WHITE PAPER EDITION:

Fayette County Local Food Demand Assessment

A condensed summary of the findings and recommendations from the full Fayette County Local Food Demand Assessment Report (Department of Agricultural Economics Staff Paper No. 493)

Prepared By:

Jairus Rossi Lilian Brislen

Contributors:

Heather Hyden Tim Woods Alison Davis James Allen IV Scott Smith





Contents

INTRODUCTION 2

DEMAND BY MARKET CHANNEL 3

Restaurants 3

Institutions 4

Retailers 5

Hotels/Event Spaces 5

Direct to Consumer Sales 6

CHALLENGES 7

Access and supply chains 8

Production planning 8

Expanding the harvest 8

Communication between farmers and purchasers 8

Consumer education 9

NEXT STEPS 9

Understanding Our Regional Marketplace 9

Developing Wholesale Ready Producers 10

Supply Chain Analysis 10

Support for local food coordinators 11

CONCLUSION 11

INTRODUCTION

The report examines the current landscape of local food demand in Lexington, Kentucky. Based on interviews with purchasers, producers, distributors, and processors, we detail how farm products travel from farm to table, and consider how these relationships are evolving. To assess current demand in Lexington for Kentucky farm products, we interviewed major food purchasers in Lexington and producers who sell directly to consumers. We asked each purchaser to identify 1) current (2014) and expected (by 2020) expenditures on Kentucky Proud and local food items, 2) major barriers to sourcing food locally, and 3) perceived opportunities to strengthen the local food system.

Demand is measured in terms of total dollars spent in 2014 by Lexington-based purchasers on food products that originated on Kentucky farms. We break purchasing up into the following market channels: 1) restaurants, 2) institutions, 3) retailers, 4) hotels/event spaces, 5) direct farm to consumer sales, and 6) distributors. We also asked purchasers how much they expect their purchasing to increase or decrease over the next 5 years to gauge the growth of demand.

Based on these interviews, we estimate current purchasing of Kentucky food products by Lexington businesses to be approximately \$14.2 million, and project this number to grow to between \$20 and 24 million by the start of 2020. When considering the resale of these products by each market channel to consumers, we estimate that end-users purchased around \$34.1 million worth of local food products in 2014. In five years, we estimate consumer purchasing to be at least \$51 million for the greater Lexington local food economy.

Because we focus on actual expenditures by businesses, our projected sales represent a conservative baseline for demand. Our interviews revealed several barriers within current supply chains that, if addressed, could significantly increase purchases of Kentucky farm products. In particular, interview participants report that institutional purchases would increase significantly

if adequate supplies of desired products were available at a competitive price. The overall economic impact of the local food system is beyond the scope of this investigation, but it is undoubtedly much greater than the data presented here.

The baseline demand data is contextualized within challenges and opportunities to sourcing locally as discussed by interview participants. The majority of interviewees are confident that local food demand is likely to grow rapidly in the next 5-10 years, and thus we view the local food economy as an evolving and expanding component of Lexington's economic and social well-being. In order to meet increasing consumer demand, findings from this study encourage efforts that 1) strengthen and facilitate relationships between area purchasers, distributors, and producers and 2) support the development of supply side capacity and associated infrastructures.

DEMAND BY MARKET CHANNEL

In this study, demand is measured as the existing expenditures on food with a Kentucky farm origin by Fayette County purchasers. Interview participants were selected from businesses representing different, significant market channels for local farm product. We consider both direct sales from farm to buyer and sales mediated by distributors of meat, produce, and value-added products. Estimates exclude items such as coffee, soda, wine, and personal care products which can sometimes qualify as 'Kentucky Proud' as a Kentucky processed product, but which are either not foods or contain no Kentucky-sourced farm products. By restricting 'local' to state boundaries, we emphasize relations between producers and food purveyors that keep farm products and dollars flowing within the state. As such, the 2014 column in Table 1 represents actual purchases of Kentucky-based meat, produce, and value-added items as reported by buyers. 2020 estimates are based on each individual buyer's expected growth in purchasing.

