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Response of Land Grant Universities to the Increase in Consumer Demand for Local Foods in the South

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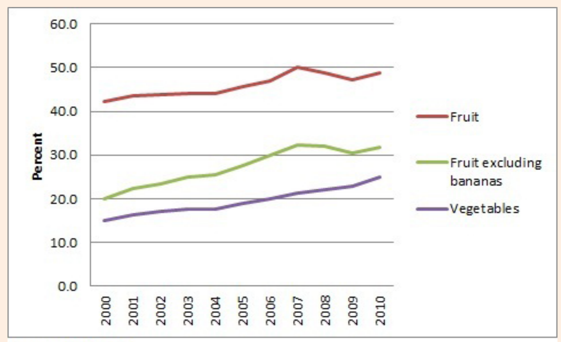
Local food systems (LFS) are attracting attention from producers and food retailers as consumer concerns and interests about the origin of food continue to rise. There is a rapidly growing body of academic and popular press literature related to the demand for local food with important implications for participants of local food systems. The increased popularity of local food is linked with a subculture rooted in a preference for domestic products, increasing consumer concerns about food safety and sustainability, climate change and associated transportation costs and perceptions of higher quality (Onozaka and Thilmany, 2011). Particular attention has been given lately to the concept of regional food hubs or entities that seek, aggregate, distribute and market food products with a local origin. It is important to note that currently, there is no legal or universally accepted definition for local foods, and the notion of "local" has different connotations for different people, ranging from proximity to the production site, to within a county, State or even national boundary. Even without a clear definition, consumers place higher value on locally produced food compared to other sources (Onozaka and Thilmany, 2011; and Darby et al., 2008).

However, it must be noted that despite the local food movement, domestically grown food share is decreasing, and U.S. consumers are becoming more dependent on imported food sources as shown in Figure 1 (Palma, Ribera, and Bessler, 2013). The share of U.S. fresh fruit consumption derived from imports increased from 42.4% in 2000 to 48.6% in 2011. Excluding bananas, the share of U.S. fruit consumption derived from imports increased from 20.1% in 2000 to 32.1% in 2011 (U.S. Department of Agriculture (USDA), 2012a) and vegetable consumption derived from imports increased from 15.1% in 2000 to 25.7% in 2011 (USDA, 2012b).

Figure 1: Share of U.S. Fresh Fruit and Vegetable Consumption Derived from Imports 2000-2010.



Source: USDA-ERS.

Farmers' markets are a significant outlet for locally grown food products. Of products sold in farmers' markets located in the Southeast and in the Southwest, nearly 91% and 81%, respectively, are labeled as locally grown (Ragland and Tropp, 2009). The predominant food category sold in farmers markets is fresh fruits and vegetables. The value of agricultural products sold directly for human consumption, e.g., at farmers markets, farm stands, and roadside stands, increased 49.1% from $812 million in 2002 to $1.2 billion in 2007 (US Census of Agriculture 2007). However, U.S. agriculture has experienced a similar growth rate during that period. Direct marketing sales as a percentage of total value of US agriculture remained almost the same from 2002-2007 at 0.4%.

Most farms selling directly to consumers are small farms with average annual sales of $8,853 and which tend to rely on direct-to-consumer sales. In 2007, about 78.1% of farms in the United States reported sales of less than $50,000; however, these farms accounted for just 3.9% of total agricultural sales (U.S. Census of Agriculture, 2007). While the South has a large number of small farms, the share of those farms engaged in direct to consumer sales is very low with 3.8 and 4.9 percent in the Southwest and Southeast respectively (Ahearn and Sterns, 2013). It is unclear at this point what the role of small or medium-size farmers would be in satisfying the demand for local products or whether large farmers will continue to penetrate the local food market as consumer demand increases. There are many factors that may impact the ability of small farmers to satisfy, at least in part, the demand for local food. Some of the factors identified in the literature include: (1) an array of free trade agreements covering most North and South American countries that facilitated fresh produce access to U.S. markets; (2) dietary guidelines; (3) consumer health concerns; (4) Food Safety Modernization Act (FSMA); (5) trade practices of wholesalers, brokers and supermarkets; (6) lengthening marketing season; (7) direct marketing, organics, and local foods; (8) technological changes; (9) immigration policies; (10) food prices and income distribution; and (11) food security and food programs.

The ability of small farmers and local food systems to improve their contribution to the food supply chain is contingent upon the capacity of producers to compete successfully in a global food system with increased competition and increased regulations. This presents challenges and opportunities for local food systems. Southern land grant universities (LGU) are uniquely positioned to collaborate with a wide range of stakeholders in integrating the efforts to help develop local food systems in the South. In this article, we reflect on trends for local food demand, review existing resources, identify opportunities for collaboration, data and resource gaps and needs, and explore the role of LGUs, particularly in the South.

