Indiana town in 2000 might have appeared to flaunt the odds, but the Eshelmans’ instinct was that a gourmet option would be successful. Eshelman says the day they opened the doors to Joseph Decuis he told the staff that “Our goal is simple. We are going to offer one of the finest gourmet dining experiences in the world, and grow to become one of the top restaurants in America.” He says some laughed, and some didn’t believe. They are no longer with the restaurant. Those that did believe are the core of our team today. Eshelman is proud to say that last year, Open Table named Joseph Decuis one of the top 50 restaurants in America.

⁴⁸ The term “discrimination eaters” refers to a group of consumers who select their foods carefully.

To create great food, Eshelman says, “You need great ingredients. We started raising vegetables and herbs on our 100-acre farm. We expanded to raise free-range hens for eggs. Then, one night, our chef featured Kobe (Wagyu) beef on our menu.” Pete and his wife were awed at the taste of this Japanese delicacy. They began a journey to learn more about this beef, that led them to meeting Wagyu producers in Texas, Iowa, and ultimately Japan. The Eshelmans ultimately met Mr. Shogo Takeda, a legendary Japanese Wagyu farmer. With Mr. Takeda’s help the couple expanded the farm to raise Wagyu beef in the Japanese tradition.

As the Joseph Decuis farm grew to provide more and more food products for the restaurant, the farm grew to become a destination. Eshelman says people wanted to see where and how their food was raised. They began hosting farm tours for dinner guests. The farm has become the setting for Farm to Fork dinners, tours, and special events.

In addition to Wagyu beef and other food raised at the Joseph Decuis farm, Joseph Decuis sources as much food as possible for its menu from local farms. For example, Gunthorp Farms (*see page 97*) supplies all-natural pork, chicken, and duck. Strauss Farms supplies humanely raised veal, and a new close-loop aquaculture farm, Bell Aquaculture (Albany) supplies yellow perch.⁴⁹ Other local farms provide asparagus, heirloom tomatoes, maple syrup, honey, goat cheese, and lamb. All told, Eshelman says, “We buy from about 20 local farms.”

One immediate goal of Eshelman’s, to extend the ability of local growers to supply Joseph Decuis, is for a partner firm to develop a commercial kitchen that can take in fresh produce at harvest time, when prices are the lowest, and process it for later use in the off-season.

Eshelman is pleased with the way Piazza Produce (*see page 76*) has stepped up to respond to his restaurant’s demand for high-quality local foods. “Piazza is really embracing the value of locally sourced foods, and they are helping Indiana niche farmers find customers for their products.”

Yet he also adds that “I don’t think the traditional distribution system works for small niche farmers. Niche farming is seasonal in nature. Some distributors and retail stores want margins which don’t allow the farmers to make needed profits.” After attempting to wholesale, Joseph Decuis changed its business model, offering its farm-raised Wagyu beef and other products only through its own restaurant and retail store. Eshelman says, “As we grow, we see ourselves expanding through our own Joseph Decuis stores and not engaging in the wholesale business. I think we can better control our brand, quality of our product, and realize acceptable margins.”

“We also have barriers with processing,” Eshelman adds. Currently, there are few USDA-inspected outlets for processing beef. This creates a barrier for niche protein farmers, he says. “Maybe one day we will buy our own processing facility, one dedicated to our own use.” He adds that he feels the lack of a local processing capability is also a food security issue. “If I were president, on my top ten strategic issue list would be how to supply Americans with high-quality, safe, locally produced and sourced foods.”

⁴⁹ Bell Aquaculture did not respond to requests for an interview.

Eshelman thinks the current traditional food system needs to change in ways that accommodate local farmers, distributors, and retailers. He sees extraordinary opportunity, but he also sees challenges in Indiana. “While niche farming can be more financially rewarding than commodity farming, many farmers are trapped in the way they are farming. They have invested so much in a certain set of equipment and a certain production system they really don’t see any options to change.” Pete says the free market is the answer. “Once farmers see there is a demand and better margins for locally raised and produced niche foods, you will see a strong cottage industry emerge.” He cautions that while “Most farmers are awesome people, not a lot of them are good businesspeople. But they are all hard working entrepreneurs looking for opportunity.”

In the meantime, Pete works with farmers such as the Hitzfields at Seven Sons Farm in Roanoke, which supplies grass-fed beef, and Jeff Hawkins at Hawkins Family Farm. “We all need each other. The next step is how do we all work together as a niche industry?” He envisions a future culinary tour including opportunities for people to see firsthand the operations of local niche farms and at the end of the day enjoying the bounty on the table.

Eshelman has also structured Joseph Decuis as a vertically integrated culinary business based on creating a world-class, distinct Hoosier experience. He believes that all of his staff on the farm, at the restaurant, at the inn, and at the retail store, have to share this passion. “It’s much more complicated than just running a single business. We have created different ways to experience and enjoy Joseph Decuis, and all facets are interrelated. For example, our chefs spend time working on the farm. This first-hand experience gives them the respect and understanding of what it takes to raise world-class foods as they prepare world-class foods. We are creating and selling a culinary experience much different than selling a commodity.”

Investing in a neighborhood Christopher Eley, Goose the Market (Indianapolis)

Goose the Market started out as a concept for a local butcher shop in Indy’s Fall Creek neighborhood, but is blossoming into a cluster of food firms that very intentionally brings farmers and urban consumers together.

Christopher Eley, the moving force behind this eruption of attention to quality foods, says he chose Fall Creek when he opened his market in 2007 “because of what was happening in the neighborhood. The city was putting money into redevelopment. A growing population of childless young professionals was moving in. The neighborhood has a large arts presence and a receptivity to GLBT⁵⁰ lifestyles.” Critically important for his new business, he found a location on “one of the main arteries out of downtown that leads to the near north neighborhoods.” This seemed likely to attract a stream of commuting customers, as well as neighbors who might walk to the store.

⁵⁰ GLBT is an abbreviation for gay, lesbian, bi-sexual, and transgender.

An Indianapolis native, Eley grew up in the northeastern section of the city, moved to Chicago, gained considerable experience in the hotel and restaurant industries, and then decided he wanted to move back home. “All I knew when I first started planning was that I did not want to start a restaurant,” Eley says. “I knew I enjoyed butchering and preparing charcuterie, so I centered on that. Over time, it evolved into several more directions: We added specialties like beer, wine, coffee, and gelato. As this vision expanded, we began to think of this as a neighborhood gathering place.”

Indeed, visitors to the market are greeted with an unhurried, genuine warmth by the staff, who seem to focus their attention on responding to the wishes of the customers. The meat counter offers a diverse array of sausages, cured meats, and prepared foods, most of which have been created by the market’s staff. On a lower level sit a few tables surrounded by a gourmet collection of wines and beers; from a small alcove in the back one can order a few small plates to eat.

Still, for all of these options, the core reason for the market is to provide a place to purchase high-quality meats. “I learned the basics in culinary school,” Eley adds. “I also picked up some tips from people I’ve worked for. I have tried my own recipes and made lots of mistakes. Still, I have friends who enjoy trying new approaches, and we continue to learn from each other.” He adds that he looks for suppliers who genuinely follow sustainable practices, rather than simply adopting a label. “We are continuously improving our knowledge of, and sense of, our product.”

This expansive spirit pervades the growth of the business. At the time of our interview in July, 2011, Eley was weeks away from opening a new smokehouse, which he planned to name “Smoking Goose.” He says, “Once we open the new business we will be at a level where we can sell meats wholesale. Our aim is to produce products that are unique to this region.” In the prevailing market, he adds, “Meat has become such a commodity product that it all looks just the same. We feel we bring something unique.”

After the expansion, “We’ll still be small enough we can continue to buy from our current producers, but we will be able to buy more from them. Smoking Goose will deliver within sixty miles, but we also have our sights on Chicago, Louisville, and Cincinnati. We make all this possible for ourselves. We do our own legwork, have our own network of processing and transportation. We have adequate supply.”

One of the market’s sources of meat is Gunthorp Farms (*see page 97*), which delivers whole hogs directly. Eley then cures these into exceptionally delicate and flavorful meat, for sale at the deli counter. To Eley, this is also a treasured business relationship that will continue to deepen as the wholesale smokehouse opens. “Aside from compromising his quality or sustainability, Greg will do whatever it takes to grow with us,” Eley says of Gunthorp. Eley adds that he buys from about 15 or 20 such growers, and prizes their independence. “We’re definitely well connected to other businesses.” He makes a point of making sure that market employees visit the supplying farms, so they know what the farmer goes through.

Eley’s vision is to expand into a network of small shops that add more and more specialty items. “We’re only going to get more specialized. I am not sure what the products will be. Cheese? Fish? More butcher shops?”

Local, Smaller-Scale Distribution Networks

Scaling up while staying small

Erick and Jessica Smith, This Old Farm (Darlington)

Streetwise urban marketing

Nick Brown, Green Bean Delivery (Indianapolis)

Purchasing fresh produce in the winter months

Laura Henderson, Indy Winter Farmers' Market (Indianapolis)

Clustering near a convent

Sister Claire Whalen, Sister Marie Nett, and Chris Merkel, Michaela Farm (Oldenburg)

Chef Adam Israel, Li'l Charlie's Restaurant and Brewery (Batesville)

Patty Reading, Langland Farm (Batesville)

Kathy Cooley, Food and Growers Association (Batesville)

Custom processing to their neighbors' specifications

Bea Frey, Prime Meats / French's Locker (Batesville)

“That's just the way poor people farm”

Albert and Diane Armand, Harper Valley Farm (Westport)

A family produce farm since the 1920s

Gary Bush, Bush's Market (Columbus)

Forming a local cooperative

Bud Beesley, Jennings County Growers Cooperative (North Vernon)

Bringing back a trusted name

Steve Stoll and Charles Shelby, Daviess County Food Processing Institute (Elnora)

Local, smaller-scale distribution networks

If produce growers, and meat and dairy producers who have the means, are gaining market leverage by integrating diverse components of the production, processing, and marketing system into a single business, or into a cluster of related firms, it stands to reason that smaller operators are also deeply interested in forming integrated operations of their own.

Many of these food initiatives are more localized, and less capitalized, than the ones described above. Many start with a fairly broad vision for the food they would like to carry, but many are also more limited by a lack of personal wealth for implementing their visions. This very lack of resources prompts many networks to innovate in ways the larger, more capitalized firms have yet to do.

Scaling up while staying small

Erick and Jessica Smith, This Old Farm (Darlington)

Persisting despite remarkable challenges, Erick and Jessica Smith have patiently built a collaboration of more than seventy farmers who sell locally raised foods to retail and commercial markets in the region between Indianapolis and Lafayette. Called simply “The Alliance,” the group is creating a distribution network that allows farms to stay small and to focus on sustainable practices, while pooling their efforts to respond to the large-scale demand represented by institutional buyers and grocers.

The Smith’s business, “This Old Farm,” also represents an effort by a group of producers who are not individually wealthy to build infrastructure from the ground up. In doing this, the Smiths acknowledge, access to grants is critical. The Alliance may lack some of the rapid clout that more prosperous initiatives enjoy, but it also seems to cultivate a collaborative spirit among the producers, who are making policies for themselves as a group, rather than following the lead of one powerful leader.

Jessica Smith says that This Old Farm tries to find a point of balance that is “right-sized,” not too small or too large. “We are small enough to care about each and every family as a farm. As part of the Alliance, we are large enough to help supply commercial buyers with good, locally raised foods.”

The need for creating their own infrastructure became apparent to the couple not long after they purchased their 88-acre farm in 2000. As young Purdue graduates with a technical bent (Erick holds an engineering degree and Jessica holds one in biology), they set out to raise food in a sustainable manner. Soliciting the involvement of nearly 50 of their neighbors, they formed a CSA (Community Supported Agriculture) farm that shipped fresh vegetables weekly to their shareholders.

As a vegetarian, Jessica had once opted not to purchase meat, but as she farmed she also realized that they could not build enough fertility in their fields to raise vegetables unless



Map 8: Interviews with local distribution networks

they had animals on the land. After much soul-searching, she also decided she would be open to eating meat if they had produced it themselves. Thus, they began to raise pastured beef, pork, poultry and eggs. Then a new problem emerged: They discovered the demand was more than they could handle. “There was no way to supply the larger customers as an individual farm.”

Missing was the infrastructure (meaning the equipment, facilities, and market channels) that could efficiently convey food raised on individual small farms, and aggregate this to sufficient volume that it would attract the interest of a food buyer from a college, school, or supermarket who needed to feed a large number of mouths each day. So, the couple set out to create that infrastructure anew. “The whole food industry needs to be renewed or it will be gone.”

They formed the Alliance to provide this vehicle. The group meets together to shape policies and to share their individual farm plans, but each sale is made from a farm direct to the end customer. This relieves the Alliance from having to have money to buy inventory and carry stock in a warehouse. “The grower sets a price in advance with the buyer, based on the quality they intend to deliver,” she adds. “We take 20% off the top for helping to make the deal possible.” Jessica adds that the Alliance was loosely modeled after Good Nutured Family Farms in Missouri, but also adapted to conditions in Indiana. “The Chicago markets run differently,” she adds.

Smith says their first forays into regional food distribution involved produce. “Produce is always what leads our entry into a certain market. The meats follow.” Yet she also mourns the fact that “Finding produce is the biggest obstacle we face. If I had \$350,000 to \$400,000 of produce I could move it to just one account, but I can’t get the supply.”

Among the produce suppliers for This Old Farm are Amish and Mennonite producers near the Smith farm. “Amish growers know how to raise produce for case-lot boxes,” Smith adds. She views This Old Farm as an alternative to the community produce auction that started six years ago in Rockville. That auction moves produce, but does not often differentiate⁵¹ chemical free produce. The Smiths are able to offer a premium by working directly with the growers to encourage organic agriculture. The Smiths also work with “English” farmers — this is the term given to the rest of Americans by the Amish communities. Many of the “English” farmers are first-generation farmers who needed assistance to understand packaging and harvest techniques.

When the Alliance first started offering local food options, the couple could not find any grain from Indiana. Almost all of the available stock came from Michigan. Nor could they find Indiana producers who could assure their grains were free from genetic modification (non-GMOs). At long last, the Smiths located Central Indiana Organics, which markets organic grains under the Fertile Fields Organic label. Founded by David and Jon Randle, in partnership with Denny and Ed Cunningham, Central Indiana Organics operates from the Kern, Kirkley, & Herr elevator near Lebanon.

⁵¹ A differentiated product is one that has special characteristics that spark consumer interest. These often command a higher price, or greater consumer loyalty.

Another large bottleneck, they discovered, was a lack of meat processing that was responsive to what they needed. Even when they offered to pay more for special cuts, they could not always find processors who would cut to their specifications. By shuttling among three different meat packers, they were able to deliver the products they wanted, but this was also wearing on their margins.

Once again, the Smiths realized they would have to build their own. They contemplated putting up a new building on their own farm. Yet when a former meat plant in Colfax became available for purchase, they realized it would be cheaper to work with an existing facility. “It was one of the nicer plants in the area, built in the 1970s,” Jessica recalls.

With the help of two grants from USDA and matching funds from the Indiana Economic Development Corporation, the Smiths bought the 7,000 square-foot building in 2009. After remodeling the property and installing new processing equipment, the Smiths hired Mike Bruton, the plant’s former owner, to be their meat manager.⁵²

The new plant can handle poultry, beef, pork, lamb, goats, and bison. Each animal is processed one at a time, allowing for individual attention to the requests of the customer. Natural products are used rather than artificial preservatives like nitrites or flavorings like MSG. Inspected by the state of Indiana, the plant is also applying for USDA inspection. It is one of the two certified organic facilities in the state of Indiana.

The plant includes a butcher shop and retail store, where local customers can buy meat that is identified as coming from specific farms in the region, so customers know exactly who produced the foods they are eating.

Bruton adds that the store carries a mission of educating consumers to ask for better foods than they are used to finding. “If we get people in the door once, we’ve got them. There’s a big difference in taste, and people now are a lot more conscious of where their meat comes from and how it is processed.”⁵³

Tragically, at the end of 2010, after less than a year of operating the renovated plant, a short developed in the electrical system, and the building was badly damaged by fire. Erick took on a second-shift job in designing and building the processing facility in order to help recover from the fire. They reopened the processing plant in the summer of 2011.