	2014	2020	Annual Growth
Restaurants	5.5	7-9	5-10%
Institutions	1.5	2.5	5-10%
Retail	3	4-4.5	5%
Hotels	1	1.3	5%
CSAs/Farmers Markets	3.2	5.2	5-15%
Total	14.2	21.1	

Table 1. Purchasing by Market Channel (in Millions of Dollars)

	2014	2020
Restaurants	18.3	26.8
Institutions	5	8.3
Retail	4.2	6.4
Hotels	3.2	4.3
CSAs/Farmers Markets	3.2	5.2
Total	34.1	51

Table 2. Total Consumer Purchases from Market Channel (in Millions of Dollars)

In Table 2, we present the estimated consumer purchases from the interviewed buyers. We estimate that ingredient costs are 30% of the total menu price in restaurants and that 70% of the retail price for various items covers the initial purchase from the farm or distributor.

Restaurants

We interviewed restauranteurs and chefs from a total of 20 restaurants which were known to source from Kentucky farm products. These restaurants represented a variety of business models though most of these are locally-owned, independent restaurants. Some have multiple locations, and a few are small regional chains. We identified a total of 40-45 restaurants that emphasize their use of local products, which represents about 15-20% of all restaurants in Lexington. Buyers at national chains were not responsive to interview requests.

Overall, we estimate 2014 expenditures on Kentucky farm products by restaurants to be at least \$5.5 million dollars. An overwhelming majority of respondents

expect their demand to increase by at least 5-10% per year over the next 5 years to about \$7-9 million. As mentioned, this growth rate is conservative as participants report they would incorporate more local sources of produce, dairy, and especially protein if the supply and quality increased, or if the price was more competitive with nationally-sourced products.

Based on interview data, restaurants play a leading role in driving, supporting, and expanding Lexington's local food economy. Restauranteurs and chefs educate consumers about local cuisine, while also promoting and directly supporting a diverse array of farmers and food producers. Restauranteurs interviewed associate rapid increase in demand for local food with the emergence of 'the craft beer generation'; a broader shift in consumer ethos towards source-identified, artisanal and quality products, and support for creative small businesses and entrepreneurship.

Restaurants also have strong connections with local food producers. Restauranteurs shop at farmers markets, buy directly from farmers, and create supply contracts prior to the growing season. These relationships encourage diverse crop production around the state and provide farmers with a reliable outlet for their products. Furthermore, spurred by reliable restaurant demand for local farm product, nascent small-scale distribution efforts are emerging focused specifically on providing cost effective access to local food products.

Institutions

We surveyed the 7 largest institutions in this channel which includes universities, schools, and hospitals. In 2014, institutions purchased approximately \$1.5 million worth of Kentucky food products. Institutions have only recently begun to integrate local food into their dining services. Most respondents report their institutions spend less than 5% of their total food budget on Kentucky-based products; there is significant room for growth. Based on interview responses and the structure of existing local sourcing agreements in some institutions, we estimate growth to be between 5 to 10% per year for the next 5 years. This would create an overall demand of \$2.5 million by 2020.

Respondents in multiple channels note the potential for significant influence of institutions on the local food system. Institutions have the potential to influence demand based on their large-scale supply requirements as well as their public visibility as large regional employers. As such, any type of explicit commitment to local food sourcing can have a positive effect on demand for Kentucky-based farm products. Institutional commitments are tacit endorsements for Kentucky agriculture which have symbolic and material effects on what types of food are valued. This large potential demand is both a promise and a challenge for product sourcing.

Through public commitment to Kentucky farm products, institutional buyers can mitigate some of the uncertainty for farmers wary of producing for wholesale markets that have comparatively unknown demand. Farmers can plan, and potentially scale up, production based on the expected demand of these institutions. However, because contracts with individual farmers are rare in institutional and wholesale procurement systems, care must be taken to develop and maintain trusting and transparent relationships between all parties.

