Increasing Farmer Success in Local Food Markets in the Deep South: Mississippi & Alabama

Challenges & Opportunities in the Fruit & Vegetable Market

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This report is based on Wallace Center research, field work, and findings from a value chain development analysis carried out between January and March 2012 by Wallace Center lead consultant Gregory Sullivan; Alabama consultant Andrew Williams; and Mississippi consultant Katrina McLin. Funding for the Increasing Farmer Success in Local Food Markets in the Deep South: Mississippi & Alabama project comes from the Walmart Foundation.

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Executive Summary

Demand is high across the United States for locally and regionally grown products and opportunities are increasing for farmers to meet this demand as local food systems develop. In the Deep South, however, limited resource and historically disadvantaged farmers, especially those who grow fresh produce, face a myriad of challenges and barriers in accessing burgeoning local fresh fruit and vegetable markets.

The main challenges that limited resource and historically disadvantaged farmers face on-farm include: availability of necessary infrastructure; harvest and post-harvest handling to avoid losses; maintenance of the cold chain to extend shelf life; adequate irrigation, often under drought or near-drought conditions; access to and informed use of market information; access to credit and capital; sufficient scale to sell into wholesale markets; availability of labor; production of a diversity of crops; and sufficient volume and continuity of supply, among others.

In addition, farmers struggle with numerous market and infrastructure challenges, including: complex local and state procurement requirements within farm to school and farm to institution programs; food safety and traceability standards; conditions set by large wholesale buyers; aggregation and value-added processing; pricing issues; a lack of capacity for organic production, and lack of resources to comply with organic production standards. Coupled with these challenges, historically disadvantaged farmers, particularly African-American farmers, tend to be older; operate fewer fruit and vegetable farms in the Deep South; do not farm full-time; and may lack a plan for farm succession as their children pursue other professions. There are also cultural barriers due to a negative perception of agriculture as a viable and respectable business.

As a whole, these issues significantly affect farmers' ability to meet scaled-up demand from institutional and wholesale buyers for local fresh produce. Many distributors are interested in buying local produce, but find that they meet their needs for volume, consistency, and quality more easily and at lower cost sourcing from large farms in California or South Florida rather than buying locally from smaller farms.

This study has identified numerous and varied opportunities to address the on-farm, market, and infrastructure barriers small farms face in accessing these markets in the Deep South, including: providing capacity building and technical assistance directly linked to market activity; facilitating collaboration among farmers to share resources and achieve scale; catalyzing new, and working with existing, produce aggregators; moving beyond direct markets into local institutions and businesses, and varying the types of product that meet the needs of high and low-end customers; aligning crop production to market windows; expanding use of organic production practices; and fully utilizing hoop house technology, among others.

There is significant room for growth in local and regional food systems in the Deep South states of Alabama and Mississippi, which are currently underdeveloped. This report reveals pragmatic interventions and insights that will shape the success of developing local and regional food systems in the Deep South. Among them are the importance of collaboration along the supply chain; the role of market intermediary actors (such as supporting organizations, aggregators, distributors, and food hubs) who can expand the reach of local products into new markets;

information sharing along the supply chain; transparency and trust in building relationships; the need to diversify partners and to work directly at the farmer level; the need for accountability processes and systems built into projects that ensure capacity and follow through; and encouraging farmers to take incremental steps to access larger markets. The Wallace Center intends this report to be a resource for farmers, farmer groups, and entrepreneurs to learn of new markets, stimulate collaboration, and encourage strategies to begin to address limitations in the food system.

I. Introduction

In 2011 the Wallace Center, with funding from the Walmart Foundation, initiated a program to more effectively link limited resource and historically disadvantaged farmers to local produce markets in the Deep South. As a first step in this work, the Wallace Center undertook a study of the fresh fruit and vegetable markets in Alabama and Mississippi, specifically focusing on challenges faced by limited resource and historically disadvantaged farmers.