The capacity of the Alliance is discrete, but impressive. Smith says the 70 growers can deliver as much as 450 beef cattle, 400 hogs, 7,000 broilers, 200 lambs, and truckloads of produce per year. The meat is labeled at the plant with the name of the grower on it. “Through this name we can tell you exactly how the product was raised.”

⁵² McGurk, Linda (2010). “Small processing plant opens in western Indiana.” *Farm World*, May 20. Viewed August 25, 2011, at <http://www.farmworldonline.com/News/NewsArticle.asp?newsid=10133>

⁵³ McGurk, Linda (2010).

With 7,000 square feet to work with, the Smiths plan to expand the facility into a community kitchen where their neighbors can process value-added foods for themselves in a commercially certified facility. The expanded building will also hold a packing area for fruits and vegetables, and better storage space, to aid This Old Farm's distribution effort.

Drawing upon Erick's masters degree in Building and Construction Management with a focus on sustainability in construction, they also hope to reduce the costs of running the plant by reducing electricity and water use. As one example, they envision using waste heat from the cooling units to preheat the hot water they use in the processing plant, reducing heat loss into the atmosphere, and cutting down on their propane bill.⁵⁴

By aggressively reaching out, This Old Farm has also found distribution channels all over the region. "We started with one restaurant in 2009," Jessica Smith says. "Then we began to supply the Eli Lilly campus through [the food service] Aramark. We sell eggs to Traderspoint [*see page 105*], and sell to several food buying clubs or health food stores." As the food delivery service Green Bean (*see page 118*) has come on line, This Old Farm has sold to them.

Smith adds that, at the time of our interview in March, 2011, This Old Farm was about \$100,000 short of the investment capital it needed. They were preparing a strong presentation for Chicago investors, but also felt uncertain there would be interest. Most of the investors they have approached want returns of 20%, she continues, which is unreasonable given the nature of their business.

Ultimately, she also hopes the infrastructure they build will be supported by the community. "I really believe in the local production of food," she concludes. "And I believe in operating a small, community-supported facility. Our neighbors are thrilled that we are small, and they don't want something larger in our community."

Streetwise urban marketing

Nick Brown, Green Bean Delivery (Indianapolis)

Hitting hard up against the reality of urban living, the delivery firm Green Bean believes it has a solution for people who are too busy to shop for their own food: "We'll deliver to you." Using an internet order platform, customers in select Indianapolis neighborhoods can choose the foods they wish to buy; then a box full of fresh food will arrive at their doorstep.

Not only does this cut the time involved for urban shoppers to procure the foods they eat, the volume Green Bean has built also presents exceptional opportunity for farmers near Indianapolis. Certainly this is not an answer for those customers who want the most direct connection possible to the source of their food, and certainly this model so far has been offered primarily (but not solely) to people who live in more prosperous neighborhoods. Green Bean is nonetheless a bustling outpost of activity as it ramps up its delivery reach, and it has launched a few trials in low-income areas.

⁵⁴ McGurk, Linda (2010).

Taking a rare pause from his fast-paced office, Nick Brown leaned back in a straight-backed chair and outlined the path that had brought him to Indianapolis. After working in several prominent grocery firms in the West, including Wild Oats and Sunflower Market in Tempe, Brown had opted to return home to see what he could do to promote a local food economy.

Brown hooked up with Matt Ewer, brainchild of Green Bean, who also had built an array of experience in the western states after growing up in Indiana and studying environmental science at Indiana University. “Matt worked for the Full Circle Farm in the Snoqualmie Valley, Washington,” Brown recalls. “They started with 250 CSA (Community Supported Agriculture) shares a week, although they also bought food from nearby farms to fill the shares, and eventually grew to a total of 6,000 shares, including shares sent to Alaska.” The farm allowed customers to select what would be placed into their bin, instead of simply taking whatever had been harvested.

Yet Ewer also felt the pull to return to his home state, Brown recalls. “‘Let’s bring food closer to home,’ Ewer said. ‘That is how we will grow our own economy. We will also put back the soul we’ve taken out of our food.’” Ewer visited a bakery in Indianapolis, and arranged to make use of some empty space in the back. He took out a loan so he could build several hundred insulated plastic bins for making food deliveries. He sought employers who would connect the service with their employees. He did grass roots outreach in neighborhoods he thought would be receptive.

Over time, through constant motion and refinement, the concept of the business has evolved from being a food-delivery service to being what Brown calls “a lifestyle delivery service.” That means, to Brown, that they are delivering products that were naturally and organically raised in the most sustainable way possible. They hope to fuel their delivery vans with biodiesel, and they hope to convince their customers to eat better foods. Green Bean owns and operates a separate distribution company, Tiny Footprint Distribution, to actually carry food boxes out to subscribers’ homes. Tiny Footprint also distributes products from local artisans and producers to retail outlets such as Whole Foods and BIGGs Rempke in Cincinnati, and backhauls products between the various Green Bean warehouses.

The boxes carry vegetables, fruits, meats, grains and flour, dairy, eggs, and an entire complement of foods that are delivered on a weekly basis. The bins in which the food is carried have compartments designed to keep fresh foods fresh, and frozen foods frozen, for nearly eight hours during the summer months and even longer during the cooler seasons; thus deliveries are made in the afternoons about 2-8 pm, so the food will not spoil before the customer comes home.

With a rapid plan for expansion, Green Bean now sources food from nearly 75 Indiana farmers and artisans, and ships nearly 5,000 bins of food a week at the height of the growing season to neighborhoods in Indianapolis and surrounding areas. They have operated in Cincinnati since early 2009, Dayton since late 2009, and brought Columbus, Louisville, and Fort Wayne on line early in 2011.

In Columbus Green Bean has built an innovative partnership with Snowville Creamery, a grass-grazed dairy in southeast Ohio that offers premium quality milk. Green Bean represents the creamery in the Midwest, except for the dairy’s sales through Whole Foods.

When Snowville delivers a truckload of milk to Indianapolis, that truck also carries a variety of other naturally grown produce, and products from a myriad of artisans and farmers in the Greater Columbus and Athens Ohio area. The truck does not go home empty; rather it carries food back to Columbus for later delivery in that city for Green Bean. This creative arrangement, which Brown calls “a spider web of connections,” makes efficient use of delivery trucks.

Recognizing that the Green Bean Delivery model primarily attracts middle class consumers, Green Bean has also partnered with a local hospital, Indiana University Health, that offers a “Garden on the Go” truck, a mobile farmers’ market that sells fresh produce at lower than average prices in low-income neighborhoods and places lacking grocery stores.

Purchasing fresh produce in the winter months

Laura Henderson, Indy Winter Farmers Market (Indianapolis)

At first it was a curious sight: entering a half-built-out retail space in downtown Indianapolis on a crisp and sunny day in March, to see people milling about informally around tables that displayed freshly-baked scones, homemade pies, fresh greens, tomatoes, milk, and dark-roasted coffee. Several hundred people strolled among the tables, placing orders, socializing, and sampling their purchases.

This was the Indy Winter Farmers Market (IWFm) in Indianapolis, with an extraordinarily rich component of offerings, ranging from religiously inclined farmers and bakers to organic farmers to urban farms. At the time, this was clearly a temporary space, one of three the market had occupied in as many years as it sought a permanent home.

When visionary market organizer Laura Henderson met a visitor at the market, morning sunlight streamed in. The city had long featured a public market, she explained, during the growing season. As was typical of early American cities, the city’s founders understood that opening a public market was essential, both as a social gathering place, and as a critical way to ensure farmers could connect with consumers to trade.

In 1821, one year after the city of Indianapolis was founded, the city opened a market where farmers could sell meats and produce directly to residents. This grew into the current City Market, an attractive brick building opened in 1886. At first this was primarily an open space where meat and produce were sold. After World War II, when supermarkets entered the region, the City Market continued to serve as a community gathering point, but lost its original distinction as a place to buy fresh foods. Over time, the focus of the market shifted toward prepared foods that offered vendors higher margins than raw food products, crafts, and small gift items. Still serving as a vital center of activity, the market’s historical importance was recognized by placing the building on the National Register of Historic Places.

As interest in local foods expanded in the past few years, several growers in the Indianapolis region began to use hoop houses and greenhouses to grow vegetables in mid-winter, and sought a place to sell these items in the colder months. Thus the IWFm was born. It would not compete with the City Market, or the Indianapolis Farmers Market (an outdoor market

that could not accommodate winter traffic), but it would be open when the City Market was not. Since there were relatively few farmers ready to sell foods in the wintertime, it would also feature fresh-baked and prepared foods from local vendors.

In the winter market's formative years, it occupied several different sites. Each year, Henderson would identify a new space, arrange with its owners for winter use, and set up shop. Customers had to be lured to new locations each year. By 2010, Henderson had found a large, unused retail space in a brand new condominium complex. The victim of the economic downturn, the space had been framed out but never leased. The owner, eager to have the space used, granted low-cost access to the property on Saturday mornings.

Standing behind a table, overflowing with fresh greens on this particular Saturday, were Deb and Darin Kelly from Good Life Farms in Martinsville. Their hydroponic farm, with a hoop house, produces arugula, lettuce, basil, Chinese cabbage, chard, mustard, kale, and cilantro. They also raise spinach and tomatoes in their fields.

The Kellys say that their hydroponic practices are often more sustainable than growing in soil. Water can be reused, and the couple estimates they use one-sixth the water they would require to grow in fields. Moreover, they argue, by not tilling as much soil they are helping to protect the land on their farm. Since Good Life Farms is among the first producers to have product ready for the early season, they find this winter outlet to be critical.

In addition to selling at the IWF, the Kellys sell to Pogue's Run Grocer (*see page 68*), Goose The Market (*see page 111*), Bloomingfoods East and West (*see page 63*), and Locally Grown Gardens. They also supply restaurants such as Farm Bloomington, Finch's Brasserie, Story Inn, The Oceanaire, Euphoria, and Restaurant Tallent (*see page 65*).

Deb traces her farm experience back to volunteer work she did for Traderspoint Creamery (*see page 105*), where she became “fascinated with sustainable growing methods.” Traderspoint itself was showcasing its milk, cheese, and yogurt at the market.

As we strolled the market, Henderson expressed the hope that a permanent home for the market could be found before long, just to relieve the pressure of having to make logistical arrangements at each new site. Later in the summer, it was announced that the Winter Market had now found a permanent home — inside the City Market.

Clustering near a convent

Sister Claire Whalen, Sister Marie Nett, & Chris Merkel, Michaela Farm (Oldenburg)

Chef Adam Israel, Li'l Charlie's Restaurant & Brewery (Batesville)

Patty Reading, Langland Farm (Batesville)

Kathy Cooley, Food and Growers Association (Batesville)

A remarkably deep-rooted and effective cluster of food leaders has coalesced in Batesville, with a passion for organic agriculture, a drive to feed low-income people, effective reach into Cincinnati, and profound unity. There is a rare and infectious sense here of people genuinely enjoying their collaboration. Working in a relatively small town with a strong

sense of patience and considerable humor, the cluster of leaders in Batesville exhibits a steady sense of patience and a bold long-term vision.

This cohesion was apparent to this visitor when he was invited to meet many of the principals over a meal in March, 2011, at Li'l Charlie's Restaurant and Brewery, a brew pub that chef Adam Israel, at 23, has transformed into a destination dining spot using local food. This was not the first place one might look to find a convent nun, but sitting at the table when the visitor arrived was Sister Claire Whalen, still the sparkplug for local foods activities although well into her 80s. Also at the table was Patty Reading, vice president of the local Food and Growers Association, and coordinator of the farmers' market in Batesville. Her farm, Langland Farm, also happened to be the source of the grass-fed beef that Israel served for dinner. One would have to call this a very rooted meal.

Chef Israel came out to the table to explain that his efforts to transform the restaurant were paying off well. Trained at the Culinary Institute of America (CIA), he had come home to Batesville to feed really extraordinary food to his neighbors in Southeast Indiana. It is a bar, with sports events broadcast on multiple video screens, so hamburgers and nachos are common fare — but one is eating grass-fed beef and fresh peppers from local farms. The original beers are brewed as much as possible with local grains.

“Seventy percent of the food I cook is sourced locally,” Israel says, wiping his hands dry on his chef's apron. “We are turning people on to eating fresh vegetables. We buy one side of beef every three weeks. The butcher does just what I want.” The result? “Sales are up almost 300%” over the days when local fare was not an option. This, one must add, is not because prices have escalated to outrageous levels. This menu is priced at levels Israel's small-town neighbors can afford; the restaurant is full of families at dinner time on a weeknight.

As the diners munched perfectly grilled rib-eye steaks from Langland farm, owner Patty Reading recalled how her family had transitioned 300 acres to organic agriculture a decade ago. In addition to grass-fed beef, the farm raises black beans, spelt, pepper, and corn, much of which also shows up on Li'l Charlie's menu.

The approach the Readings have taken is to find niche markets. “We know where our food is going before we grow it,” she adds. This reduces risk and also allows them to tailor production to what the end user wants to buy. Langland Farms still raises commodities for sale to broader markets, but the Readings don't find this rewarding. “We need to sell commodities to get a cash flow,” she continues, “but the margins are small. You might get one good year once in a while, but as soon as you do the input prices rise again” so the profit margin is lost.

These local food leaders went on to say that they had surveyed potential customers to learn what they wanted in food. “Eighty percent of the people we gave the survey to responded. Seventy-seven percent of those wanted more local foods. They want local food because they find it is better food, and because they want to know the farmer. They know this supports the local economy, and they also understand it is better for the environment,” Reading continues.

Among the plans this group has is to become an important food hub for their region. As they outlined it, they would convert an old factory into a produce distribution center, connect their farmers with buyers in Cincinnati, and open a storefront featuring local foods. There are already two meat processors in town, so that base is covered. Yet their goal is not necessarily to feed the world, it is to feed themselves: “We would become self-sufficient for food,” Sister Claire adds.

Sister Claire is in many respects the main force behind this vision. As a member of the Sisters of St. Francis community in nearby Oldenburg, she has spearheaded efforts to bring Michaela Farm back to production. The 320-acre farm, located on convent property, expresses the sisters’ vision for stewardship of the soil and care for the broader community. For years, extra food from Michaela Farm has been donated to the needy — but the vision of the convent is that fewer and fewer people will be needy, if they are successful in their quest.

It would take until mid-June for a visit to the farm to be feasible. The tour began with a long ramble through the immense L-shaped brick barn — with a cavernous wood roof — that had been built for the convent from 1907 to 1909. It is the largest brick barn in the state of Indiana. With multiple levels, it holds basement rooms for packing produce, a ground-level sales area, a substantial root cellar, a former milk house turned into a meeting room, and large expanses where machinery, or straw bales, could be stored.

The barn was built at a time when the Sisters of St. Francis, like many convents and monasteries of the era, produced most of their own food, and fed the students of the associated school, which taught in the German language. The sisters raised all of their own vegetables, milk, fruit, chickens, hogs, and butter. The farm had equipment to separate its own cream and smoke its own meats. The sisters hired their own butcher and traded with the town mill to obtain flour. This intense dedication to self-sufficiency was rooted in the convent’s Germanic heritage.

Sister Marie Nett explained that the convent received their first 40 acres of land in 1854, when a priest donated the land to them. They were able to purchase the parcel where the barn now stands a few years later, and other parcels were added as opportunities arose. “We just kept expanding,” Sr. Marie adds. At its peak, the farm included 440 acres. The sisters own the land themselves.

Over time, however, the convent began to purchase more of its food from commercial channels. Harvests diminished during the 1970s (ironically, as new interest in local foods was emerging in Bloomington), and ultimately stopped in 1987. The convent leased land to local farmers, and began a soul-searching decision about how to care for their property.

In 1991, the result of the sisters’ deliberation was finally clear. If the convent was to model sustainable life practices, the sisters concluded, they needed to show their ability to form “just relationships with all Creation” on their own land, stewarding it well, feeding their neighbors, and educating others about their work. The sisters brought the farm back into being, and named it after Sister Michaela Lindemann, the first director of the farm in 1854.

The farm’s website now expresses the guiding principles that compelled this decision:

- simple living
- seeing all (creation) as “kin”
- respectful use of resources
- striving for sustainability
- gratitude, hospitality and sharing.