Due to both scale and organizational considerations, growth of institutional buying will invoke transactional issues very different from those with direct buying. Absent formal contracts and guarantees, institutions can develop trusting relationships with producers by having strong local food procurement policies that specify 1) what producers (e.g. what business structure/ownership) are considered local and 2) which food products are eligible for inclusion. Additionally, local food economies would benefit from renewed attention and enforcement of existing laws that require state-funded institutions to buy and track local products (see HB 669–2006 & SB 84–2009).

The most significant sourcing barrier for institutions is that in many cases they cannot find a sufficient supply of desired items at a price that fits their desired price point. Currently, institutions are 1) attempting to identify which products can be sourced from within Kentucky at a sufficient volume and 2) working with their dining service providers and distributors to

acquire those products. These initial efforts will hopefully facilitate easier processes for local sourcing for other institutional buyers in the future.

Retailers

Retailers occupy a middle ground between the restaurant and institutional channels. They face the same issues as institutions in relation to supply—they require a consistent product that is priced competitively to non-local sources.

In 2014, retailers purchased around \$3 million in Kentucky based farm products. This demand exceeds institutional purchasing, but is modest in comparison to restaurants. Much of this purchasing is attributable to the efforts of specialty retailers, but larger chain retailers are also expanding their sourcing from Kentucky producers. By developing new vendor agreements with Kentucky farms and developing new procurement processes and infrastructure, current efforts by retailers are crucial to the growth of Lexington's local food system. Additionally, local food marketing campaigns and in-store signage are a key to educating consumers on the value and dynamics of local food sourcing. The impact of retailers' recent promotion of local products goes beyond simple increases in purchasing-it develops consumer awareness about local food that benefits all market channels.

Respondents generally expect their purchasing of local products to increase by around 5% per year, though that increase could be significantly greater if supply and price barriers, particularly for local protein, are resolved. In 5 years, retailers expect to purchase at least \$4-4.5 million in farm products, though these projections are conservative. This number may be significantly higher with the pending expansion of a few specialty retailers and the imminent arrival of a new local/organic retailer. Like institutions, local food currently makes up a very small portion of retailers' overall inventory, and so the introduction of any additional local farm products can have a substantial proportional impact. Growth can be achieved in this sector if consumers, producers, and others push retailers to increase local farm product sourcing.

Hotels/Event Spaces

This market channel reflects the impact of tourism on Lexington. As the Bluegrass Region is home to the horse industry and the bourbon trail, visitors spend time and money in Lexington for unique cultural experiences. Local cuisine can potentially play a prominent role in cultural tourism, particularly through hotels and event spaces. While local cuisine is indeed promoted by tourism campaigns, Kentucky farm products play a small role in hotels' menu offerings.

The demand for local products in this channel is difficult to estimate as most purchasers were not responsive to interview and survey requests. Purchasers in this channel spent an estimated \$1 million on Kentucky farm products in 2014. Those surveyed expect a 10% per year increase in local purchasing, but note that they find it difficult to maintain relationships with local food producers.

One respondent mentioned that sourcing issues are related to turnover of kitchen staff. When a chef is in charge of procurement, frequent chef and kitchen staff turnover compromises hotels' ability to have continuity of vendors and retain particular preparation skills and knowledge necessary for working with specialty and seasonal products. In these cases, hotels most often work with larger distributors and dining service providers to maintain consistent menu offerings of reliable quality. There are, however, some unique purchasers who visit farmers markets, create relationships with producers, and even host local food festivals to promote local cuisine and farm products. Which is to say that inclusion of local farm products into hotel and event food offerings is possible, if uncommon.