Where Do We Stand?

LGUs across the South recognize the increasing importance of local food systems regionally and are exploring research and educational support to meet the growing consumer and producer support. These LGUs have worked both individually and collaboratively to develop research, information, and programs meant to establish viable local food systems in their states. Although each state is unique, nearly all existing programs and research efforts have the same goal: to evaluate and identify local food system needs and opportunities. Currently, parties interested in developing local food systems have at their disposal tools such as wholesale market preparedness trainings for farmers as well as consumer demand studies of local foods and assessments of state marketing programs.

Southern land grant universities' Extension and outreach programs remain an important resource for local producers. Research pertaining to consumer demand of local foods in the South focuses on statewide economic impact studies and the efficacy of statewide branding and promotional campaigns. Current projects within Southern LGUs include: expanding local food direct market opportunities, farm-to-school projects, outreach targeted to small farmers and alternative enterprises, and support and education specific to farmer's markets. Individual states are active in programs such as: state and national food MarketMaker portals to connect farmers with buyers, price reporting for farmers' markets and local food hubs, statewide local food systems' advisory boards, and a local food systems certificate for students.

In addition to Southern land grant universities, local food systems in the South and Southern agriculture are the primary foci of several stakeholders, including governmental agencies, private sector groups and non-governmental organizations (NGO), and consumers. Many LGUs in the South are providing support to state departments of agriculture to promote State programs for buying local. NGOs involved in local food systems research and resource development include Southern Sustainable Agriculture Working Group (SSAWG), and Southern Sustainable Agriculture Research and Education Program (SARE). Both organizations have been instrumental in developing current resources, public and private, for those interested in any segment of the existing local food system, ranging from production to marketing and distribution. SARE and SSAWG actively collaborate with many Southern region land grant universities on local food concerns. Local chapters of select organizations, such as Slow Food USA and Farm Bureau, often provide valuable support to local distribution infrastructure and locally focused production and marketing strategies. Governmental agencies currently involved in the research and development of local food systems are USDA Economic Research Service (ERS), USDA Agricultural Marketing Service (AMS) and local state departments of agriculture, among others.

As interest in local food systems across the South continues to build, additional research and extension efforts coordinated by Southern LGUs and other interested organizations is expected to continue. Further examination of local foods systems in the South will supplement existing information to provide a better understanding of the challenges and opportunities that are available for participation of Southern LGUs.

Who Are the Stakeholders?

Many producer groups, consumer groups, government agencies, and food-related sectors exhibit growing interest in better understanding the dynamics of local food demand. This provides a rich area for research collaboration among Southern LGUs and regional partners. Value chain partners, such as input suppliers, producers, wholesalers, grocers, restaurants, farm-to-school partners, community supported agriculture (CSA), and farm market groups, are interested in consumer-oriented responsive producers and efficient delivery of local food products. Public agencies and consumer advocacy groups are concerned about economic development outcomes that arise from clear recognition of consumer demand within specific groups of consumers, for example, low income access, health and wellness, and local ethnic groups. Public agencies that provide infrastructure, education, and promotion have a strong interest in understanding consumer demand for local food products.

The LGUs have regularly partnered with producer and food business groups to help identify and determine local food demand. Private market research firms have contributed significantly to consumer awareness of local food and have a ready audience within the retail food sector. Smaller-scale producer groups that are typical of many local food systems, which emphasize local products to local markets exposed to localized consumer interest segments, may not have the capacity or funds to address specific research questions.

There is a distinct role for the land grant-based scientist to serve these groups and perhaps an opportunity to collaborate with private research firms and local food supply chain members and stakeholders to fill in knowledge gaps. There are certain economies of scale to market research, but these are tied to diverse consumer groups across locations. Consumer demand for local food products in Texas is expected to be different from that of Michigan, for example. Local food is, by definition, distinctive, both in products and experience.

There are further opportunities for research collaboration regionally across LGUs. Part of this can be to harmonize data collection, producer and consumer survey methods, and outreach evaluation metrics. There are also collaborative opportunities across disciplines within the university community. Many disciplines have some stake in the research questions related to consumer interests in local food including, for example, medicine and public health; rural sociology; education; and production, marketing and economic scientists.

Extension education is at the core of LGUs' missions. There is an opportunity to collaborate to provide local food producer education with marketing and business planning tools that integrates local demand research from farm to table. Effective Extension programs are research-based; opportunity exists to extend objective research findings to producers, producer groups, and the full spectrum of stakeholders and agencies affiliated with local food systems.