Under the leadership of Sister Claire, Sister Marie, and others, Michaela Farm started with two acres of vegetables. After a couple of years, a herd of beefalo (a cross between cattle and buffalo) was introduced. Fed with grass, they also played a role in fertilizing the fields. By 1998 the farm was ready to sign up CSA (Community Supported Agriculture) share members. The garden was expanded, and more animals were brought to the farm. The apple orchards were renovated.

By now, the Michaela CSA has attracted 87 members, mostly in Cincinnati. They sell some of their product through the Findlay Market in central Cincinnati, and have developed a few value-added products like dried herbs.

Ironically, says farm manager Chris Merkel, the market for food in the Oldenburg/Batesville community itself is not that large. “If we have early or late produce I can sell it, but for the most part people have their own gardens, and don’t need what we grow. Those who do join our CSA either don’t have any time to grow, or simply don’t have a garden.” So, the farm looked to Cincinnati, where people seldom have gardens of their own. Their pilot project was to set up at a hospital there, to attract CSA members.

In 2006, the sisters joined in the creation of the Laughery Valley Growers Co-op, a group of 15 growers who wanted to reach larger markets. Robert White, an advisor to the sisters and to the Indiana Cooperative Development Center, says that “Michaela Farm serves as the anchor to the co-op, accounting for nearly 40% of the co-op’s sales.” To do more, he adds, “There needs to be a facility where we can pack produce for larger markets.” Michaela Farm once had its own small refrigerated truck, he adds, but was forced to give that up.

White adds that the farm also needs money for regular staff. Relying upon volunteers who come for the summer, he says, holds some uncertainty. “We don’t know who they are until they get here. Moreover, there aren’t that many people who know farming skills, and the work ethic is not what it used to be.”

On the institutional end, there have also been pitfalls. “The hospitals talk a lot about buying local food, but they have not bought that much,” White adds. To this, Merkel responds, “Many of the hospital’s staff feel they are too busy to handle fresh food, even though the patients are demanding organic meals.”

As these issues get addressed, Michaela Farm has done well at showing it knows how to produce food in a sustainable way. Among the awards they have won, two are especially notable: 2001 Conservation Farmer of the Year from Franklin County Soil and Water Conservation District (for outstanding achievements in conservation), and 2002 Indiana Conservation Farmer of the Year from the Indiana Farm Bureau.

“It boils down to a trust in God,” Merkel concludes.

Custom processing to their neighbors' specifications

Bea Frey, Prime Meats / French's Locker (Batesville)

[Note: Bea Frey sold this business since the interview was completed.⁵⁵]

The tour of Southeast Indiana was not yet complete at this point. To round out the story it was useful to visit French's Locker, back in Batesville, the meat processing plant where the Readings and Michaela Farm take their animals to be slaughtered. Although the sign on the storefront window reads "French's Locker," painted on the glass in embossed letters, the actual name of Bea Frey's business is Prime Meats. Still, in a small town like Batesville, the old name persists for most everyone in town including Frey herself. Only an outsider might be confused by all this.

The storefront is hardly imposing, with a small window clouded by dust that partially obscures the view of a retail meat cooler piled with cardboard boxes. From the outside, a visitor would be forgiven for thinking the business is closed. By no means does it seem large enough to handle a meat processing operation. Indeed their kill operation is eight miles away, in New Point. In these two shops, Frey, her husband, and six employees kill and wrap an average of 8-12 large animals a day, sometimes transporting sides from the kill floor to this shop for breaking down into the final product. Working solely by hand, one animal at a time, they are well set up to do custom work to their neighbors' specifications. She says that over 1,000 farmers, many from Ohio, come to their shop for custom work.

Like many of the people active in the local foods movement, Frey says she almost backed into her business by accident. She and her husband started raising ostriches a number of years ago, in an effort to provide a specialty meat. At the time, French's Locker was an active processing plant and frozen storage business; people would rent locker space to store meats and other frozen foods they could not handle at their homes or farms. When the previous owners decided to sell, the Freys opted to buy the business and own their own processing capacity, rather than lose the Locker's essential services.

As Prime Meats, the couple found a number of customers who eagerly asked them to do custom processing for them. They had no difficulty maintaining state certification, but did not realize the political moment they had stepped into. The story was similar to ones detailed by others in this report: Due to budget cuts, state inspectors could not come as often as they once had. "They told us they would have to cut their time here from 16 hours each week to 3 hours," Frey recalls. "Other plants were cut even further, to one hour. Some in the state government wanted to shut down the inspection program altogether."

Luckily, these worst-case scenarios did not occur. Finally, "the Governor said small shops should be given the hours they need," Frey recalls. "If that had not happened, we would have had to close. We can't do our work in three hours. The federal inspectors were not willing to inspect small plants like ours."

⁵⁵ Source: personal communication from Bea Frey to Ken Meter, November, 2011.

Although some processors simply shifted to solely custom-exempt work (where they process meats for customers who will use the meats for personal use, not for commercial, and where daily inspection is not required), Frey adds, “I was not willing to expose my people on the kill floor, or my customers, to that risk.” She adds that tuberculosis was found in some cattle on a farm not far away last year, and she looks to the inspectors to help catch conditions like that. “Having an extra set of eyes never hurts,” she says. “The kill floor is the first line of defense. There are a lot of little things to pay attention to. It takes considerable experience to catch them.”

Although this is where Frey perceives the greatest risk to be, the state “keeps coming up with new regulations every day for the processing floor, [not the kill floor]. They have it all backwards.” This is especially true when state budgets are being cut, she adds.

Frey adds that there are some 82 meat processors in Indiana, but very few that are open to taking in small farm customers. “One time we bid to prepare all of the livers for the state of Indiana. We needed to provide 1,200 livers, all portion controlled, and we had to take care of the entire state with one contract.” She shakes her head playfully. “Never again.”

The Freys joined a collaborative meat marketing effort, Hoosier Hills Grown Natural Meats, and market some of their meats through that affiliation. Like any butcher shop, they have no difficulty selling prime cuts for a good price, but this leaves them with hundreds of pounds of hamburger that are difficult to sell. In the schools market “We compete with federally subsidized hamburger,” Frey says.

This means the Freys rely heavily on custom work for their neighbors. “You develop a following,” she continues. “Even in this economy, people are still buying quarters and halves. People will drive all the way from Shelbyville, Madison, and Greensburg, making a special trip just to come here.”

Frey also has targeted her marketing to small mom-and-pop grocers who can make their own decisions about which meats to buy. “It’s not a big market, but it sure helps.” She tried selling to two restaurants, but found there was no money to be made by doing so. One positive draw is that her storefront is right down the street from the Batesville Farmers’ Market, where 50 farms sell their wares to about 300 customers each week. “It draws people to our shop,” she adds.

Frey has no difficulty outlining the ways she would like to improve her business, and some of the costs that would be involved to bring it up to her standards. She thinks an investment of \$40,000 would go a long way. Mostly, however, she says, “I wish I had more time.”

“That’s just the way poor people farm”

Albert and Diane Armand, Harper Valley Farm (Westport)

Albert Armand, a grower in Westport, southwest of Greensburg, has been raising vegetables for local residents and commercial processors for twenty years. As a pioneer, he entered the produce market before it was popular. At first, he says, “It didn’t take off. The consumers were not ready.” Moreover, he was not entirely understood by his neighbors. “We kind of

got these looks from our neighbors. They'd say, 'You can't make any money with vegetables. That's just the way poor people farm.'”

Yet over two decades he built a diversified farm raising tomatoes, sweet corn, pumpkins, watermelon, cucumbers, ornamentals, and flowers. “I always go back to what my grandmother told me,” he says, “don't put all your eggs in one basket.”

Now consumers are ready. By engaging them, and putting a story to the food, he attracted great loyalty. “I want to look them [consumers] in the eye and know they're coming back next month,” he adds. He said that due to high corn prices he expects in 2011, he may have an unusual year: For the first time, “My row crops may make more money than my vegetables.”

All of his field crops, and most vegetables, are planted no-till; Armand also uses a hoop house and places plastic sheets on the soil to prevent weed growth. Decatur County Extension educator Dan Wilson points out that Armand has been extremely innovative; he developed a new technique of planting pumpkin and watermelon into standing wheat, which reduces weed pressure and also keeps the fruit cleaner for harvest. Armand once served on the board of the Decatur County Soil and Water Conservation District, and is president of the area planning board. He also represents Hubbard Feeds and Brodbeck Seeds, and sells a soybean-based soil amendment, SO-IL Landoil, which he says reduces his need for herbicides.

Armand's wife Diane handles farmers' market sales at four nearby markets. The couple also sells through the Jennings County Growers Cooperative in North Vernon (*see page 128*). Although in the past they have held wholesale accounts with KB Specialty Foods in Greensburg, GreenBarn in Columbus, and Paramount Pickles in Louisville, Albert says they do not “anticipate wholesaling to any large extent.” Albert sold to Wal-Mart for a while, through a third party, but found the intermediary was chronically late in making their payments; Albert still waits for a payment the firm owes him from his fourth and final year of sales to the large firm.

A family produce farm since the 1920s Gary Bush, Bush's Market (Columbus)

You can tell the Bush family has been in the produce business a long time, since they refer to their product as “truck crops.” In fact, the Bush (pronounced 'boosh') family launched their produce farm in the 1920s, and now operates a popular produce market right at their farm on 25th Street in Columbus. They also process their own pigs on the farm. Despite being able to offer this seasoned experience to consumers who want to buy local food, the family says they see obstacles to the long-term future of their business, in part because they are a small firm in a market that would prefer to trade with larger suppliers.

It is actually difficult to think of this as a small farm. The four cousins who operate the farm each specialize in one aspect of the business. One handles the cash grains, one coordinates the chemicals, one takes charge of produce, and one manages the meat operation. All told they farm 130 acres of truck crops, including tomatoes, muskmelons, green and yellow bush

beans, zucchini, sweet corn, sweet and hot peppers, pumpkins, and squash. Their market also buys grapes, apples, and peaches from a farm in Benton Harbor, Michigan, to resell to their local customers. The family sells bulk produce through an Amish auction, sells to a farm stand on Route 90, and sells through wholesalers. They offer pork at their market during the winter months, and have another 1,000 acres of cash grains.

“This is a fantastic business,” Gary says. “All of our kids went to college on the proceeds of this farm. But we’re probably the last generation to run the farm. There is no way to make enough money in farming all by yourself.” While the family farms on land that was paid for long ago, they don’t see an easy path to expanding into new acreage. “When ground comes up for sale, there is only so much you can pay for it.”

The family has invested heavily in the equipment needed to raise produce, including automatic harvesters for green beans, and transplanters built in Michigan. They also process pork right on the farm, but have had to exercise all of their creativity to stay in business. “At one time, the federal inspection service told us we were too small to stay in business. They said, ‘You’re going out anyway, so we will no longer inspect.’” The Bushes threatened to call a local TV station, and the inspectors agreed to continue serving the farm, Gary adds.

The Bushes used to derive additional income from selling sweet corn seeds for one major seed firm, but, as Gary puts it, “The seed corn business got a little funny. We have traded their seeds for years, but they kept adding new restrictions. One year they told us we had to have one person on the farm to handle the seed who does not farm. Then they said we had to buy only their corn. We’re not ones to push it on you, so the firm decided we were not selling enough. A few weeks later, we got a letter in the mail terminating our sales contract.” Robert White added that now some of the larger seed companies are insisting that any dealer have expensive storage systems in a separate building, sell \$250,000 of seed at minimum, and sell treated seed.

As he moved energetically through the farm buildings, showing off the equipment and processing plant, Gary Bush simply shrugs and says, “I don’t think about the future.”

Forming a local cooperative

Bud Beesley, Jennings County Growers Cooperative (North Vernon)

Retired Cummins employee Bud Beesley more or less backed into the food scene after he retired in 1992. “I just took some time off after I retired and started raising vegetables. Almost by accident, I started raising large pumpkins for competitions. It grew into a friendly rivalry with my brother, who farms 2,500 acres. Some of our neighbors got into the act; it almost grew out of hand.”

Beesley won the state fair competition a time or two. He was just out to enjoy himself, encouraged by the fact that his region of Indiana at one time was a good region for pumpkin production, but he also developed closer bonds with fellow growers as they made the circuit of the shows.

Yet as the pumpkin industry waned, the competitions lost their home. At last Beesley and nine others offered to host the pumpkin show in Jennings County. This, in turn, lasted only three years until bad weather and a floundering economy diminished both the crop and popular interest. But the group kept moving forward. By 1998, they decided to start a farmers' market in downtown North Vernon. They were shocked by the interest.

“We set up in a city park under a big oak tree. All of a sudden we had too many booths, and the market jumped across the blacktop road, and took over the park shelter as well. Now the shelter is pretty much full.” Now in its fourteenth year, the market attracts 50 growers, with about 30 on peak days during the season. “It’s still growing,” Beesley adds.

Working under the umbrella of the Jennings County Farm Bureau, the growers formed a committee of Farm Bureau members to provide oversight, and another committee of “those who actually grew the foods” to set day-to-day policies. The market runs very informally. “The Farm Bureau gave us a \$500 grant to get started, but we don’t use the money unless we have to.” There is no charge to sell at the market, “but at the end of the year we pass the hat and ask people to donate a day’s sales.” That is usually enough to cover the annual costs. Each farmer who sells at the co-op is required to carry liability insurance, and to clean up their section of the market before they go home.

Beesley has been surprised by the large number of people who come during harvest season to buy by the bushel full to put up their favorite foods. “I would say our main customers are women aged 50 to 75,” Beesley says. “That’s 90%. The other 10% are older guys or very young gals.” He adds that the market sells well over \$250,000 of produce each year.

By October 5, 2001, he adds, several of the growers involved in the market realized that demand was so high they needed a more formal structure. So, Beesley and fellow farmers Richard Adrian and Dave Swaim took the lead in starting a growers' co-op to convey foods they grew to institutional buyers. The co-op now makes weekly shipments of “any vegetable that grows in the garden,” including hoop house lettuce that is sold to a hospital and a school; apples and a few peaches, and poultry, beef, and pork.

The co-op was a state pioneer in farm-to-school as early as 2003, but this path was not an easy one to find. “We got picked up by USDA Rural Development with a Value-Added Producer Grant, and we obtained assistance from Robert White (then USDA Rural Development State Director). We learned we had to meet some state regulations at the state level, but we met them and were approved by both the health department and the education department.”

Still, Beesley credits the staff of a federal agency, the Agricultural Marketing Service (AMS) of the USDA in Washington, as “the only reason we got things going.” He recalls that he had just leased an old pizza factory in town as a packing and distribution center for the co-op, in an effort to build enough capacity to meet school demand. AMS branch chief Debra Tropp and her associate Jason Roller came out to visit, asking what they could do to assist. “I told her the school purchasing agents were telling us we were illegal because we were not USDA inspected. They told me I had to run lab tests to document the nutritional content of our tomatoes. Each lab test would have cost us \$700. Further, they wanted me to document which farmer grew them and in which row in each field they were grown.” Tropp

called her superiors in Washington, who in turn called school officials, to tell them they were wrong; farmers did not need to be inspected in order to sell to the school. Furthermore, the agency told the schools that farmers could use nutritional information already posted on the USDA website to verify the nutritional content of the tomatoes they sold. Beeseley was impressed by how fast the situation turned around. “By the time Deb got back to her office in Washington, the issue had gone away.”

As he considers the future, Beesley imagines Indiana “hoop houses in each community,” growing food for local residents. “If we had hoop houses and root cellars,” he continues, “people could rely upon themselves. I don’t think we would be as dependent as we are today.” Certainly, the growth of the Jennings County Growers Cooperative suggests that local people can take solid steps on their own behalf — even if they need an assist from federal officials now and then.

Bringing back a trusted name

Steve Stoll and Charles Shelby, Daviess County Food Processing Institute (Elnora)

A similar grass roots effort to build local foods infrastructure has taken root in Daviess County, bolstered by a forceful presence from the local Chamber of Commerce, and a federal grant.

On a summer morning that was already stifling, Charles Shelby, Executive Director of the Daviess County Chamber of Commerce,⁵⁶ and Steve Stoll, manager of the Daviess County Food Processing Institute, showed this visitor the second floor of the former Graham Cheese factory in rural Elnora.

Shelby began by recounting the history of the building. “This was once owned by the Graham family, who lived in Washington, Indiana, and owned a diverse set of businesses. They had their own car factory, and they owned several banks in the region. At one time, they even owned Madison Square Garden and several hotels in New York City.”