This report explores the issues these farmers face and offers an array of potential solutions to address on-farm, market, and infrastructure problems. It provides an overview of historically disadvantaged and limited resource farmers in the South; presents on-farm challenges that these farmers experience in meeting local and regional market demand for fresh fruits and vegetables; explores market and infrastructure challenges that stand as barriers to farmers' market access; and offers key insights and findings related to developing effective market linkages.

The main body of the report concludes with key points for moving forward to increase limited resource and historically disadvantaged farmers' success in the local and regional food system. Appendices include farmer resources; regional information on vegetable production; packing and processing facilities, local aggregators, and distributors; market information; farmer groups; supporting organizations; and a local food systems map of Mississippi and Alabama.

II. Background

A. The Changing Nature of Farming

The food and agriculture landscape in the United States has undergone a dramatic shift in the last 100 years. Where small-scale, locally based agriculture production once dominated, market power has shifted to large national and international players along the supply chain driving down prices paid to farmers and keeping margins for fresh fruits and vegetables small along the rest of the chain. Focus on volume and cost competitiveness has led to the introduction of new technologies and environmentally unsustainable practices to reduce transaction costs and to encourage economies of scale in agriculture.

At the same time, demand for fresh quality produce is rising, driven by consumer attitudes about the importance of fruits and vegetables in their diets. Buyers need year-round supplies of fresh produce to keep pace with market demand.

Consumers and retailers are also increasingly concerned about food safety. Retailers and their distributors must meet stringent requirements for fresh produce including certification, liability insurance, and traceability from field to consumer. New requirements increase farmers' financial and transaction costs, as management time and skills are needed to implement sometimes burdensome and expensive regulations. These costs disproportionately affect small-scale, limited resource farmers, and create new challenges for them to compete in the commercial marketplace. In the Deep South (Alabama, Georgia, Louisiana, Mississippi, and South Carolina), small-scale, limited resource and historically disadvantaged farmers[1] struggle to take advantage of opportunities to meet consumers' demand for local and regional products.

B. Limited Resource and Historically Disadvantaged Farmers in the South

Beginning, limited resource, and historically disadvantaged farmers make up a surprisingly high percentage—40%—of farmers in the United States, with limited resource farmers accounting for 14% of the total. According to the 2007 Agriculture Census, 16% of farmers in Mississippi are limited resource, while the rate is 15% in Alabama. According to the USDA, a limited resource farmer has direct or indirect gross farm sales of not more than $163,200 (for FY2012) in each of the previous two years, and a total household income at or below the national poverty level for a family of four—or below 50 percent of the county median household income in each of the previous two years. These farmers rely heavily on off-farm income, usually from unearned sources such as Social Security, pensions, dividends, interest, and rent (Nickerson and Hand 2009).

Farmers who are historically disadvantaged are defined as having been subjected to racial, ethnic, or gender prejudice, without regard for their individual qualities. This includes African-Americans, American Indians or Alaskan natives, Hispanics, and Asians or Pacific Islanders.

African-American farmers make up the largest group of historically disadvantaged farmers in the South. Mississippi has the largest percentage of African-American farmers (12.6%), followed by South Carolina (8.1%), Louisiana (6.4%), Alabama (5.6%), and Georgia (4.3%). To put these numbers into national perspective: roughly 1.3%, or 41,000, of the 3.3 million farmers in the United States are African-American (USDA 2007 Census of Agriculture). African-American farms tend to be smaller than the average; the average US farm is 418 acres, whereas African-American operated farms average 104 acres. African-American farms also have fewer sales: an average of $21,340 annually, compared with $134,807 nationwide.

Alabama has 2,709 African-American farmers, while Mississippi has 5,306 (USDA 2007 Census of Agriculture). These numbers are small, but their potential impact is significant in terms of filling demand for local produce, providing living wages for the farmers, and creating jobs in the rural south where unemployment is high. African-American farmers have some of the richest soil

1 Historically disadvantaged producers have been subjected to racial or ethnic prejudices because of their identity as a member of a group without regard to their individual qualities.

in the United States in the Black Belt region[2] of the South. However, many factors have contributed to the difficulties these farmers face to adequately access and serve local and regional markets.