Hotel interview participants observe that their guests increasingly request local food, and acknowledge the growing demand for Kentucky farm-sourced products. Again, the main issue for this channel is a perceived lack of consistent volume and variety of locally produced products which respondents attributed to a combination of lack of production and an inefficient distribution structure in Kentucky for local growers. At the same time, hotels (as well as institutions) have strict compliance policies which require a minimum

percentage of purchases go through dedicated suppliers (e.g. large broad-line distributors). As these large distributors are not designed for, nor are they focused on working with and promoting local food products, those market channels working within such systems will have to think creatively about how to work within their contractual obligations to 'pull' local farm products into their kitchens. For local sourcing to increase, similar compliance policies could be developed to incentivize suppliers to include Kentucky-based farm products in their offerings.

Direct to Consumer Sales

There are three primary channels for direct sales in Lexington; community supported agriculture programs (CSAs), farmers markets, and produce auctions. The estimated amount of farm products sold through this channel in 2014 is valued at a minimum of \$3.6 million. Most respondents in this category expect demand to grow. Some individual producers are expecting at least 10-20% increase in sales per year for the next 5 years. In 2020, direct-to-consumer sales are anticipated to meet or exceed \$5.8 million. Sales in this channel surpassed both retail (\$3 million) and institutional (\$1.5 million) purchasing in 2014.

As many farms in Kentucky are relatively small (under 50 acres), CSAs and farmers markets offer an attractive

outlet for their produce and proteins. Direct markets require smaller product volumes and offer higher premiums when compared to wholesale markets. CSAs are subscription-based services where a subscriber pays in advance for a share of a season's produce and/or other farm products, and then picks up their share from the farmer on a weekly basis. Established CSA farms mention that demand for subscriptions is growing and that each year they continue to add new shareholders and scale up production. As consumers become more aware of CSAs, and more farmers acquire the skillset needed for diversified crop production and distribution logistics, CSAs may become a more prominent source of local food access.

While a few farmers we spoke with produce for both direct and wholesale markets, our findings suggest that local food producers in our region tend to focus on one production strategy or the other. Producers focused on direct markets tend to be of relatively small scale, and emphasize diversity of product over volume of production. The alternative strategy requires larger production volumes, significant investment in on farm infrastructure (cold storage, equipment, packing sheds), and focus on a few specific items for wholesale. Farmer's choice of production strategy is shaped by their perceptions of viable market demand, faith in the ability to secure reasonable financial returns, and trusting relationships with buyers.

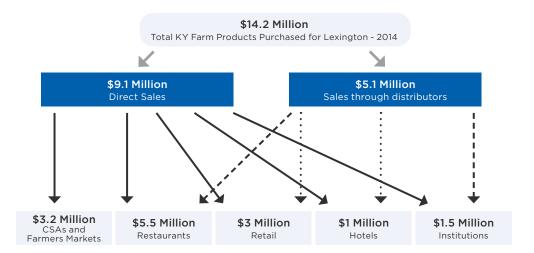




Figure 1: Purchasing by Market Channel 2014

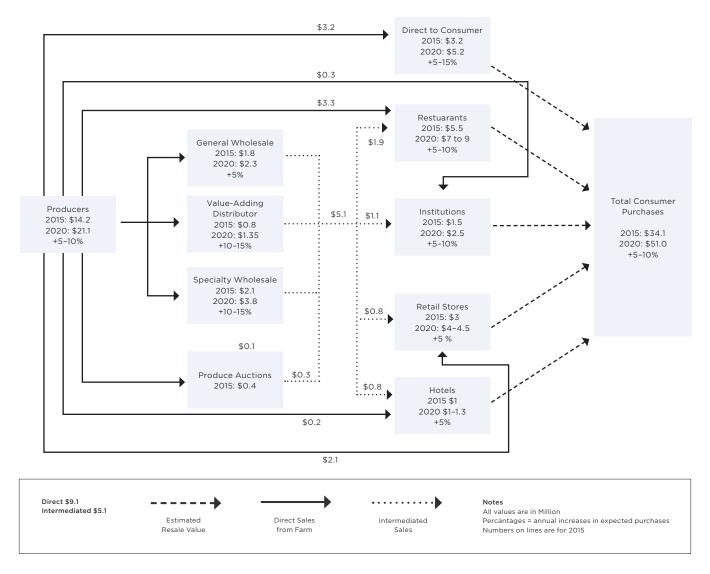


Figure 2: Current and Projected Sales of Kentucky Farm-raised Product for 2014 and 2020 by Channel