But it was this 20,000-square-foot cheese factory that made the family’s mark on the popular imagination of the region, Shelby says. “Graham Cheese was known throughout the U.S.,” he continues. Reaching peak production in 1928, it was especially known for its swiss cheese recipe. Yet in 2008, after their historical markets had eroded away, the family announced they had no use for the building. The county’s Economic Development Foundation bought the former factory, hoping to find a new use.

That new use was to develop the upstairs into a community kitchen. The old showroom on the main level hosts a food store featuring local brands, including Graham swiss cheese. “The idea is to help small family farms here,” Shelby adds. “We have lots of Amish farmers here, and we see lots of potential for value-added products to be made here.”

⁵⁶ Since this interview was held, Shelby has taken a new position as director of the Westgate@crane technology park.

The foundation won a grant of \$140,000 from the USDA for the project. With matches from several local partners, this was leveraged into \$250,000, used to purchase the building and convert it into a multi-use kitchen space with storage, packing, and cooler space. At first, anyone in the region who wanted to produce a food product under inspection could make use of the facility.

Kitchen manager Steve Stoll points out that several local business have already begun to operate, making use of the kitchen's certified processing space to make products such as barbeque sauce, commercial pie crusts, salsas, and preserves. Although the facility was designed to make use of the experience local Amish families hold in putting up food, this was not as true as the founders had hoped. "We had the idea that people would bring in lots of new products to prepare," Shelby adds, "but it has not worked out that way." Nevertheless, he feels confident that "the Amish will see the value of the kitchen." For the time being, he says the business model has shifted to one that supports manufactured food items, by a few select entrepreneurs, rather than an open kitchen.

Shelby admits that one shortcoming of the original business model was "We should have had a distribution plan in place when we first wrote the grant." Even without that, the group has made progress in finding grocers like Kroger and IGA to carry products produced in the Elnora facility, Shelby says. "Kroger has a truck here every week."

Farming at a Larger Scale

Working 7,500 acres

Tom Boyd, Trent Boyd, and Logan Graber, The Boyd Farm (Washington)
Marv Knepp, Boyd Grains

Finding solid niche markets

Don Villwock, president of Indiana Farm Bureau (Edwardsport)

Farming at a Larger Scale

Visions of feeding the world

The vision of feeding the world is a tantalizing vision, so this researcher welcomed the opportunity to attend the 2011 Farm Management Tour sponsored by Purdue University Extension in late June, to learn more about how these methods work in practice. Several farms in Southwest Indiana invited hundreds of guests for these tours.

Daviess County Extension educator Scott Monroe pointed out that these new technologies were suited largely to big farms. It costs a bit more to own the advanced machinery. Still, he adds that “Even if the extra yields were only one-half or one-quarter of a percent higher, this could make a substantial difference in the harvest over thousands of acres. With the equipment some of these farmers have, they can very comfortably work 1,000 acres per day,” he adds.

Working 7,500 acres

Tom Boyd, Trent Boyd, and Logan Graber, The Boyd Farm (Washington)

Marv Knepp, Boyd Grains

Tom and Marsha Boyd farm over 7,500 acres near Washington, Indiana, and are proud adapters of some of the more sophisticated farm technology available. Their son Trent farms with his father, and son-in-law Logan Graber runs the family trucking company. The entire family turned out to show off the farm for the tour.

By any stretch of the imagination, this is a successful and immense operation. Clean, new buildings that could almost hold a football field are full of the latest tractors, sprayers, and combines. The Boyds also run a grain elevator a few miles away, where they are involved in a national effort to hedge grain through a network of farmer-traders. The five family-run businesses include a dispatching firm, and a warehousing business with three locations in Southwest Indiana. Combined, they hire 200 employees and own 120 trucks. The firms trade with each other and share equipment and labor with each other.

The family also commands the respect of its rural neighbors. They invest in their community, supporting the schools, and painting a huge image of the basketball team on the trailers of their trucks when the team wins at the state tournament.

More striking, the farm has a companion farm of a similar size, run by Tom’s brother, Steve, formed when the family split their father Bob’s land into two parts. Steve also occupies himself by running a construction business when he is not farming. Those farmers in Indiana who complain about the lost work ethic are certainly not speaking about the extended Boyd family. To a person they exude a sense of competence and humility. They do not put on airs, but they are not bashful about the scale of their farm, either.



Map 9: Large farms interviewed

They graciously invited several hundred people to look over their farm for this Farm Management tour, and openly discussed their operation. “We are getting yields of 180 to 235 bushels per acre,” farm manager Trent explains. “We mostly have very productive ground,” he continues, so the family tries to grow as much as possible. “We will rotate crops on our poorer ground, where it is sandier. There, we will rotate with soybeans and popcorn. We also grow about 1,000 acres of wheat. But wherever we can, we just like to plant corn.” That means about 4,500 acres of continuous corn. Trent says that with corn at seven dollars per bushel, he can make so much more money on corn that he cannot afford to plant beans. “In any year you plant soybeans, you lose money,” compared to the income to be made from corn at these prices.

Trent also cautions that planting corn-on-corn runs the risk of an ear mold taking hold. “After four or five years of continuous corn, your fields are susceptible to *diplodia*,” Trent says. To manage that, he adds, the family sprays fungicide each year to help keep the ear mold at bay. “It’s not a fix,” Trent adds, “but it helps.”

Still, Trent Boyd, admits, “Farming like this is not for everybody. When we get going in the fall, we work from 7 am to midnight.”

Brother-in-law Logan, who shoulders these logistical challenges, adds that the family’s trucking fleet includes a wide variety of trucks and vans for special purposes. “We trade in twenty-five trucks each year, and our dealer allows us to keep them during harvest and then turn them back.” One of his major challenges, he adds, is that the farms require labor at the same time that the elevator needs workers, and it can be tough to fill both roles at once.

Tom Boyd predicts that “2011 will be a record year for farm income, although on the livestock side people are not so happy,” because they are trying to feed animals at these steep grain prices.

Tom also introduced his accountant, Dave Frette, a friend since high school, and said the CPA was a key element in the farm operation. “One of the problems with a large farm,” Frette adds, is “you almost have to keep getting bigger” because of the economics. “When you are as large as we are, you get discounts from the dealers. We trade each of our combines in every year [the family had two parked in the barn] and we trade in our tractors every second year.” Thanks to accelerated depreciation accounting, he continues, the Boyds can write off the full cost of each new tractor and combine.

Another burden of being large, Frette continues, is the cost of land. “We lost 250 acres of land that was taken to build the new Interstate 69,” he adds. “We had to go 15-20 miles away to replace that land, and it is costing us \$10,000 to \$14,000 an acre.”

Trent Boyd went on to describe the technical practices of farming. “Having biological activity is important, so we apply turkey manure, potash and lime in the fall to go to work on the residue from the previous crop.” He uses variable rate technology while applying potash and lime, since they are relatively costly as soil amendments, but he has not yet used it on nitrogen. “You just pour the nitrogen on, whatever it takes. Shannon [his crop technician] gives me a recommendation and I usually put on a bit more.”

“We do not use variable rate for planting yet, but we may in the future. We just don’t see that much difference, because our fields are fairly uniform. On some fields with a lot of variation, it could be good. We just scout the fields for ourselves.”

His tractors are so large, Trent adds, that he buys tractors with tracks rather than wheels. This distributes the weight better, and helps minimize soil compaction. Using minimum tillage also reduces the impact of the farm equipment.

In a separate interview, the manager of the Boyd elevator, Marv Knepp, said that the family has found several fairly local markets for their grain. “The bulk of our corn is sold to Grain Processing Corp (GPC) in Washington [Indiana]” where the starch is extracted. The residue is used as animal feed. “Only about 20% of our corn is sold to Perdue for their turkey barns, and a bit to a local co-op to feed hogs,” he adds. Soybeans are largely traded to processors in Indiana and Illinois, while the Boyd’s wheat is shipped to mills in Indiana, Illinois, and Missouri.

Knepp also points out that a local elevator such as the Boyd’s plays a valuable role. “There will always be a need for the country elevator to be a buffer for the producer at the end of the year. The elevator’s job is to have grain around at all times, so there is grain to move around.”

He adds that the actual price of the grain on any given day is “irrelevant to the elevator. What matters is the margin between the price we pay and the price at the Chicago Board of Trade.” It is these tight margins that drive buy and sell orders. Still, he cautions that corn reached prices of \$8 per bushel earlier this year. “If you’re buying corn at that price, there is no way to come out ahead. The price cannot stay at that level,” he adds. That is good news, perhaps, for the livestock farmer.

Later in the tour agricultural economist Chris Hurt echoed what Knepp said. In fact, speaking after lunch at Don Villwock’s farm (*see below*), Hurt asked the gathered crowd to repeat after him three times, “It’s not always going to be like this.” He continued on his own, “We had \$8 corn. That made it one of the most extraordinary years of the last century.” Still, he cautions, “The new crop will not come in at that price level. We had a major sell-off just in the past week [mid-June].” He adds that late planting may reduce yields, and that of course weather for the rest of the year remains uncertain. Of some concern was the fact that global supplies would fall to 20 days worth of corn by the end of August. While this lack of reserves keeps the price of corn high, it also can lead to greater speculation in the market if traders perceive there will be potential shortages of supply. Hurt adds, “You can’t build up these reserves if the yield is lower.”

Finding solid niche markets

Don Villwock, president of Indiana Farm Bureau (Edwardsport)

The final stop of Farm Management Day was at Don Villwock’s farm. As president of the Indiana Farm Bureau, Villwock extended exceptional hospitality to several hundred visitors, giving them the run of his sheds and hosting a buffet chicken dinner that had been prepared by local caterers.

It was also a poignant tour, since Villwock recounted how he had been forced to move from his former farm in Knox County due to threat of eminent domain; Duke Energy took over his old farm to build a coal gasification plant. Nevertheless, he thanked Duke for graciously waiting a few months to take over ownership until the 100th Anniversary of his ancestors settling on the land. Having qualified the farm as a century farm, the Villwocks were immediately forced to move their family homestead several miles to this new location.

“I have a good conservation ethic from my father,” Villwock adds, “That is what pushed me to no-till thirty years ago. I also made more money when I made the shift. We left the land [at the old place] better off than when we started.”

Already, Villwock had settled into the new property admirably; immense sheds hold the large equipment that is required to work 3,900 acres of land. Moreover, this land is scattered across four counties (Daviness, Green, Knox, and Sullivan), and forty miles. Although this poses some logistical challenges, running scattered sites does help reduce the risk of damage from concentrated storms throughout the year. Yet the land in Sullivan County, he noted, had not seen a tractor yet this year, because it was in the bottomlands of the Wabash River. It was simply too wet to work by late June.

Villwock points out that he owns about one-quarter of the land he works and rents the rest. He has also gone to great lengths to tailor his farm to his professional life as the head of the state’s most powerful farmers’ organization. Forced to be on the road to attend meetings, and maintaining an office in Indianapolis, he keeps an airplane in his shed. He also plans his farm schedule to reduce the conflict between his official duties and his farm chores.

That meant turning away from the standard commodity crops like corn and beans. “In pure competition [when thousands of growers are producing identical commodities and selling them undifferentiated from each other], the average producer gets no profit,” Villwock says. “We decided we had to find niche markets where we could get added value by devoting ourselves to management.”

His first choice was to raise popcorn, since conditions are ideal in this part of Indiana, and there are buyers in the state. He got his first management directions from Tom Boyd, who, he adds, “was willing to share. He was a good mentor.” Popcorn, however, takes intensive management. “You have to sanitize the combine, the bins, and the trucks to avoid cross-contamination with corn,” he continues. Moreover, it is a tough market to sell into, since the contract buyers may call at the last minute and demand shipment right away. “You have to be on call for the buyers when they ask.” Because of these management requirements and other profit alternatives, he has cut back on popcorn production.

His main crop now is white corn, which he primarily sells to the Azteca Company in Evansville, where it is milled into *masa* for making tortilla flour. “We don’t use GMO corn for the most part,” Villwock says, “Although we do use Bt white corn for the second year of a corn-on-corn rotation.”

He also has developed niche markets raising seed beans and seed wheat. “DeKalb, Pioneer, and others came to us and asked us to produce for them,” he adds. “Some years we don’t

even know which varieties we grow because of product confidentiality.” Growing for seed also requires Villwock to segregate each new crop into separate bins to avoid cross-contamination, and to sanitize equipment and storage.

As he approaches retirement, Villwock has carefully arranged a succession plan with his farm manager, Jason Misinieć. Jason, who worked as the number two man for a nearby farmer, approached Villwock when it became clear that neither of Don’s daughters or sons-in-law wanted to take over management of the farm. “Sarah is the out-of-state promotions manager for the Oliver Winery in Bloomington, and Betsy works for Elanco Animal Health and lives in Wayne County,” Villwock says. Jason proposed that he take over part of the Villwock farm gradually, to keep the operation as intact as possible.

After some soul searching, Villwock says he heartily embraced Jason’s suggestion. Consulting legal help, the Villwocks created some rental agreements dividing their farm into three parts: one for Don, one for his wife Joyce, and one for Jason. Jason purchased a 180-acre farm three years ago. They use Villwock’s machinery across the farms and Jason buys machinery as he can.

Villwock added, “Our CPA David Frette is a key part of our management team.” Villwock also hires a marketing and crop consultant that helps him sample the soil every three years, and makes fertility recommendations.

“There is not a single item we acquire that we don’t try to order more cheaply if we can find a way,” Villwock adds. For one thing, he has cut back on nitrogen. “We used to apply 200 pounds per acre, and now we are down to 170 pounds.” He says the farm is also working on a design for a fertilizer storage facility so they can buy when prices are relatively low and keep it for later use. Misinieć adds, “We also use a lot of turkey litter to offset our fertilizer costs.”

Two weeks after the farm tour, Don Villwock graciously agreed to an interview to give his perspectives on the Indiana food system. “We realize in the Midwest, where we raise products like corn, beans and wheat, that these are not directly consumable by the public,” Villwock says. “Farmers here are a step removed from the food system. Fruit and vegetable growers are more directly involved with the customer [than grain farmers are]. I also serve on some boards with cattle and hog farmers. They do understand how they need to become integrated into the food system; they need to be more visible and identifiable.”

“We’ve learned that the public likes farmers; but they don’t like farming. We need to put a face on farmers so the public will support us. The market is going to shift toward those who can show they provide good products raised in a sustainable way. The early adapters are in this phase now, but it won’t be long until all farmers are involved. We’re going to have identity preservation, third-party verification. It will be here before we know it.”

Yet he placed the main responsibility for that shift onto the buyers. “Grocers, fast food chains, and restaurants really need to get their sources of supply clear. They will set their own standards for their growers. My crystal ball is starting to tell me that the end users will mandate, or at least seek out, suppliers who adopt best practice standards.

“You dangle the cheese in front of a farmer, and the farmer will respond instantly. Agribusiness cannot do it all out of the goodness of their heart. In a capitalistic society, the financial reward is what motivates action.”

As one example, he adds, “The local Perdue turkey processing plant is only 15 minutes away from me. Already their feed mill takes nutritionally dense corn, and they pay a premium for those qualities. It does not quite compete with white corn, but if I lost that market, I would certainly consider selling to Perdue.”

Next I asked Villwock to explain why he had chosen to grow products that were outside of the normal commodity system, apparently because these niche products commanded higher prices. “Yes, that is a conundrum,” he agreed. “There is no such thing as a big niche market.”

I also asked Villwock to discuss the dilemma that Indiana had such extraordinary productivity in agriculture, and yet also had a solid core of residents who were not eating enough. “Nationally,” he says, “the Farm Bureau has partnered with Second Harvest addressing food issues for the poor, to help the hungry.”

“In Indiana, Farm Bureau started the ‘Hoppers for the Hungry’ program,” Villwock adds. “Each of us pledges to sell one hopper load of grain and dedicate the proceeds to the hungry. Each farmer might unload that hopper 500 or 1,000 times over a season; we’re just asking for one hopper load. I sell mine on behalf of North Knox Social Ministries in the northern part of our county. The grain elevator makes the check right out to them.”