Over the years, African-American farmers have faced racial prejudice, poor public policies, and an uncertain economic environment (Woods and Gilbert 2000). As a result, large numbers have exited agriculture in search of better off-farm opportunities (Reynolds 2002). However, interviews with a number of African-Americans who have retained ownership of their land reported a willingness to re-enter agriculture if opportunities improved.

African-American farmers are on average older individuals. Many currently hold full- or part-time jobs outside of farming. Many others had experience in agriculture growing up, left the farm, and have now returned to farming after retiring from other vocations. Unlike children of farmers who operate larger commercial operations, children of African-American farmers often do not enter the profession when older farmers retire from the family farm.

Today, few large African-American fruit or vegetable farms exist in the Deep South, and those that remain may lack a plan for farm succession. Drawing new farmers into the field will be successful only if market opportunities grow and farmers increase their ability to tap into new markets. The burgeoning consumer demand for local and regional fresh fruits and vegetables offers a promising boon for the Deep South if the infrastructure and capacity are put in place to support it. Yet farmers face a myriad of challenges in positioning themselves to fill the demand.

III. On-Farm Challenges

Limited resource and historically disadvantaged farmers face a number of challenges in producing for and accessing local and regional markets for fresh produce. Few such farmers are effectively reaching beyond local and regional direct-to-consumer markets to access wholesale and institutional markets. This section highlights the most pervasive challenges.

A. Irrigation

Due to weather variability, irrigation is key to producing fruit and vegetables of consistent quality in the South. Farmers report that the region has suffered from drought conditions since 2004, leading to an increase in the number of acres under irrigation in both Mississippi and Alabama between 2002 and 2007. Without adequate irrigation, weather variation can quickly undermine a good crop and produce variations in quality at a time when buyers require consistency.

2 The Black Belt region term originally described the prairies and dark soil of central Alabama and northeast Mississippi, and it has long been used to describe a broad agricultural region in the American South characterized by a history of plantation agriculture in the 19th century and a high percentage of African Americans in the population.

B. Post-harvest Handling and Cold Chain

Farmers who grow for the fresh market face problems of short product shelf life, especially during the summer. Most historically disadvantaged and limited resource farmers do not have adequate cooling equipment to reduce the temperature of the harvested crop in a timely manner. This includes harvesting equipment with in-field cooling for selected crops, nearby cold storage, adequate packing sheds, and refrigerated transportation. For instance, farmers need hydro-coolers to reduce field heat from 80 to 40 degrees within one hour of harvest to prevent losses. Whole Foods advised that the biggest constraint they face in sourcing from small-scale, limited resource farmers in the Deep South is maintaining the cold chain and transportation to market. Some farmers address this need in part by harvesting early in the morning or late in the afternoon to avoid the harsh summer temperatures; doing so, however, still does not cool the product sufficiently to maintain necessary shelf-life. Low-tech, on-farm, affordable cooling equipment, such as Cool-Bot technology, is often necessary for farmers to preserve the cold chain to maintain product quality.

C. Access to Credit and Capital

Access to capital and credit is a major challenge for most small- to medium-scale farming operations, especially for limited resource and historically disadvantaged farmers who are not always deemed credit-worthy by conventional lending institutions. Some limited resource and historically disadvantaged farmers cannot qualify for USDA Farm Service Agency loan programs because of poor repayment of previous government loans. Banks have loan instruments for farmers, but many limited resource and historically disadvantaged farmers do not qualify for their standard loans. In the 1990s a system of Community Development Financial Institutions (CDFIs) was created to provide affordable loan capital in communities where it was limited and to support businesses that offer employment and other desirable social outcomes. The CDFIs have good potential for addressing credit needs in small-scale agriculture, but have been slow to lend in this sector.