For Lexington's local food system, farmers report more rapid growth and investment in CSAs and farmers market sales, as many farms feel these market channels have less inherent risk in comparison to other channels. At the same time, a number of producers currently engaged in direct markets are interested in the opportunity to grow their farm enterprise by scaling up to supply wholesale markets - institutions, restaurants, and grocers. However, while the potential for growth in local wholesale exists, there are significant regulatory, logistic, and bureaucratic barriers that must be overcome by both producers and potential buyers. We expand on these barriers in the next section.

CHALLENGES

While producers and buyers of Kentucky farm products remain optimistic about the growing demand for local food in multiple channels, they identified issues that facilitate or inhibit further growth. Interviewees identified five key challenges within the current marketplace that, if addressed, could go a long way to encouraging further growth in the production and purchasing of local farm product. These include: the state of existing supply and supply chains, production planning and season extension, seasonal availability, communication among buyers and producers, and the need for an informed community of consumers.

Access and supply chains

There are currently no dedicated wholesale distribution channels for source-identified and other local products. This absence of convenient channels causes some buyers to forego local procurement, as alternative sourcing methods require extra time and effort. While many respondents mentioned a need for change in the existing processing and distribution infrastructures, most were unable to articulate specific gaps in the infrastructure. In particular, many buyers would love to buy local meats, but feel the products they desire are not currently available in sufficient volume or at a competitive price. Similarly, many retailers mentioned that there is enormous unmet demand for farm direct sources of milk, butter, and yogurt. Some buyers, especially restaurants and some retailers, suggest that distributors specializing in local farm sourced products would be more effective at marketing and moving those products, and consequently securing higher premiums for farmers.

Production planning

Interview participants across buyer categories pointed to a 'feast or famine' phenomenon within the local produce supply as a barrier to increasing regular local food procurement. Buyers expressed frustration with the fact that a limited number of produce items (e.g. tomatoes, peppers, sweet corn) are over-represented during peak season, but completely unavailable during the rest of the year. Thoughtful production planning to ensure off peak availability and greater diversity of available produce could go a long way to mitigating this barrier. Other potential strategies include investment in on-farm season extension production methods and technologies, as well as off-farm infrastructure that would minimally process and package vegetables to make them available beyond harvest time.

Expanding the harvest

As seasonality and farm size are major limitations in meeting demand, the local food system will require creative interventions to increase supply. Current capacity for basic processing in the region is limited, and there is a demonstrated demand. Basic processed food products could be used by institutional kitchens, co-packers, and other food enterprises, and expand both the effective supply and demand for regionally produced products. Development of processing capacity can also expand markets for producers by providing an outlet for 'seconds' (i.e. produce that is edible but not visually appealing to wholesale buyers), thus increasing produce revenue and potentially lowering overall price benchmarks for local production.

Communication between farmers and purchasers

In order to grow a vibrant market for local produce and protein in the Bluegrass, there is a need for greater understanding and transparency between producers and buyers on expectations in quality, price, quantity, and product presentation. Buyers expect farmers to be savvy marketers willing to conform to their company's particular standards, while producers seek to work with buyers who understand the unique value and vulnerabilities of local, seasonal food production. While all players in the value chain have the best intentions, there is a lot of learning to do on all sides so that mutually beneficial relationships can be built and maintained.

Producers simultaneously navigate uncertainty and risk on many fronts of their enterprise; new or greatly expanded production systems, weather events, pests and predators, market fluctuations, and labor shortages. On the other side of the supply chain, purchasers are concerned with finding stable sources of products that meet their internal specifications as well as their end users' expectations; all within the context of a highly competitive marketplace and a warehouse full of perishable produce.