Villwock also pointed to the firm Elanco, run by CEO Jeff Simmons. “He has a big project starting to develop in the farm community, to address nutrition and malnutrition.” According to the *Indianapolis Business Journal*, Elanco is an animal health subsidiary of the Eli Lilly company that promises some food products can be made more cheaply because of new technology. As one example, the story said, the firm envisions cheese made from milk from cows treated with artificial growth hormone. Simmons, the article says, hopes consumers “will opt for food made cheaper by using Elanco’s productivity-enhancing drugs over the pricier organic and locally grown products made without them.”⁵⁷

Villwock continues, “After all, one of every six kids in Indianapolis is on food assistance. Our social responsibility comes into play for a lot of folks. I am certain that the nutritional side will become a bigger and bigger factor as we move forward. Still, the market will make that decision. We’re beginning to see the market ask for this, this also requires consumer education. Once producers see a financial return for this, producers will respond immediately.”

⁵⁷ Wall, J.K. (2011). “Lilly hopes Elanco unit becomes a cash cow.” IBJ, May 8. Viewed August 25, 2011 at <http://www.ibj.com/lilly-hopes-elanco-becomes-a-cash-cow/PARAMS/article/19823>.

Ensuring Health and Safety

Introducing a new decontamination technology

Jeff Blakely, Iotron (Columbia City)

Engaging low-income consumers at the intersection of food and health

Matt Gutwein, Lisa Harris, Laura Henderson, and Michael Kaufmann, Wishard Hospital (Indianapolis)

Ensuring Health and Safety

Several of the major public health questions currently under discussion center around the risks of foodborne illness. Indeed this is a significant medical issue, causing an estimated 3,000 deaths per year nationally, and incurring annual costs of more than \$152 billion of medical expense in the U.S. (and \$3 billion in Indiana).⁵⁸ This is a staggering figure, equivalent to one-half of all the revenue earned by the nation's farmers.

Several of the farmers and food buyers interviewed for this report (*see pages 76 and 103*) have identified food safety as a major concern; their comments need not be repeated here. In this section, we will draw upon lessons learned from these sources and briefly consider solutions that are being proposed.

Hoosiers propose widely divergent strategies for addressing the perceived risks of foodborne illness. Many farmers and buyers assert that some farms are too small to warrant detailed certification or inspection procedures. This school of thought suggests that consumers who buy food directly from farmers (at farm stands, farmers' markets, or through Community Supported Agriculture [CSA] arrangements) have every opportunity to see for themselves whether a farmer's practices are safe. Some would even argue that this direct contact by the consumer is more effective than regulatory approaches. This school claims that most food recalls have been traced back to larger farms or processors; part of what is so unnerving about these outbreaks is that it has taken so long to learn the source of the contamination (in some cases, no clear cause was found).

Indeed, advocates of this position also point out that foodborne illness is an ever-present issue, even though food firms are regularly inspected. Moreover, this argument goes, the potential risks to society of relaxing inspection for small farms are minor, because each small farm only sells to a limited number of customers; if there were an outbreak, damage would be limited, and it would be relatively easy to determine the source. This is not to suggest that outbreaks of foodborne illness should be accepted at any scale, or that tracing an outbreak after it occurs is better than prevention. Yet proponents of this position argue there is less risk when small farmers and processors are involved. Incurring the potential public costs of close oversight and inspection is not warranted, given the volume of food sold by any one individual farm. No public interest is served, this position argues, if county or state officials intervene between a farmer and a direct customer.

As one example, Amish farmers selling through produce auctions in Ohio have successfully made the case that since the elders of the community meet on a weekly basis to discuss agricultural practices, and the farmers have an ongoing discussion and training about how to produce food safely, the community has adequate safeguards in place to protect consumer health. Both health officials and buyers appear to consider this an adequate precaution.⁵⁹

⁵⁸ Scharff, R.L. (2010). *Health-Related Costs from Foodborne Illness in the United States*. Pew Charitable Trusts. Available at www.MakeOurFoodSafe.org. While the study originally attributed 5,000 deaths per year to foodborne illness, the government has revised its estimation model, and now says that 3,000 deaths occur each year.

⁵⁹ Meter, Ken (2011). *Ohio's Food Systems: Farms at the Heart of it All*. University of Toledo. Available at <http://www.crcworks.org/ohfood.pdf>.



Map 10: Interviews covering health & safety

Misinformation has also plagued efforts to protect public health. Some county officials have told school food buyers they cannot purchase fresh produce from local farms without those shipments being certified and regularly tested at considerable expense; these officials were contacted by federal marketing officials who pointed out there were no such regulations (*see page 130*).

For the largest vegetable and fruit producers, close attention to production practices and third-party inspection is seen as essential by buyers who want their customers — who cannot know the farmer directly — to have solid assurance that safe practices have been followed. Some corporate buyers insist that farmers file a thorough HACCP (a hazard assessment and safe handling) plan⁶⁰ for preventing outbreaks. The logic of a HACCP plan is indeed, that no inspection regime is enough to prevent foodborne illness — the best line of defense is not inspection, it is the producer following accepted prevention practices day by day. Some buyers require \$50,000 software that can track each item from the row in the field where it was grown to the truck that carries it to the factory, to the case lot in which it is sold to distant buyers. Clearly this is not an option for smaller growers. To proponents of this position, larger farms and processors are better placed than small farmers to implement safe practices, since they have larger cash flow, and greater economic incentive to avoid an outbreak.

Mid-size buyers will sometimes accept produce from a farm with a GAP (good agricultural practices) plan. This is less stringent than HACCP, but still offers some assurance that basic safety procedures are being followed.

The question of who is liable for this risk is quite contested. Many farmers have been required to buy a \$5 million insurance policy to protect them from liability in the event of a disease outbreak. Some institutional buyers have even agreed to indemnify the farmers they buy from, in order to reduce the burden on the farmers. Certain cooperative produce pools are exploring the possibility of purchasing joint insurance that covers all members of the co-op, so that individual farms do not carry the full burden.

Others question why the inherent risk in food production should be translated into a source of profit for insurance companies that are located outside of the state; perhaps there are Indiana-grown solutions to the risk question. Insurance, of course, does not in itself prevent disease, nor does it really compensate in the event of a major outbreak or death. Rather, it is seen as providing a financial incentive for growers and processors to follow careful practices.

Meat inspection has been somewhat more complex than inspection for produce, because greater health risks are associated with meat. Some health officials reject the position that consumers can adequately investigate the health practices of a given farmer or processor; indeed one processor interviewed here (*see page 125*) points out that she wants an inspector on the kill floor as a second set of eyes to help catch potential trouble, because signs of illness in the animals can be hard to spot. Indiana state law specifies that when a farm sells its own meat at a farmers' market, it is a retail sale rather than a direct sale, subject to the same oversight as if the chicken were sold at a grocer. This legal provision persuaded Stan

⁶⁰ HACCP stands for "Hazardous Analysis Critical Control Point."

Skillington to stop selling chickens entirely, since he felt the cost of meeting health requirements were not worth the benefits (*see page 103*). Many other states do not have this restriction.

The inconsistency of inspection and regulation has also proven critical. This is all the more complex because inspection happens at three governmental levels: local, state, and federal. In some counties, local officials have been quite cooperative with local foods producers, yet others have put up significant barriers. Some farmers express exasperation that their operational practices have been approved by state officials, only to be rejected by county health officers.

At the state level, funding cutbacks have created exceptional tensions, since farmers who are told they must submit to state inspection find that state inspectors cannot visit their farms due to budget cutbacks (*see page 103 and 125*). In many cases, state officials have worked with farmers to devise some accommodation to their needs, but the uncertainty plagues many farmers. One glance at the list of state-inspected meat processors (*see Appendix, page 166*) shows that inspectors have reason to feel stressed by their work load.

Both federal and state meat inspectors are at times praised for their efforts to go out of their way to work with growers tapping niche markets. Some small operations report that for the most part, inspectors have served their plant even if it meant only visiting one day a week (*see page 103*), but other growers report that federal officials balked at inspecting a plant they felt was so small it would be too expensive to service (*see page 127*).

All in all, says the Indiana Farm Bureau's Policy Development Specialist, Tiffany Obrecht, "It is the county regulation that is the biggest obstacle now." Since different counties may set different standards, farmers in one county may have options that are not open to their neighbors in the next county.

To many civic leaders, the answer to food inspection concerns is to ramp up technology. It is argued that removing the human factor from production and processing will assure safer food. This may involve expensive tracking software, computerized risk assessments, or food irradiation after packaging.

Others argue that technology is not the answer, but the problem. Only an informed group of consumers and producers can handle food safely, say the proponents of this position. Technology (or packaging) that distances consumers from knowing food processing procedures, or inhibits consumers from access to accurate information about their food supply, actually helps create disease, this point of view argues.

Introducing a new decontamination technology **Jeff Blakely, Iotron (Columbia City)**

As Indiana discusses future food safety policies, a new firm has located in the state. Iotron, based in Columbia City, plans to offer an alternative method for sterilizing foods after processing: electron-beam generation.

Jeff Blakely, general manager for the new Iotron facility, is quick to point out that electron-beam technology does not involve radioactive materials. Rather, a stream of electrons (negatively charged atomic particles) is generated to create an electron beam. This beam, moving at high velocity, can rapidly and safely sterilize a food package, he adds.

Blakely says that the IMPELA[®] e-beam technology is proven safe and effective against foodborne pathogens such as *Listeria*, *E. coli*, and *Salmonella*, which have been the source of food recalls in recent years both in the United States and Europe. “We see this as an alternative decontamination process,” after the product has been packaged. Despite careful precautions that are taken by most food processors, he adds, “Food processing facilities are quite difficult to completely decontaminate.”

Iotron’s technology would not replace traditional preventive steps taken prior to processing, Blakely says. As Iotron envisions it, in the future, every package shipped from many food processors will benefit from the company’s technology. “By using Iotron’s e-beam technology, we can help food companies to achieve three important goals to promote food safety, revenue growth, and market expansion,” says Blakely. “These are to reduce spoilage in transit, lengthen shelf life by up to 30%, and prevent costly recalls.”

Since the electron-beam equipment itself costs millions of dollars, Blakely says that processors are most likely to ship their finished product to Iotron’s new facility in Northeast Indiana, where it would be decontaminated and then released for sale. Since there are no residual effects of the process, he adds, the product can be shipped immediately without quarantining. He says that adding the decontamination process would cost very little per package, so it would add a small expense for consumers, while returning great value with a higher-quality and longer-lasting product.

Blakely says Iotron’s technology was initially developed for sterilizing medical supplies, where it is highly effective at ensuring that new equipment is shipped safely. Iotron’s e-beam process has since been adapted for use in a variety of industrial settings, including the eradication of pathogens.

Originally founded in Vancouver, Iotron located its new United States facility near Fort Wayne to be close to the clusters of medical device and equipment industries in Indiana. In tests, electron beams have proven effective in decontaminating herbs and spices, in controlling pests in grains or fruits, and can also extend the shelf life of fruits, vegetables, packaged meats, fish, and juices, he says. It can also be used to effectively and safely delay the ripening of fresh produce. The effect of the electron beam is to destroy the structure of the DNA of specific bacterial organisms, rendering further microbial (or pest) growth impossible. Citing broad research conducted over the past 20 years, Iotron claims that “this technology could prove to be one of most important tools in the fight against food-borne illness.”

Blakely points out that Iotron’s approach is less harsh than procedures already approved by the USDA. “Quite a few food materials have been approved for irradiation treatment in the U.S.” The federal agency already mandates that all fruits and vegetables imported into the U.S. from foreign nations must be subjected to x-ray radiation for decontamination, he says. Radioactive treatments have also been approved for decontaminating meats. Blakely

believes that as consumers become more educated about the major safety and preservation benefits of e-beam irradiation, they will become more accepting and embrace it.

**Engaging low-income consumers at the intersection of food and health
Matt Gutwein, Lisa Harris, Laura Henderson, and Michael Kaufmann, Wishard
Hospital (Indianapolis)**

One Indianapolis hospital is launching several food initiatives to reduce costs for treating illness, (much of this food-related), and to help create a climate that supports food production in the city. These initiatives certainly place Wishard Hospital on the creative edge in connecting food with public health.

Matt Gutwein, President and CEO of the hospital's parent organization, Health and Hospital Corporation of Marion County, calls Wishard the "safety-net hospital" of the city. This means it maintains an "open door," offering access to services for patients regardless of their ability to pay. Marion County taxpayers paid \$24 million in 2010 to help cover the costs of treating uninsured patients, who make up 40% of Wishard's customers.

All told, approximately 65% of the uninsured inpatient care required in Marion County is provided by Wishard; it treats 16,000 adult inpatients per year. The hospital addresses an even higher percentage of the county's outpatient care, receiving approximately one million outpatient visits per year.

This is not to suggest that Wishard's care is in any way substandard. The hospital prides itself on meeting and, in many cases, exceeding local, state, and national benchmarks on an array of publicly reported data related to the quality, efficiency and effectiveness of care. "Wishard is one of the highest quality health systems in the country, at one of the lowest costs," Gutwein says, as measured by the nationally recognized Dartmouth Atlas.

Wishard attributes its success in providing low-cost, high quality care in large part to its pioneering role forty years ago in developing, in partnership with the Regenstrief Institute, one of the nation's first electronic medical record and clinical decision support systems.

As employees of the general hospital of Indianapolis, with a network of ten neighborhood clinics, hospital staff serve the vast majority of the city's low-income population. Dr. Lisa Harris, Wishard's CEO and Medical Director, says that for all the challenges this represents, Wishard's strength lies in aligning the health system's interests in keeping the costs of care low with the community's interest in good health. "We focus on keeping people well in the first place. There is not enough money in the world to treat all of the people who get sick. We want to help people make choices that make it less likely they will ever end up in the hospital."

Dr. Harris adds that the entire biomedical model of treating disease has less than a 20% impact on individuals' health. Far more important is focusing on wellness through education, environment and lifestyle choices. For this reason, the hospital invested more than thirty years ago in neighborhood clinics and a host of community-based prevention

programs. Economically, it was less expensive to offer simple, convenient access to doctors and to focus on preventive care.

For nearly a decade, the hospital also has offered free personalized health coaching to anyone in the community who asks, through their “HealthyMe” program. These coaches offer motivational tips and work with residents to help them change behaviors, all in the context of local community resources that support health.

The hospital views food as a critical public health concern. “Many who come in for treatment have some condition that is related to their diet,” Gutwein adds. “We also found that many come in without much of a support structure.” They may live alone, or have few friends who foster healthful living habits. “Often, the most important thing we offer is that a physician takes a personal interest.”

The hospital decided to build upon the personal connection that doctors make with their patients. For food-related conditions, the doctor or medical coach can “prescribe” more healthful foods by offering low-income clients a food voucher for a seven-week membership to Big City Farms, an urban Community Supported Agriculture (CSA) farm. The patient can drop by a neighborhood clinic on Friday afternoon to pick up their box of food, and receive information on healthful eating. The farmers visit them at the clinic to establish a connection. “People are amazed this great food is grown in the city,” Gutwein adds. At the end of each seven-week session, the recipients share a potluck meal. Each participant may then sign up for seven more weeks of produce, if they have completed the terms of the agreement. They also receive vouchers to the Indy Winter Farmers Market (IWFm). Laura Henderson, IWFm director and consultant to Wishard, says “Response has been great. Many participants report that they now look forward to more vegetables in their diet.”

Health coaches follow-up this offer by visiting patients in their homes. This not only is meant to reassure the patient that the doctor cares about their recovery, but also gives the medical staff direct exposure to the life of each patient. This may help the staff figure out how to help patients find resources in their community that help reinforce their healthy habits.

Gutwein acknowledges that with only twenty individuals receiving such benefits per term, this is “starting at the micro level. Some of this is more symbolic than operational.” Nevertheless, he sees strong potential for the program to show over time that health care costs can be reduced enough to pay for the allocations of food.

Harris says the hospital’s strategy is to “create multiple avenues for residents to move to health. When the patients pick up their food, there is a story that goes with it and a connection to both a farmer and a physician. The emotional connections people make help drive behavioral change.”

Wishard is now constructing a new hospital that will feature an urban farm on its top floor. “The Sky Farm won’t produce mountains of food, but we really hope that patients will feel they have to see it,” Gutwein says. “They are at a heightened state in the hospital, and more willing to listen to new information. We hope that visiting this small plot will have a multiplying effect.”