For new and beginning farmers, the many up-front costs of farming require a significant financial investment. The initial investment in land and equipment can be insurmountable for limited resource and historically disadvantaged farmers. According to Alcorn State University researcher, Dr. Frank Chukwuma, a new farmer entering the horticulture business can require more than $3,200 per acre. The Farm Credit system and Farm Service Agency have programs for beginning farmers that may help limited resource farmers get started in farming. However, limited resource farmers face barriers in accessing such programs; cultural barriers are often foremost among them, including distrust of these organizations and government programs due to unjust treatment in the past.

D. Scale

In most wholesale markets, such as mid- and large-size retailers and regional or national distributors, farm products need to be available in sufficient quantity and quality to meet buyer needs at a price that is competitive. In addition, more and more wholesale buyers are requiring producers to have certified on-farm food safety procedures (such as GAP—Good Agricultural Practices—or other certifications); product traceability procedures; and a minimum level of

general liability insurance (e.g., for Walmart the minimum level is $2 million per incident, for Whole Foods it is $1 million in product liability insurance). Many of these demands can be met affordably when farmers coordinate production across farms and pool product through a production or marketing association (aggregator) that has access to cooling and packing facilities. If farmers are to enter into marketing agreements with wholesale buyers without an aggregator, the scale of their operations must be at the level to meet the wholesale buyer requirements, or it must grow.

E. Farmer Training and Capacity Building

As with any new or expanded enterprise activity, farmers need new capacities and skills to be successful. To supply wholesale and institutional markets, farmers need a new level of professionalism in production and harvesting practices, business and financial management practices, and marketing.

Often, farmers participate in training programs determined by others. In this study it was found that farmers in Mississippi and Alabama are more motivated to participate in trainings where they see a clear application of information to their operations. These farmers should have a larger role in defining their own needs and initiating requests for technical assistance. Training will be more effective if farmers can see that, in the words of one farmer, "doing something will lead to a tangible benefit."

Once training needs are identified, using familiar approaches such as identifying or developing lead farmers, on-farm demonstrations, farmer-to-farmer mentoring, and even farmer field schools could play a role in significantly increasing farmer capacity.

F. Labor

The limited availability of labor is often a considerable challenge during planting and harvest seasons. The cost of manual farm labor is now approaching $9.00 an hour. Local labor is typically available if farmers have a cash flow, but many farmers cannot afford to hire the number of workers needed to properly harvest and pack their produce.

Additionally, the fresh produce industry is estimated to rely on undocumented workers for a majority of its labor supply (Kandel 2008). African-American farmers are believed to use fewer undocumented workers than larger-scale commercial farmers. Yet the enactment of the Hammon-Beason Alabama Taxpayer and Citizen Protect Act[3] created an environment of extreme uncertainty for undocumented workers in Alabama. The shortage of labor has had a spillover effect on the labor pool for all agriculture. For example, a number of farmers said they would have to reduce the size of their operations due to a labor shortage.

Ironically, unemployment in Alabama and Mississippi is high (7% and 8.7%, respectively, as of April 2012 (Bureau of Labor Statistics), Younger African-Americans are not joining the agricultural field at the same rate that their parents or grandparents did. Many in the South have

[3] Alabama HB 56, the Hammon-Beason Alabama Taxpayer and Citizen Protect Act, is an anti-illegal immigration bill signed into law in Alabama in June 2011. The law has had a strong impact on industries depending on migrant labor, including agriculture.

explained that there is often a cultural stigma attached to farming because of the history of slavery and sharecropping in the South, coupled with the low potential to earn a good living wage. These factors have led to an aging population of farmers, as young farmers are not replacing those who are exiting the occupation or nearing retirement age.

G. Market Information, Crop Variety, and Market Access

Market Information: Historically disadvantaged and limited resource farmers often struggle with knowing and understanding the demands of the marketplace—what consumers and buyers want. Farmers often lack necessary timely information about markets to react to changes as they occur. Establishing strong relations with selected buyers and keeping in regular contact with them and/or, utilizing market intermediaries, such as aggregators, Food Hubs, and farmer groups, to supply market information to the farmer are ways to address this problem. USDA's Agricultural Marketing Service Market News, available online, is another resource for this information.