Retailers in particular note that misunderstandings between producer and purchaser may be reduced through producer education on 1) trends in what products are desired by wholesale markets, 2) expectations of food safety related to production and post-harvest techniques, 3) insurance requirements, 4) developing business plans, 5) packaging products attractively, and 6) building product representation and branding. As there are many educational materials

available on these topics through Cooperative Extension agents and publications and state agencies, producers and buyers would benefit from increased awareness of and access to these resources.

Some producers are already savvy enough to meet these requirements and articulate a different set of concerns. Many find that distributor requirements and expectations are not clearly laid out in agreements with growers, require time consuming redundant paperwork, and that there is little consistency among purchasers. Most importantly, producers have little to no ability to negotiate any price premium for their fresh, locally grown products, or products that carry additional value such as organic certification. Producers were particularly concerned with the additional time and expense of buyer required safety certifications.

Consumer education

An engaged and educated community of food eaters is a key component of any vibrant regional food economy. The more consumers are interested in, and willing to pay more for fresh, locally raised quality foods, the greater the market opportunities. Respondents express concern that general consumers don't know what products are available seasonally in our region, and may not know how to work with fresh and seasonal products. They also note that consumers sometimes lack nuanced views of why meats and vegetables produced with organic or other alternative production methods carry a price premium. These factors and attitudes limit consumers' willingness to buy locally produced items.

At the same time, many interviewees see consumer attitudes changing through the local food system's link with the craft brewing and bourbon industries. By educating consumers on craft processes, local microbrewers and distillers have given value to products that have a cultural connection to the Bluegrass Region and that emphasize local labor and economic development. As such, consumer willingness to pay a premium for local craft products, in particular food items, is seen as likely to increase.

To increase demand for local products, we recommend the creation of buyer/consumer education initiatives that explain unique characteristic and many benefits that come with seasonally grown and raised Kentucky foods. Educational materials should highlight the many benefits to our community and economy of Kentucky food products.

NEXT STEPS

To support the continued growth of our regional food and farm economy, we recommend further research to identify: strategies for scaling-up production for local markets; appropriate season extension and minimal processing technologies for KY producers; and market demand for specific local products.

Understanding Our Regional Marketplace

In order to best guide the development of a vibrant regional food economy, we need to better understand the existing status of both supply and demand within the wholesale marketplace. To this end, we recommend research to determine current and short term production capacity for in-demand produce and protein, especially those products commonly sourced by institutions and other large wholesale buyers. This research will help answer three strategic questions: What do we grow well in Kentucky? What products are in demand? Where is there overlap between those two things, and how can we connect those dots? A more detailed understanding of the specific needs, policies, and logistical requirements of our current wholesale marketplace with allow identification of opportunities for successful partnerships and key areas for strategic development of our regional supply chain.

As this is an extremely complex issue, we recommend research on both producer and purchaser sides of the supply chain to determine how to adapt existing systems to facilitate more local sourcing. This research would require a consideration of wholesale pricing benchmarks for conventional and differentiated

product, identification of additional costs associated with localized production, and overall consumer demand for differentiated and value added local proteins at different price points.

To support the growth of production capacity, we need a greater understanding of pricing benchmarks used by both producers and potential purchasers of local food. Along with identifying where producers may have a competitive advantage, this research will also help determine what, if any, price premiums are necessary and or possible for source-identified local products within our regional wholesale market place. We further recommend research into the potential for local producers to work with ethnic food buyers and producers. As many crops and meats have diverse and specific product needs, local producers may find new market channels for their products.

Developing Wholesale Ready Producers

Many purchasers noted that when producers approach wholesale markets for the first time, they are often unaware of market standards and requirements related to quality, quantity, and product diversity. In order to encourage the growth of diversified production to meet the latent demand of many market channels, buyers feel that producers in our region need more training in how to produce for and market in the wholesale arena.