Laura Henderson will consult on the installation and operation of the farm. She also coordinates another Wishard-sponsored project, the Wishard Slow Food Garden at White River State Park, near the downtown hospital.

Henderson collaborated with Gabe Filippelli, director of the Center for Urban Health at Indiana University – Purdue University in Indianapolis (IUPUI), to produce a guide on soil safety for urban growers. She is also working with the Marion County Health Department (MCHD) on ways to encourage urban gardening in Indianapolis.

Gutwein acknowledges that the hospital is bucking trends. “Today it is more economically advantageous for most hospitals to treat sick people than to keep people healthy. The new regulations will shift this. By 2014, doctors will be paid based on the health outcomes of their patients, not on how many procedures they perform.” Harris adds that this is consistent with Wishard’s model of allocating resources, and also that of other successful public hospitals including Harborview in Seattle, Boston Medical Center and Denver Health. Kaiser Permanente is another firm helping to establish this trend.

Harris points out that Wishard has taken steps in this direction by measuring different outcomes. “We used to measure only the outcome of medical interventions. Now we also focus on examining patients’ experience with care, since data have shown that positive experiences lead to better outcomes. With a strong relationship to a physician, patients are better able to access care and more likely to adhere to recommended treatments.”

In medical care, as in food marketing, building strong personal connections stands at the core of health.

Where does Indiana go from here?

This review of emerging trends in the Indiana food system has uncovered a wealth of detail, covering historical trends that shape the choices Hoosiers face today, economic forces that shape the business options available, and the practical experiences of those most intimately involved with these emerging trends.

Each of the interviews above illuminated complex issues that face Hoosier farmers and consumers. It would be nearly impossible to analyze all of the issues presented, or to suggest all practical paths for the future. Nevertheless, several potential courses of action stand out as critical to take.

1. **Food practitioners around the state need to be more closely networked with each other**, to improve coordination across food initiatives, and to make sure that practice is as efficient as possible. This networking will take advantage of a Hoosier tradition of including all stakeholders and perspectives.

This position has been most forcefully advanced by Roy Ballard, Purdue Extension educator in Hancock County. “There are lots of good folks doing good work who are often going in the same direction but don’t know much about each other. Perhaps we will begin to find ways to be more aware of what each of us is doing, and better to find ways to collaborate so we can efficiently use limited time and resources as we move forward together.”

These convenings provide critical groundwork for all of the rest of the strategies listed below. Yet bringing people together must accomplish more than simply putting people into the same room or convention; it should focus people’s attention on common goals and build both professional and political trust. Over and over again, business, farm, health care, and food system leaders have all said that the future is being created by people who hold relationships of trust. People who share considerable sense of mutual respect and trust can frame better strategic approaches, and also can respond with greater flexibility to unpredictable conditions that may occur in the future.

Hoosiers have strong traditions of being inclusive and ensuring that all voices are heard. Clearly, upholding these cultural traditions will ensure that solutions generated are unique to Indiana, and will find a lasting home here. Such convenings may be organized along regional boundaries (for example, Northeast, Southeast, Southwest, Northwest, and Metro Indianapolis), or they might be organized along specific industries (for example, pork producers, beef processors, or produce distribution groups), or methodologies (grass-fed cattle farmers), or may cut across disciplinary lines (food and public health, or green energy use on the farm and in food industries).

One essential set of experience that can inform this work is the work performed at the Leopold Center for Sustainable Agriculture at Iowa State University under Rich Pirog, who convened several working groups that included residents, farmers, businesspeople, scholars,

nonprofit staff, students, and others into working groups.⁶¹ These “communities of practice” allow participants to build mutual trust, to become informed about emergent trends, to participate and learn from groundbreaking research, and to reflect together on their practice. It has been a forceful method for ensuring a solid foundation for local foods efforts in Iowa. Moreover, Pirog has now moved to Michigan State University, so his work brings him closer to Indiana. He has offered specific training for people who wish to develop a close community of practice. His model combines convening the community frequently with small research grants that can help new ideas be tested quickly, with collaborative reflection.

The community of practice model is also a highly effective approach for working in a rapidly changing setting. As members of the community meet regularly, they can track emergent trends and begin to respond as required. This is a highly resilient approach.

2. Indiana should focus its efforts on expanding on the local foods movement that has built for over forty years.

Some whose interest in local foods is new have not had occasion to learn that discussion of local foods goes back at least forty years (and indeed even longer). The most visible manifestation of this is Bloomingfoods Cooperative in Bloomington. The most effective way to advance efforts to ensure Hoosiers have access to home-grown food is to build on this legacy, rather than trying to replace it, or work around it.

For one thing, it is critical for those who invested in the past decade to give credit to those who worked diligently with little reward to create the possibility that locally grown foods would be sought after by Hoosier consumers. It may be possible to turn a better profit in this industry now than it was in 1976, but that does not make those who do any more accomplished than those who laid this groundwork.

Launched in 1976 with a \$30,000 loan from a local resident, the co-op now counts nearly ten percent of Bloomington’s population as members — and ranks among the city’s top 20 employers, with a payroll of \$4 million per year.

Moreover, keeping this history in mind allows Hoosiers to relieve the pressure they feel to turn quick results. Much of this work is very long term; it cannot always be hurried along even by spending a great deal of money toward that hope. There is certainly a sense of urgency as we imagine the 9 billion mouths the world will have to feed by mid-century; yet this urgency should not be used as an excuse for imposing short-term fixes that harm our ability to sustain our lives over the long haul.

As Hoosiers look for “anchor institutions” that can help provide the backbone for the emerging local foods movement, it would be important to consider whether the network of Indiana co-ops that already exist might already be serving that function. As community owned facilities, each expresses a unique set of working agreements by local residents. Each has responded to customer desires for healthy foods; most know all of the growers who

⁶¹ <http://www.valuechains.org/>

wish to supply that market already. Each is self-organized, making each a potent center of knowledge about how the local foods movement can continue to be self-organized. Each has invested resident capital in a vision for the future, and the co-ops are already linked through mutual purchasing agreements and joint training programs. Many, like Bloomingfoods, reach out to diverse constituents.

This is not to suggest that the food movement of the next forty years will look exactly like the movement of the past forty years. It *is* to suggest that the next phases of the work should build upon this established foundation, rather than erode it. Other anchors may be found, such as hospitals, public health agencies, farmers organizations such as the Indiana Farm Bureau, or community colleges, universities (such as Purdue) and colleges. Yet the place to start is with those who have labored to build a strong foundation all along.

It should also be kept in mind that many Hoosier farmers have thrived with limited technology. The examples of how Amish, Mennonite, and Hutterite communities have thrived by collaborating, and limiting their use of technology to tools that do not create a sense of dependency, stand as a strong reminder that adopting larger technology is not always the best strategy. This, too, is a strong foundation that should be built upon, especially as we plan for a post-oil economy.

3. Farmers report that responsive meat processing for beef, pork, chicken, and other meats is seldom available in proximity to Hoosier farmers who are attempting to meet local demand for meat. Developing this capacity is a high priority.

The meat farmers interviewed for this report have all in some manner found ways to own, or connect to, responsive meat processing capacity, in some cases owning the entire supply web under one person. Although Indiana has a wealth of processing capacity, little of it is available to farmers who wish to make use of special cuts, or who wish to offer higher quality products to their customers. Many farmers must drive long distances to find a processor who will follow their instructions; indeed some farmers resort to hiring more than one processor for successive steps because no single one has the capacity to respond to grower needs.

The prime example of success in this regard is Moody's Meats of Ladoga, which has been able to vertically integrate the entire beef business from grass to retail store under one business. Adam Moody now boasts of 69% growth in 2009, and of gaining better financial returns than a bank.

The successes of farmers with means, or with access to high-end markets, to locate suitable meat processing should be celebrated; yet it must also be kept in mind that this does not, in itself, provide the best possible meat options to the 28% of Hoosiers who are low-income. Public action may be required to ensure that all Hoosiers have access to the healthiest meats possible. Investments in regional infrastructure that ensure safe warehousing and storage, efficient local transport and marketing may be critical in addressing the protein needs of all Hoosiers.

Pursuing this direction will hold economic importance, since the ability of livestock producers in Indiana to build wealth has been steadily eroding since the late 1970s. Restoring the ability of Hoosier farmers to create wealth by producing meat and dairy products will be an essential path if Indiana is to build a stronger economy.

4. **Stronger local distribution networks and processing plants for produce are also critical;** several such initiatives are underway across the state, which require greater investment. Others must also be created.

Almost every produce farmer interviewed for this report has mentioned the need for efficient local produce distribution. New efforts such as the Food and Growers' Association of Laughery Valley and Environs, This Old Farm's "Alliance" and Green Bean Delivery show the urgent need to create these channels. Farmer Adam Moody adds that produce processing (quick freezing, canning, packing, etc.) is critical in extending the ability of produce farmers to supply year-round markets in the state.

Clearly, some effective, larger produce distribution networks already exist. These are very proficient at conveying fresh foods to Indiana grocers, but many of their suppliers are distant. Some are also so large that they have little financial interest in smaller flows of food from small farms to nearby consumers. Several farmers interviewed here are involved in devoted efforts to create local distribution networks; most are undercapitalized. Both public and private investment will be required to expand these networks.

It should be kept in mind that if Indiana develops distribution networks and facilities that run on locally produced green energy, these local networks will hold a competitive edge as fossil fuel prices rise. The time to start constructing these systems is now, while we still have fossil fuels to use in their construction.

Season extension is a critical related goal that can also be accomplished by building energy-efficient hoop houses and greenhouses that can raise fresh greens and vegetables in early spring and late fall. Root cellars, warehouses, and packing sheds will need to be built to help extend the reach of Hoosier growers who wish to extend seasonal sales. Some of these facilities may be suited to public investment, with the understanding that access to food is as important as access to sewer or water systems. In other cases, private investment will be critical.

5. **Food safety has become a prominent concern across Indiana.** Ensuring food safety is obviously a high priority, yet the state is split about how to achieve this.

Some say that the more direct connections made between farmers and consumers, the greater safety that can be created. Some dispute this, and also point out that for more distant transactions, where farmers and consumers cannot know each other, technology will be an essential component of food safety regimens.

The example of Stan Skillington is a sobering one, of a poultry farmer who was required to undergo inspection by the state of Indiana, but learned the state was not able to pay for an

inspector to come on Saturday when Stan had enough labor to do the processing. As a result, he has abandoned commercial poultry production even though demand is skyrocketing.

This story alone shows that stricter regulations do not automatically mean greater compliance, nor better outcomes. The delicate balance of proper policy rests on requiring enough oversight to assure safety without unduly burdening farmers or distributors, while keeping costs to a minimum.

A thorough exploration of this topic is beyond the scope of this study. One conclusion is clear: Efforts to assure safe food must not place larger farms and businesses at an advantage over small; food safety approaches must be scale neutral. Small farmers are essential to the overall resilience of the food system, since smaller farms can adapt more readily to changing conditions, and also offer beginning farmers an opportunity to launch farms. While some castigate smaller farms as “too small” to perform proper safety procedures, this is not a valid argument. It is equally likely that smaller farms can manage more closely and comprehensively, and certainly have more ease in tracing potential difficulties. Farms of all sizes must operate safely.

Food safety approaches must also build the capacities of consumers to make smart decisions while shopping, preparing, and eating food; ultimately, informed consumers and diligent producers will be the strongest line of defense against potential food risks.

Indiana should think critically about the issue of insurance. As several interviewees have pointed out, being insured against food contamination is not always a robust strategy, since it may be too late for the consumer once food has been tainted. Insurance does have the advantage of forcing producers to pay for the costs of potential damage, which may offer a strong incentive to reduce contamination sources. It certainly can help cover the costs of potential recalls or disease. Yet there is no inherent reason that insurance, in itself, will reduce the risks of foodborne illness, nor is there any clear reason that external insurance firms should profit from the potential for foodborne illness in Indiana. If some form of indemnity is desired, the state should explore Indiana-based insurance pools, perhaps among growers or among state residents.

Finally, it should be kept in mind that even under the current inspection regime, foodborne illnesses currently cause Hoosiers to pay roughly \$3 billion in medical costs, despite the presence of fairly stringent regulations.

6. Networking food-related businesses into intentional clusters can help stabilize local economies, and will create larger economic multipliers.

If one looks at the maps contained in this report, and if one pays attention to the many linkages that food businesses have built across the state, it is clear that solid networks of cooperation have already been built by food entrepreneurs. These include, but are not limited to: (a) cooperative grocery networks and related distribution; (b) meat processing networks; (c) produce distribution networks; or (d) clusters of businesses that occupy the same farm.

One mark of successful business clusters is that firms agree to communicate with each other about matters that do not involve revealing competitive secrets, even if they also compete at times when it is appropriate. One prime example of effective communication is the relationship Chris Eley of Goose the Market describes he has with hog farmer Greg Gunthorp; the two confer so that the growth of one reinforces the growth of the other. By expanding in harmony with each other, and by trading with each other, clusters like these create economic stability and resiliency for Indiana.

The business clusters must be expanded and strengthened. By creating trade within the state of Indiana, they will ensure that a dollar earned by a Hoosier stays in the state for a while. This is to say they will create higher economic multipliers, which in itself will expand the impact of food-related economic development.

Indiana state and local governments may currently spend as much as \$1 billion per year to incentivize community economic development. As much of this money as possible should be devoted to creating and strengthening effective food business clusters. This will not strictly be a business matter. Effective clusters rely on motivated and respected employees, on nonprofits that build social networks and convene stakeholders to set a common vision, on educational institutions, and also on supportive public policy. It is a fallacy to think this can be accomplished by businesses alone.

The best investments in fostering effective business clusters will be infrastructure investments: distribution channels, warehouses, cold storage, green energy sources, efficient local transportation facilities, knowledge, tax policy, and information technology that are designed to build health, wealth, connection, and capacity in Indiana communities. Offering cash incentives for specific commodities is a failed strategy, since it extracts wealth from Indiana communities, and tends to select specific winners and losers.

Finally, it is important to note the era we are in. This will be a time of great uncertainty. Our business leaders are wrestling with competing world views. On the one hand are those who say that expansion is right around the corner and that we can borrow our way to a far more prosperous future, and on the other are those who argue that rural America is coming to resemble a Third World area, and that more humble expectations for growth and development are more appropriate. Importantly, the leaders who are making the most headway in food entrepreneurship, as indicated in the interviews, are the latter. Those who are trying to “bring the food economy to scale” often find that this is not rewarding either to customers or to farmers, as many interviews show.

Moreover, the food system we have is built upon a massive expectation that oil will continue to be plentiful and cheap. Both of those assumptions are breaking down rapidly. Our food system will also undergo unpredictable change due to climate change. Smaller, more flexible networks, self-organized by Hoosiers who are responsive to changing conditions and effectively networked, will hold an edge in the future.