Crop Variety: Crop selection is generally the same across farms in a region, so when a crop is ready, everyone has an abundance of that crop (for example, collards) inundating the market and driving down the price. Growing crops that are less prevalent in the South and that are in demand by local and regional buyers would be a good area for investment as long as supply and quality standards could be met. For instance, Whole Foods has already established relationships with suppliers of traditionally grown crops in Alabama, but is seeking non-traditional organic crops for the South, including broccoli, celery, asparagus, colored peppers (not green), and raspberries. Another consideration is growing vegetables and fruits that enable farmers to have crops ready for harvest over a longer period of the year, and for which there may not be a lot of competition in the marketplace.

Market Access: Limited resource farmers typically do not have a good understanding of how to sell to institutions, and may lack knowledge of proper packaging, food safety, and liability requirements of schools. Although the demand for fresh produce is increasing, limited resource farmers lack the time or skills to identify these new markets and to successfully negotiate and deliver on sale agreements. Further limiting farmers' access is their need for supply agreements that fit the size of their operations and skill sets without imposing enormous risks on their financial stability.

As mentioned earlier, farmers' success can by bolstered by working through an aggregator that pools product across farms and has a staff member who understands the parameters of working with institutions, can watch the market opportunities, and can communicate with buyers about crop selection and demand.

H. Supply Continuity

The year-round market for fresh produce is growing; to supply this demand, limited resource and historically disadvantaged farmers need to expand production and extend the production season. Varietal selections can change seasonally, but buyers still appreciate a steady flow of local produce of any kind throughout most of the year. Farmers struggle to have a steady supply of product for buyers. For instance, they may have herbs one week and not the next, which may

require buyers to find another source to meet their needs. Use of greenhouses and high tunnels, as well as the prospects of climate change (which modify and perhaps lengthen the growing season), can make it possible for some farms in Alabama and Mississippi to extend the growing season, expand crop selection, and have a more consistent supply of product.

I. Outdated Equipment

The lack of modern equipment and machinery were cited as issues constraining farmers' competitiveness in the South. Tractors and farm implements are often old and in poor condition, requiring expensive maintenance and parts. New equipment can cost tens of thousands of dollars, and may be needed only occasionally on a smaller farm. Equipment sharing and/or renting may be more financially feasible than purchasing new equipment.

J. Rising Fuel Costs

Farmers face rising fuel costs to transport produce to markets. Some of the most lucrative markets can be several hours away from the farm. Farmers in rural areas may struggle to reach urban markets, where demand for local produce is high. Returning to the farm with an empty truck is also a lost opportunity to backhaul. This is one area where an aggregator could bring savings and scale.

K. Cooperation Challenges

Farmer groups, associations, and cooperatives provide small- to medium-scale farmers with a competitive advantage through better outreach to larger scale markets, aggregation/distribution of product, equipment sharing, and market information. Across the country cooperatives and marketing associations have a long history of success as well as challenges. Many of the groups in the Deep South have historically been unsuccessful (with a few notable exceptions) reportedly due to poor management, contributing to farmers' distrust of working cooperatively. A number of farmer cooperatives and associations operate in the Deep South, but farmers' perceptions of their performance are mixed. However, many wholesale buyers are recommending that farmers work in associations and cooperatives to achieve the scale needed to sell to them. If, in the near future, cooperative approaches are chosen to meet the growing demand for local food it would be prudent to study, understand, and plan for the typical challenges these approaches encounter. A viable alternative can be to work through an aggregator/distributor or a food hub.