At the same time, the Cooperative Extension Service has many resources and training programs available to producers to understand the demands of retailers, distributors, institutions, and restaurants. We recommend that these resources be made more available to both producers and purchasers who interact directly with producers. This can be done by publicizing and streamlining UK and KSU Extension's websites, working with purchasers on how to direct producers to these resources, and creating closer correspondence between local food advocates and Extension personnel. Finally, continued and ongoing outreach is needed to track and explain local and national consumer trends, commodity pricing, and production costs.

Supply Chain Analysis

Identifying and mapping existing distribution, processing, and production facilities could help distributors, farmers, and buyers identify local food system assets, potential new partnerships, and opportunities for enterprises that fill identified gaps. We recommend research that identifies these gaps and formulates diverse strategies to facilitate stronger relationships between producers, buyers, and distributors. We also recommend expanded research into season extension technologies to meet the restrictions of Kentucky's climate. Supply can also be extended through minimal processing infrastructures—flash freezing, canning, etc.—as well as creating shelf-stable value-added products.

Price disparities between local and non-local products are perceived by buyers as a significant barrier to increasing local food procurement. Existing local production systems can at times be price competitive with industrial produce or protein enterprises. However, locally raised products offered through conventional distributors are generally perceived as prohibitively expensive. Further research is needed to determine where and why additional costs are incurred in the supply chain between local producers and potential buyers. For example, are high prices due to a lack of economies of scale on the part of producers, or from inefficiencies in traditional distribution chains that are maladapted to dealing with regionally focused procurement? Do producers need assistance in calculating a true cost of production for a wholesale crop enterprise? Thoughtful investigation can sort out fact from fiction in the pricing of local foods, and identify opportunities as well as key areas for intervention.

We also need a more exact understanding of actual price differentials between conventional market products and local supply. Through this, partners along the value chain can identify strategies to streamline supply chains, share costs, negotiate prices, and create opportunities for product and price differentiation. Investigating and improving the production and transaction costs for local food products should be of the highest priority for the future of our regional food economy.

Support for local food coordinators

Local food coordinators and other advocates are crucial to streamlining communication and expectations between producer and buyer, and can serve as key partners for connecting producers with University resources. As producers and buyers primarily deal with very different work environments, it is crucial for these individuals to have dedicated facilitators to troubleshoot concerns. Local food coordinators also translate language, distributor requirements, and production concerns for parties seeking to make exchanges. As each actor in the local food system has different ways of talking about and understanding distribution, production, and sales, coordinators streamline communication and ultimately improve producer and purchaser expectations. Additionally, they provide confidence to institutional buyers who may be hesitant to test a perceived risky investment.

Local food coordinators are uniquely positioned to mediate tricky relationships all along the supply chain. Both buyers and producers in our study noted the high value service provided by existing coordinators, and suggest that continued and increased support should be given to those programs. Local food coordinators serve as neutral third party mediators in navigating complicated market relationships, and translate common goals across the diverse needs of different actors in the local food system.

CONCLUSION

The good news for locally raised and produced food products in the Bluegrass is that all signs point to continued increase in demand for our homegrown products. To realize our goal of a vibrant and sustainable food and farm economy purchasers, producers, and intermediaries must continue to work to build transparent and mutually beneficial relationships, supply capacity, and efficient distribution/processing infrastructures. Most importantly, we need to develop systems to differentiate Kentucky farm sourced products from non-Kentucky sourced competitors. Differentiating source-identified and other specialized local food products allows producers and purveyors alike to demonstrate and capture the true value of their local products.

To further bolster the growth of our local food economy, actors within the local food system should develop strategies that emphasize the many benefits our community receives when we choose to source locally raised and produced foods. Vibrant local food and farm economies generate more than just economic benefits for Kentucky (though those are welcome), they also maintain our rural heritage, support our unique culinary traditions, protect environmental health and agricultural biodiversity (i.e. heirloom/heritage varieties), and attract creative entrepreneurship.