Appendices

Foods offered for sale by Piazza Produce

From the company website, <http://orders.piazzaproduce.com/> — viewed August 18, 2011

Apple	Kohlrabi
Apricot	Leeks, Ramps
Artichoke	Legumes
Asparagus	Lemon
Aspics	Lettuce
Avocado	Lime
Bakery	Lo Bok, Chinese Radish
Banana	Mango
Baskets	Mangosteen
Bean	Marmalades
Beef	Meats (non-poultry)
Beets	Melons: Seasonal & Misc.
Berry, Seasonal, Misc.	Micro Flowers
Blackberry	Micro Greens
Blueberry	Misc. Veggies
Bok Choy	Mixes
Breads, Rolls, Pizza Dough, etc.	Mousse
Broccoli	Mushrooms: Fresh & Dried
Broccoli	Mustards
Broccolini	Napa/Chinese Cabbage
Brussel Sprouts	Nectarine
Butter & Margarine	Norwegian
Cabbage	Nuts, Sunflower Seeds, Legumes
Cactus Leaves/Pads	Oils
Cakes, Pies, Pastries	Okra
Candy & Chocolates	Olives
Candy & Snack Foods	Onion
Canned Fruits	Orange
Canned Vegetables	Organic Fruits, Veggies, Dairy
Cantaloupe	Oriental
Cardoons	Packaging Supplies
Carrot	Papaya
Cauliflower	Parsley
Celery	Parsnip
Chard	Pastries
Cheese	Patés
Cherry	Peach
Chocolates	Pear
Citrus Misc.	Peas
Coconut	Pepper: Chilies, Dried Chilies
Compounds	Persimmon

Condiments	Pickles: Spears, Slices, Whole
Cookies & Granola Bars	Pineapple
Corn	Plum
Crackers	Pork
Cucumber	Potato, Idaho Only
Daikon/Japanese Radish	Potato, Non-Idaho
Dairy Cheese: Cheese	Poultry
Dairy Cultured: Sour Cream, Cottage Cheese	Preserves
Dairy Fluid: Milk, Cream/ers	Quinoa
Danish	Radish
Desserts	Rapini/Broccoli Raab
Dips By Marzetti	Raspberry
Domestic Cheese	Rhubarb
Dried Fruit	Rice
Edible Flower	Root Veggies, Miscellaneous
Eggplant	Rutabaga
Eggs: Grade AA; Hard-cooked	Salad Dressings
English	Salads: Wet; Meat; Desserts
Exotic Tropical Fruits	Sauces
Fair Oaks	Seaweed
Fajita Blends, Pico De Gallo	Seafood
Fennel	Service
Fig	Shallot
Floral, Seasonal Items, Plants	Skins, Wraps Oriental
Fondants	Slaw
French	Spanish
Frozen Pasta Products	Spinach
Fruit	Sprout
Fruit Cake	Squash
Fruit Mixed, Fruit Salad	Stir-fry Blends
Fruit Skewers	Stone Fruit
Fruit Tray	Strawberry
Garlic	Sugarcane
General Miscellaneous Items	Sugars
German cheeses	Sweet Potato
Ginger	Sweeteners
Glazes	Swiss
Global Spices	Syrups
Goat Cheese Specialties	Tamarindo
Grains	Thickener
Grape	Tofu
Grapefruit	Tomatillo
Greens	Tomato
Herb	Tortilla
Holiday Foods	Truffles
Holland	Turnip
Honey	Van Lang Foods
Honeycomb	Vegetables

Honeydew
Horseradish
Hummus
Irish
Italian
Jicama
Juice Tropicana/Naked Juice
Juices, Lemonades, Drink Mixes
Kale
Kiwi

Vegetarian: Meat Alternatives
Veggie Blends
Veggie Tray, Platter
Vinegars
Wasabi Powder
Watercress
Watermelon
Wood: Oak, Hickory, Apple, Etc
Yu Choy

Produce sources for Pro-Act

(wholesale produce co-op that supplies Piazza Produce)
http://www.proactusa.com/distributor_listing.htm — viewed August 18, 2011

Adams Produce

300 Union Hill Drive, Suite 300
Homewood, AL 35209
205-397-9300

302 Finley Avenue
West Birmingham, AL 35204
205-323-7161

Also Memphis, TN • Biloxi, MS
• Jackson, MS • Destin, FL
• Panama City, FL • Pensacola, FL
• Tallahassee, FL • Birmingham, AL
• Little Rock, AR
www.adamsproduce.com

Antonucci's Wholesale Produce & Seafood, Inc.

274 South Main Street
Gloversville, NY 12078
518-725-2169
www.antonucciprosea.com

Armstrong Produce

802 Mapunapuna Street
Honolulu, HI 96732
808-538-7051

Also Kona, HI • Kahului, HI
www.armstrongproduce.com

Bamford Produce Company

2501-A Stanfield Road
Mississauga, Ontario, Canada L4Y 1R6
905-615-9400
www.bamfordproduce.com

Bix Produce Company

1415 L'Orient Street
Saint Paul, MN 55117
651-487-8000
www.bixproduce.com

Capitol City Produce

16550 Commercial Avenue
Baton Rouge, LA 70816
225-272-8153
www.capitolcityproduce.com

Charlie's Produce Company

4103 2nd Avenue South
Seattle, WA 98134
206-625-1412

Also Anchorage, AK • Gresham, OR
• Spokane, WA
www.charliesproduce.com

Costa Fruit & Produce

18 Bunker Hill Industrial Park
Boston, MA 02129
617-241-8007
www.freshideas.com

Family Tree Produce

5510 East La Palma Avenue
Anaheim, CA 92807
714-696-3037
www.familytreeproduce.com

Foster-Caviness Foodservice

PO Box 35075
Greensboro, NC 27425-5075
336-662-0571

Also Charlotte, NC • Raleigh, NC
www.foster-caviness.com

Freedom Fresh

8901 N.W. 33rd Street
Miami, FL 33172
305-715-5700
www.freedomfresh.com

General Produce Company

1330 North B Street
Sacramento, CA 95811
916-441-6431

Also Mount Shasta, CA
www.generalproduce.com

Get Fresh Sales

6745 Escondido Street
Las Vegas, NV 89119
702-897-8522
www.getfreshsales.com

GoFresh Produce

1691 North 161st East Avenue
Tulsa, OK 74116
918-583-1153
www.gofreshusa.com

Grasmick Produce

215 East 42nd Street
Boise, ID 83714
208-376-3981
www.grasmickproduce.com

Hardie's Fruit & Vegetable Co.

1005 North Cockrell Hill Road
Dallas, TX 75211
214-426-5666
www.hardies.com

Also Hardie's Fruit &
Vegetable Co. – South
9715-B Burnet Road, Suite 100
Austin, TX 78759
512-451-8757

San Antonio, TX
www.hardies.com

Hardie's Fruit & Vegetable Co. – Houston
3137 Produce Row
Houston, TX 77023
713-926-4445
www.hardies.com

Hearn Kirkwood

7251 Standard Drive
Hanover, MD 21076
410-712-6000

Also Jessup, MD
www.hearnkirkwood.com

Hector Larivée Inc

1755 Bercy
Montréal, Québec,
Canada, H2K2T9
514-521-0741
www.hectorlarivee.com

J. Kings Food Service Professionals

700 Furrows Road
Holtsville, NY 11742
631-289-8401
www.jkings.com

Loffredo Fresh Produce Co., Inc.

4001 South West 63rd Street
Des Moines, IA 50321
515-285-3367

Also Kansas City, MO • Omaha, NE
• Rock Island, IL • Madison, WI
www.loffredo.com

Muir Copper Canyon Farms

951 South 3600 West
Salt Lake City, UT 84104
801-908-6091

Also Idaho Falls, ID
www.coppercanyonfarms.com

NLaws Produce

701 US Highway 80
Georgia State Farmers' Market
Savannah, GA 31402
912-966-5297
www.nlawsproduce.com

Ole Tyme Produce

92-98 Produce Row
St. Louis, MO 63102

314-436-5010
www.oletyme.com

Pacific Coast Fruit Company
201 North East 2nd Avenue
Portland, OR 97232
503-234-6411

Also Kent, WA
www.pcfruit.com

Paragon Foods
55 36th Street
Pittsburg, PA 15201
412-621-2626
www.pmfoods.com

Piazza Produce
5941 West 82nd Street
Indianapolis, IN 46278
317-872-0101
www.piazzaproduce.com

Pocono Produce
Route 191 and Chipperfield Drive
Stroudsburg, PA 18360
570-421-4990
www.poconoproduce.com

Potato Specialty Company
2610 Avenue A
Lubbock, TX 79452
806-747-4633
www.potatospecialty.com

Produce Distribution Center
2208 West 21st Street
Jacksonville, FL 32209
904-366-1368
www.producecenter.net

ProduceOne
904 Woodley Road
Dayton, OH 45403
937-258-4025

Also Columbus, OH
Cleveland, OH

www.produceone.net

Produce Source Partners
13167 Telcourt Road
Ashland, VA 23005
804-262-8300

Also Newport News, VA
Roanoke, VA
www.producesourcepartners.com

Royal Food Service
3720 Zip Industrial Boulevard
Atlanta, GA 30354
404-366-4299
www.royalfoodservice.com

Seashore Fruit & Produce Company
800 North New York Avenue
Atlantic City, NJ 08401
609-345-3229

Also Penns Grove, NJ
www.seashoreeast.com

Segovia's Distributing, Inc.
3701 Shell Street
El Paso, Texas 70025
915-533-3130

Also Albuquerque, NM
www.segoviasdistributinginc.com

Simon & Leeman
2445 East Grand Boulevard
Detroit, MI 48211
313-972-2800
www.simon-leeman.com

Stern Produce
3200 South 7th Street
Phoenix, AZ 85040
602-268-6628

Also Flagstaff, AZ • Tucson, AZ
www.sternproduce.com

T&T Produce

124 Park Industrial Boulevard
Ringold, GA 30736
706-866-5955
www.tandtproduce.com

Tarantino Foods

530 Bailey Avenue
Buffalo, NY 14206
716-823-6600
www.tarantinofoods.net

Testa Produce

4555 South Racine Avenue
Chicago, IL 60609
312-226-3237
www.testaproduce.com

Van Eerden Company

650 Ionia South West
Grand Rapids, MI 49503

616-475-0900
www.vaneerden.com

Vinyard Fruit & Vegetable Co.

804 South West 2nd Street
Oklahoma City, OK 73109
405-272-0339
www.vinyardinc.com

Weyand Food Distributors

2707 East Wilder Avenue
Tampa, FL 33610
813-236-5923
www.weyandfood.com

Yancey's Food Service

5820 Piper Drive
Loveland, CO 80538
970-613-4333
www.yanceys.com

List of producers selling to Bloomingfoods Co-op

240Sweet

Columbus
Artisan marshmallows

Amish Acres Historic Farm

Nappanee
Farm eggs

Bet-Len LLC/Al's Secret Grilling & Baking Sauce

Springville
Sauce

Big Girl Chickens

Farm eggs

Bloomingfoods Granola

Bloomington
Granola

Bloomington Bagel Company

Bloomington
Bagels, challah

Bloomington Coffee Roasters

Nashville
Locally roasted specialty coffees

BLU Boy Chocolate Café & Cakery

Bloomington
Ice creams & chocolates

Bourbon Barrel Foods

Louisville, KY
Soy sauce, teriyaki, worcestershire sauce, sorghum

Bowman & Landes

New Carlisle, OH
Turkey, poultry

Brown County Coffee

Nashville
Locally roasted specialty coffees & bulk

Buffalo Nickel Ranch

Gosport
Bison

Burton's Maplewood Farm

Medora
Maple syrup bottles & bulk

Chelsea Morning Bakery

Bloomington
Cakes, scones, baked goods

Cook's Bison Ranch

Wolcottville
Bison

Daddy Bob Brittle

Bloomington
Nut brittles

Dillman Farms

Bloomington
Persimmon pulp, jams, jellies, spreads, salsa

Eagle Pack Natural Pet Foods

Mishawaka
Pet food

Eisele's Honey

Westfield
Honey

Endangered Species Chocolate

Indianapolis
Ethically-traded chocolate

Ewenique Icelandic Sheep

Seymour
Flours, beans, grains

Falafels

Bloomington
Pita bread

Farm to Kitchen Foods

Indianapolis

Energy bar, granola, hummus, salsa, dressing, condiments, soup, pasta sauce

Fiedler Family Farms

Rome

Beef

Fields of Agape

Carthage

Flax, wheat berries, soybeans, popcorn, misc. bulk

Fischer Farms

Jasper

Beef, pork, turkey

Five Star Foodies

Cincinnati, OH

Beverages, meat alternatives

Food Works

Bloomington

Breads, rolls, crackers

Forbidden Flavors Ice Cream

Terre Haute

Ice cream, gelato, sorbet

Graber Peach Jam

Seasonal

Grace Island Specialty Foods

Garrett

Cheese crisps

Gunthorp Farms

LaGrange

Fresh turkey

Herrmann's Maple Syrup

Colby, WI

Maple syrup

Hidden Pond Farm

Centerville

Kombucha, krauts, kvass, kim chi, super tonic

Hi-Ho Trading LLC

Nashville

Doot dressings

Hunter's Honey Farm

Martinsville

Honey

Isabella's Best Baked Goods

Martinsville

Gluten-free cookies

Jameson Coffee

Greencastle

Locally roasted specialty coffees

Kilimanjaro Foods

Louisville, KY

Sauces

Lambright Eggs

Jasper

Farm eggs

Leane & Michael's Sugarbush Maple

Syrup

Salem

Maple syrup

Local Folks Foods (Homestead Farms)

Indianapolis

Mushroom patties, pasta sauce, tomatoes, condiments

Miller Amish Country Poultry

Orland

Poultry

Mt. Pilot

Bloomington

Bbq sauce, hot sauce, dry rub

Nature's Farm

West Lafayette

Milk

Needmore Oatcakes

Needmore

Oatcakes

Nick's English Hut

Bloomington

Hot sauce

One Sky Farm

Martinsville

Teas

Ora Borntreger

Paoli

Amish milled spelt flour, cornmeal

Organic Acres Farm

Odon

Organic farm eggs

Partridge & Quigley Coffee Roasting Company

Bloomington

Locally roasted coffees

Pat's Gnawbone Sorghum Mill

Nashville

Relish, condiments

Phoenix Farm

Bloomington

Tofu

Piccoli Dolci

Bloomington

Italian sweets

Popcorn Indiana

Popcorn

Kettlecorn, bagged popcorn

Poplar Ridge Farm

Spencer

Farm eggs

Q Sauce

Terre Haute

Dressing, chili oil

Quarrymen Coffee Roasting Company

Bloomington

Locally roasted specialty coffees

Quilter's Comfort Tea

Bloomington

Tea

Rhodes Family Farm

Newberry

Farm eggs

Rice's Quality Farm Meats

Spencer

Beef

Rooibee Red Tea

Louisville, KY

RTD red tea

Schacht Farm

Bloomington

Fresh turkey & poultry

Scholars Inn Bakehouse

Bloomington

Breads

Shaffer's House of Bread

Columbus

Breads

Snow Lion

Bloomington

Dressing

Spring Again

Bloomington

Cleaning products

Spring Mill Bread Company

Terre Haute

Breads

Tea Unwrapped

Fishers
Teas

Tell City Pretzels

Tell City
Artisan pretzels

The Swiss Connection

Clay City
Salami

Traderspoint Creamery

Zionsville
Yogurts, milk, cheese, dairy

Triple H Wagyu Cattle Co.

Bloomington

Wagyu & Kobe beef

Turnbull Farms

Clear Creek
Quail eggs

Victorian House Scones

Lafayette
Scone & biscuit mix

Walnut Grove Spring Water Co.

Bloomfield
Spring water

Zen Sheep Farm

Cloverdale
Sheep, lamb

Future Producers at Bloomingfoods Co-op

American Sweet Bean

Old Fort, OH
Edamame

Luna Burger

Columbus, OH
Burger alternative

Martinsville Candy Kitchen

Martinsville
Candy canes

Peacetree Mountain Truffles

Bloomington
Truffles

Riehle's Select Popcorn

Sunman
Gourmet popcorn

Simply Divine Bakery

Ferdinand
Assorted baked goods

Smoking Goose Meatery

Indianapolis
Charcuterie, smoked meats

Snowville Creamery

Pomeroy, OH
Milk, dairy

Wan's Thai Food

Indianapolis
Thai sauces

Certified meat processors in Indiana

[Note: many of these processors are manufacturers or food preparers, not processors offering services to farms.]

1. Federally Certified Meat Processors

Source: USDA Federal Safety & Inspection

Service

(As of September, 2011)

American Cold Storage — Indiana

Division

Boonville

Americold Logistics, Inc.

Indianapolis

AmeriQual Group, LLC

Evansville

AmeriQual Packaging

Evansville

ARC Industries

Evansville

Armour - Eckrich Meats, LLC

Peru

Big B Distributors

Evansville

Birchwood Foods

Frankfort

Brewer Meats

North Vernon

Brushy Prairie Packing, Inc.

LaGrange

Butterfield Foods

Noblesville

Caito Foods, Inc.

Indianapolis

Cort Acres Breaker Plant

Seymour

Crystal Lake LP

Warsaw

Culver Duck Farms, Inc.

Middlebury

Dewig Bros. Packing Co.

Haubstadt

El Popular Sausage Factory, LLC

Valparaiso

Farbest Foods, Inc.

Huntingburg

Farm Boy Meats of Evansville

Evansville

Grabill Country Meats #1, Inc.

Grabill

Great Lakes Poultry, Inc.

La Porte

Hanson Cold Storage Company

Logansport

Hanson Cold Storage Company

Lafayette

Hinsdale Farms, Ltd.