Filling the Gap

Consumer demand for local foods purchased within shortened marketing and distribution channels is on the rise (Onozaka and Thilmany, 2011; and Darby et al., 2008). Objective information specific to consumer demand for locally sourced food must be shared with growers who are exploring long-term investment in year-round production and marketing of meats, dairy, grains, seafood, and produce. This information will help producers make better planning decisions in their marketing process to bring their products to market and possibly identifying new markets. Specific consumer demographic information related to wealth, geographic distribution, and health data are needed to target specific food products in appropriate market segments. Among the segments of the population which are in the greatest need to improve nutrition are those living with poverty and those lacking ready access to nutritious, local food, sometimes referred to as "food deserts." Many consumers in food deserts receive assistance from food programs such as the Supplemental Nutrition Assistance Program (SNAP). However, food assistance usage in the South appears relatively low compared to other regions in terms of poverty rates, possibly due to availability or limited public transportation options. One way to improve availability of food is with mobile food distribution partnerships. As restaurants continue to prioritize local foods on their menus, food distribution companies are interested in sourcing product from nearby food hubs or cooperative food sheds, motivating production capacity assessments along their routes. State, regional, and local level food policies and legislation vary markedly. Hence, market analyses would be beneficial to policymakers and regulators for integrating data on existing regulations, community resources, employment, population, farm land acreage and quality, public food programs and food consumption patterns, private food retailers, network connectivity, and so on.

Market situation and outlook analysis is limited in both historic longevity and scope. Current budget constraints have reduced the availability of objective farm gate and retail prices from sources such as USDA-AMS. Another pressing data need is price information from growers' sales via community supported agricultural share arrangements, farmers' markets and roadside or on-farm sales, food hubs, and direct to retail such as local grocers, restaurants, convenience stores, and public institutions.

Rebuilding regional food systems requires modern approaches and solutions to moving food from farm gate to consumer table. Consumers make food purchasing decisions based on many credence and value attributes that are not always recognized by farmers. Consumers attach a myriad of social, behavioral, physical, emotional, environmental, legal, moral, and financial values to nearly every food and drink purchase and consumption decision.

Producer decisions to market directly to consumers are certainly influenced by prices consumers are willing to pay for the added value of the locally grown, differentiated products; however, knowledge about their sensitivity to current prices and potential variability of future prices is needed. Consumer demand at a specific marketplace and market day are motivated by buyer preferences and product availability, information that varies widely across geographic and demographic characteristics. By definition, differentiated marketing channels originate from grower-consumer relationships that cannot be easily duplicated or replaced over the medium- to long-term. However, with a lack of an unambiguous definition for the "locally-sourced" food attribute, there are information asymmetries related to accurate packaging and labeling.

Research questions related to consumer behavior and local food purchase choices merit further evaluation. Other opportunities exist to better understand consumer choices around local food options and health and wellness behaviors. The success of CSA vouchers in Wisconsin distributed through regional health and wellness programs suggests promising linkages, but further longitudinal data is needed, including programs targeting distribution to lower-income communities (Woods, 2013).

To continue developing and maintaining objective, science-based stakeholder programming, there is a need for improved interaction and collaboration among LGUs and local government, grassroots, non-profit associations, consumer advocacy groups, and others keen to impact local food systems. Traditional information delivery methods are challenged to connect rapidly and produce results on-demand, ignoring geographic boundaries that embrace the food system's economic actors. Reducing impediments to functional and economical networking among land-grant systems can lead to successful leveraging of available time, money, and personnel resources and result in targeted delivery results.

Initial Steps Forward

Growing efforts are placed on understanding consumer trends related to local foods. Such trends, however, are inherently localized and difficult to generalize over broad geographies, market channels, or products. LGUs are in a unique position to assist with consumer demand evaluation for local food, not only because they are connected to local food production as part of their mission, but because they are connected to other local agencies and other land grant institutions. Although meaningful new observations are becoming available based on national-level research, the information gaps are local. Who are the consumers? What are they valuing in local products? What is the experiential dimension? How do consumers search for local products? What are the substitutes and complements for local products? How does demand differ by market channel?

There are practical steps forward for land grant programs to help fill information gaps through local consumer research and also help integrate these findings into Extension programs designed to help producers in local markets with business planning and market development. State departments of agriculture with considerable investments in "Buy Local" programs share interest in understanding consumer dynamics as they develop branding strategies. Better local demand measurement will help agencies determine better approaches for public investments. As more consumer scientists engage in demand dynamics and consumer behavior issues nationally, there will be more opportunity to adapt analytical tools and data to local contexts.

For More Information

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