Bristol

Hoople Country Kitchens, Inc.

Rockport

HRR Enterprises, Inc.

La Porte

Indiana Packers Corporation

Delphi

Interstate Cold Storage, Inc.

Fort Wayne

Kemper Foods International LLC
New Albany

Kralis Bros. Foods, LLC
Mentone

Maple Leaf Farms, Inc.
Milford

Marengo Warehouse & Dist. Center
Marengo

Mariah Foods
Columbus

McFarling Foods, Inc.
Indianapolis

Meijer Distribution, Inc.
Middlebury

Merchandise Warehouse Co., Inc.
Indianapolis

Monogram Foods LLC
Muncie

Morgan Foods, Inc.
Austin

Mr. Pizza, Inc.
Anderson

Munsee Foods, Inc.
Muncie

Munsee Meats, Inc.
Muncie

Ossian Packing Co., Inc.
Ossian

Park 100 Foods, Inc.
Morristown

Park 100 Foods, Inc.
Kokomo

Park 100 Foods, Inc.
Tipton

Pasou Foods, Inc.
Syracuse

Pasta-Bilities
Indianapolis

Payton's Barbeque
Veedersburg

Perdue Foods, Inc.
Washington

Pine Manor/Miller Poultry
Orland

Plumrose USA, Inc.
South Bend

Plumrose USA, Inc.
Elkhart

Pohlman's Meat Processing Plant
Terre Haute

Pulaski County Breaker Plant
Francesville

QCD Packaging, Inc.
Evansville

Really Cool Foods, LLC
Cambridge City

Ruwaldt Packing Co.
Hobart

Sensient Flavors LLC
Indianapolis

Serenade Foods, Inc.
Milford

Sure Fine Foods Acquisition
Evansville

The Grooms Group LLC
Madison

TKO Distributing
Cedar Lake

Tyson Foods, Inc.
Corydon

Tyson Fresh Meats, Inc.
Logansport

Vin-Lee-Ron Meat Packing, LLC
Tippecanoe

Wabash Valley Produce, Inc.

Dubois

White Castle Systems, Inc.
Orleans

White Castle Systems, Inc.
Lebanon

Williams West & Witts Products
Michigan City

Woodland Bison, Inc.
Memphis

Yoder Meats, Inc.
Shipshewana

2. State Certified Meat Processors

*Source: Indiana Board of Animal Health
(As of September, 2011)*

Adair Processing

Pennville

Archer's Meat Packing

Greenwood

Archer's Meat Packing (Little Big Beef)

Fishers

Arni's Inc., dba LINARCO Dist Co.

Lafayette

Back 40 Butchering

Rockville

Beechy Custom Meats

Shipshewana

Betz Family Processing

Schnellville

Beutler Meat Processing

Lafayette

Bloomfield Locker Plant, Inc.

Bloomfield

Boilermaker Butcher Block

West Lafayette

Bounthanh's Egg Rolls

Nappanee

Brook Locker Plant, Inc.

Brook

Brownstown Frozen Food Lockers

Brownstown

Buck-Ra Farms & Halal Slaughtering

Monrovia

Burlington Locker Plant

Burlington

Bush Farm Enterprises, Inc., dba

Bush's Market

Columbus

Butcher Bob's

LaGrange

C&S (Kokomo Butcher Block)

Kokomo

Cannelburg Processing Plant

Cannelburg

Claus' German Sausage & Meat, Inc.

Indianapolis

Country Tyme Meat Processing

Corydon

Custom Quality Meats

Fort Wayne

Darlage Custom Meats, Inc.

Seymour

DC Meats, Inc.

Osceola

Dishman's Quality Meats

Winchester

Doons Jerky dba Westport Jerky Shop

Westport

Dough Baker's Pizza

Ft Wayne

Dugdale Beef Co., Inc.

Indianapolis

Farmland Locker, Inc.

Farmland

Fender 4-Star Meat Processing, Inc.

Spencer

Ferdinand Processing

Ferdinand

Fisher Packing Company

Portland

French's Locker, Inc.

Batesville

French's Locker, Inc. (Newpoint)

Greensburg

G & G Pork Farms

Earl Park

Gerber Locker

Craigville

Glick's Butcher Shop

Williamsburg

Greensburg Frozen Foods Co., Inc.

Greensburg

Gustin's Custom Slaughter

Harlan

Hall Drive Inn, Inc.

New Haven

Hallmark Custom Meats LLC

Wolcotville

Hanford Packing Company

Thayer

Harger's, Inc.

Hamilton

Hayden's Custom Meats

Anderson

Hiatt Poultry

Rochester

Hobart Locker and Meat Packing Corp.

Crown Point

Home Style Butchering

Middlebury

Imhoff Quality Meats, LLC

Butler

J & D Custom Meats (Whipples)

Rushville

J & J Frozen Foods

Lake Station

J & M Poultry Farm

Cambridge City

Jack's Fine Foods

Brazil

Jaworski's Market

South Bend

John's Butcher Shop

Nappanee

Kaiser Meat Market

Cedar Grove

Kenny Dewig Meats & Sausage, Inc.

Owensville

Kenny's Fine Meats

Mooreville

Knightstown Locker

Knightstown

Korner's Meat Processing

West Harrison

Krider Meat Processing, Inc.

Columbia City

Ladder 51 Flame Broiled Wings
Madison

Ladoga Frozen Food & Retail Meats, Inc.
Ladoga

LaGrotte Foods, Inc.
Indianapolis

LaOtto Meats
LaOtto

LCE, Inc.
South Bend

Lemler Locker
Bourbon

Lemler Slaughterhouse
Bourbon

Lengacher Meat and Deer Processing
Grabill

Lengerich Meats, Inc.
Zanesville

Maddie Moos Custom Meats/Marsh Processing
Middletown

Manley's Meats, Inc.
Decatur

Martin Custom Butchering
Wakarusa

Martin's Chicken Butchering
Goshen

Martins Homestyle Soup
Wolcottville

McFall's Family Meats/Brock's
Tell City

Merkley and Sons Packing Company, Inc.
Jasper

Miller's Locker Plant
Waynetown

Miller's Smoke House
Middlebury

Miranda Products LLC
Elkhart

Mishler Packing Co., Inc.
LaGrange

Monon Meat Packing Company, Inc.
Monon

Moody's Meats, Inc.
Ladoga

Myers Frozen Food Provisioner, Inc.
St. Paul

Napoleon Locker Plant
Napoleon

New Haven Custom Meats, Inc. dba Willow Lake Farms
New Haven

New Moon Zabiha Slaughterhouse
Fairmount

Newton Processing Plant
Montgomery

Odon Locker, Inc.
Odon

Old Fashioned Butcher Shoppe
Evansville

O'Mara Poultry, Inc.
Greensburg

Orange County Processing

Orleans

Organic Grass Farms

Rockville

Ortman Meat Processing, Inc.

Winamac

Parrett's Meat Processing

Flora

Pate Processing Plant

Hanover

Patterson Custom Butchering

Solsberry

Patties of Jamaica

Indianapolis

Pearson's Custom Butchering

Martinsville

**PEN Products Food Industry
Company**

Pendleton

Pierceton Foods, Inc.

Pierceton

Pletcher's Poultry Processing

Goshen

Prince's Custom Slaughtering

Clayton

R & S Wholesale Meats, Inc.

Farmersburg

Remington Meats LLC

Remington

Remington Poultry & Catering

Remington

Rice's Quality Farm Meats, Inc.

Spencer

Rihm, Inc.

Cambridge City

**Roger's Custom Butchering & Deer
Processing**

Brazil

Roland's Processing

New Paris

Royal Center Locker Plant

Royal Center

**RPF, Inc., Boggstown Locker-Roscoes
Tacos**

Boggstown

Sander Processing, Inc.

Celestine

Saugany Lake Smokehouse

Rolling Prairie

Saylor's Livestock

Grovertown

Scobee Meats

Greencastle

Sievers Packing, Inc.

Vincennes

Sims Meat Proc Inc.

La Porte

Slabaugh Meat Processing

Nappanee

Smithland Butchering Service

Shelbyville

SNN, Inc. dba Howard & Son, Inc.

Munster

Snow's Beef Jerky

Peru

Spendal Brothers Meat

Clinton

Sunshine Acres Family Farm

Middlebury

T & J's Custom Butchering

Bourbon

The Butcher Block

Lowell

This Old Farm Meats & Processing

Colfax

Tim Didier Meats & Catering, Inc.

Fort Wayne

Torelli Pizza (formerly Vision Foods)

Griffith

Uebelhack Turkey Farm, Inc.

Mt. Vernon

Uselman Packing Company

Clinton

Verona Pizza, Inc.

Hammond

Vining Slaughter Haus

Roanoke

W & W Locker

Andrews

Wabash Clay Custom Meat Processing

Clay City

Wakarusa Custom Meats, Inc.

Wakarusa

Wallace Processing

Hillsboro

Wayne's Meats-Milan Food Bank

Milan

Westport Locker

Westport

White's Meat Market

Kokomo

Wilson's Locker Plant

Brownstown

Wolf's Pork Wieners, Inc.

Palmyra

Wurster Family Market dba Evergreen

Whsle. Meats

Michigan City

Fresh foods offered by Garwood Orchard, La Porte

From the farm's website, <http://www.garwoodorchard.com/varieties.html> — viewed August 18, 2011

April - May

Morel Mushrooms

Asparagus

May - June

Asparagus

Strawberries

Peas

June - July

Strawberries

Blueberries

Sweet Corn

Peaches

Green Beans

Peppers

Zucchini

Yellow Squash

Black Raspberries

July - August

Peaches

Tomatoes

Sweet Corn

Peppers

Zucchini

Green Beans

Peaches

Raspberries

Blackberries

September - October

Apples

Cider

Pumpkins

Squash

Interviews held with Indiana food system practitioners for this study

by
Ken Meter, Crossroads Resource Center, 2011

Batesville

Bea Frey, Prime Meats / French's Locker (farmer)
Chef Adam Israel, LiL' Charlie's Restaurant
Patty Reading, Langland Grassfed Beef (farmer)

Bloomington

John Galuska, (urban farmer)
George Huntington, Bloomingfoods Co-op
Kim Keeney, Local Growers Guild
Dave Parkhurst, retired plant ecologist
Stephanie Solomon, Bloomington Metro Health Commission
Michael Simmons, City of Bloomington (gardener)
Toby Strout, Bloomington Sustainability Commission
Maggie Sullivan, chair of Bloomington Sustainability Commission
Chef David Tallent, Restaurant Tallent

Clarks Hill

Jim Moseley, former Deputy Secretary of Agriculture (farmer)
Neil Moseley, Pleasant Acre Farm (farmer)

Columbia City

Jeff Blakely, Iotron

Columbus

Gary Bush, Bush's Market (farmer)

Darlington

Erick & Jessica Smith, This Old Farm (farmers)

Edwardsport

Don Villwock, president of Indiana Farm Bureau (farmer)

Gary

Kathryn Campbell, master gardener
Brian Cortin, permaculture gardener
Pastor Katurah Johnson, Christ United Methodist Church
Dr. Ellen Szarleta, Indiana University Northwest

Greenfield

Roy Ballard, Purdue Extension — Hancock County

Greensburg

Kenny Pumphries (farmer)
Robert White, WRW & Associates
Dan Wilson, Purdue Extension — Decatur County

Hazelwood

Cissy Bowman, Hoosier Organic Marketing Education (farmer)

Hobart

Ryan Richardson, County Line Orchards (farmer)
Barb Tracy, Marilyn's Bakery & Johnson Farms

Indianapolis

Brian Blackford, Indiana Department of Tourism
Nick Brown, Green Bean Delivery
Tim Carter, Center for Urban Ecology, Butler University (gardener)
Drew Cleveland, Indiana Farm Bureau (and farmer),
Andy Dietrick, Indiana Family of Farmers
Christopher Eley, Goose the Market
Chef Thom England, Ivy Tech State College
Eric Freeman, Indiana Artisans
Matt Guttwein, CFO, Wishard Hospital
Lisa Harris, CEO and Medical Director, Wishard Hospital
Laura Henderson, Indianapolis Winter Market (market director & farmer)
Kristin Hess, Indiana Humanities
Michael Kaufmann, Director of Special Projects and Civic Investment, Wishard Hospital
Mike Lewis, produce buyer for Piazza Produce
Adam Moody, Moody's Meats (and farmer)
Tiffany Obrecht, Indiana Farm Bureau
Pogue's Run Grocer
Anne Schmelzer, Indiana State Department of Agriculture
Gina Sheets, Indiana State Department of Agriculture
Debbie Trocha, Indiana Cooperative Development Council
Victoria Wessler, Locally Grown Indiana
Kristen Fuhs Wells, Indiana Humanities

Kouts

Chris Birky, Birky Farms (farmer)

East Lafayette

Levi Huffman, Huffman & Hawbaker Farms (farmer)

West Lafayette

Chuck Hibberd, State Director, Purdue Extension
Chris Hurt, agricultural economist, Purdue

Lagrange

Steve Engleking, Purdue Extension — Lagrange County
Greg Gunthorp, Gunthorp Farms (farmer)
Neal Lehman, Amish farmer
Perry Miller, auction manager, Clear Spring Produce Auction

Lebanon

Stan Skillington, Skillington Farms (farmer)

Loogootee

Abe Graber, Jr., Amish farmer

North Manchester

Jeff Hawkins, Hawkins Family Farm (farmer)

Michigan City

Lauren Bridges, AK Smith Technical Center
Pete Scherf, Scherf Farms (farmer)

Mt. Vernon

Bud Beesely, Jennings County Growers Co-operative (farmer)

Oaktown

Norm Conde, Melon Acres (farmer)
Melanie Ellis, high tunnel manager, Melon Acres (farmer)

Oldenburg

Jackie Betsch, Michaela Farm (farmer)
Sister Claire Whalen, Michaela Farm (farmer)
Sister Marie Nett, Michaela Farm (farmer)
Chris Merkel, farm manager, Michaela Farm (farmer)

Paoli

Laura Gazarian, Orange County Homegrown (farmer)

Plainville

Marv Knepp, Boyd Grains
Charlie Shelby, Daviess Food Processing Institute
Steve Stoll, Daviess Food Processing Institute

Portage

Kevin Garcia, Northwest Indiana food planning initiative

Roanoke

Pete Eshelman, Joseph de Cuis Restaurant and Farms (farmer)
Blaine Hitzfield, Seven Sons Farm (farmer)

Terre Haute

Robyn Morton, St. Mary's of the Woods & Terre Co-op (farmer)

Valparaiso

Linda Ebert, LE Garden (farmer)

Kris Parker, Purdue Extension — Porter County

Sandy Rodriguez, Purdue Extension — Porter County

Andy Vasquez, JnJ Organics (farmer)

Vincennes

Dan Egel, Southwest Purdue Ag Center

Shubin Saha, Southwest Purdue Ag Center

Washington

Thomas & Trent Boyd, Boyd Farms (farmers)

Scott Monroe, Purdue Extension — Daviess County

Several Amish farms (farmers)

Westport

Albert & Diane Armand (farmer)

Wheatland

Ross, Dennis, & John Carnahan (farmers)

Zionsville

Michael Banner, Traderspoint Creamery (farmer)

Jane Elder Kunz & Fritz Kunz, Traderspoint Creamery

Amy Rhodes, Traderspoint Creamery

Maria Smietana, Valentine Hill Farm

Kim Warren, Traderspoint Creamery

About the author

Ken Meter is one of the most experienced food system analysts in the U.S., integrating market analysis, business development, systems thinking, and social concerns. As president of Crossroads Resource Center in Minneapolis, Meter holds 41 years experience in inner-city and rural community capacity building. His “Finding Food in Farm Country” studies have promoted local food networks in 78 regions in 30 states and one Canadian province. As coordinator of public process for the City of Minneapolis Sustainability Initiative, he guided over 85 residents in creating a 50-year vision for the city including sustainability measures. He served as an advisor for the USDA Community Food Projects, including managing the proposal review panel, and serves as a contributing advisor of the *Journal of Agriculture, Food Systems, and Community Development*, where he writes a regular column, “Metrics from the Field.” He is national convenor and co-chair of the Community Economic Development Committee for the Community Food Security Coalition. Meter taught economics at the University of Minnesota, and at the Harvard Kennedy School. His work may be found at <http://www.crcworks.org>.