L. Chemical Drift

A problem that small farmers face, especially in the Mississippi Delta region, is the high prevalence of drift from chemicals sprayed by either tractor or airplane and intended for commodity field crops. Chemical drift is a common occurrence that can reduce the quality of produce, or in extreme cases, kill the crop. Some farmers stated the need for hoop houses[4] to

4 A hoop house is an unheated structure used as a greenhouse and season extender. It is commonly built in a half-round hoop shape out of PVC pipe covered with plastic. Temperatures can range from 14 to 20 degrees warmer than outside air, providing an environment where certain crops can grow during the fall and winter.

protect their crop from chemical drift. Chemical drift is of great concern to organic farmers; however, small to medium-scale organic farmers are not as prevalent in the South as in other regions of the country. If horticultural crops are to expand in the region, a variety of solutions will be needed to address this dilemma, depending on the local situation. One farmer in the Mississippi Delta has reduced chemical drift damage to his crops by establishing extensive communication with the pilot and airport that the crop dusters fly from to modify chemical spraying plans according to wind and property boundaries. He has also had to file in court against a nearby farmer who sprayed his farm, causing massive crop and income loss.

M. Other Challenges

Readiness for Assistance: Current farmer groups in both Alabama and Mississippi are at different stages of operational maturity. The quality of leadership in each group varies. There is an older demographic of farmers in the South; and the observation that limited resource farmers and older farmers do not typically seek training opportunities presents a challenge to providing capacity building and technical assistance.

Effective Use of Grant Funds: Although it is the case in all parts of the country to some degree, this study found that in the Deep South, there have been many instances in which grants intended to build limited resource farmers' business development capacity have had little tangible impact. Farmer groups often have limited management capacity to use grants properly. In one case, a grant was awarded that assumed that farmers would engage in cooperative activities that would justify the construction of a major facility. The facility was built, and has not been utilized to capacity. The trust level was either not high enough for farmers to feel loyalty to use these facilities, or the operation of these facilities was not up to the standards necessary to obtain farmer loyalty.

In some cases, a group may not use funds properly or, as intended in the grant, to address constraints. In such cases, farmers are not receiving the full benefit of the funds, and the methods employed are not hands-on and participatory enough to ensure the grant-funded activities are addressing real needs experienced by farmers. As a result any grant funds awarded should be closely monitored in an ongoing manner and technical support provided in order to support success among the recipients.

IV. Market and Infrastructure Challenges

A. Farm to School Requirements

The National Farm to School Network acknowledges only nine farm to school programs in Alabama, and none in Mississippi, although local food is still purchased by schools in the state. Part of the reason for the low presence of programs is that significant confusion exists over local and state requirements governing such programs. Regulations vary by state and seem ad hoc; they also vary by individual school district. Limited resource farmers typically do not have the necessary knowledge to supply a school directly. According to Emily Broad Leib, Senior Clinical Fellow in the Harvard Law School Center for Health Law and Policy Innovation, schools also misinterpret state ordinances around procuring locally, or may not understand what

is required. This has led to a disconnect between schools and local farmers and a lost opportunity for farmers to work with the school market.

B. Food Safety and Traceability

Due to the numerous deadly food recalls and food safety issues involving fresh produce over the past decade, large retail buyers (e.g., Walmart, Trader Joe's, and Costco, among others) require food safety, farm, and handler certification, and traceability of farmers' products. These can be major barriers for limited resource farmers due to the costs of certification, inspections, changes required on the farm, and transaction costs through the significant documentation required. Some buyers are lenient in their request for this information in the beginning and allow farmers a period of time to undertake the certification process before requiring it. If smaller farmers want to continue to sell and expand sales outside of direct-to-consumer channels, they must expect to make further investments in food safety practices.

C. Commercial Buyer Requirements

National retail or foodservice buyers have requirements for larger volumes of high quality product, along with liability insurance and food safety certification, which can be burdensome for small scale and limited resource farmers if they do not have the capacity. Many commercial buyers require farmers to carry liability insurance; meet quality standards (US #1); and sign a hold harmless agreement. Liability insurance can be $1-2 million for lower-risk crops and $2-4 million for crops with more risk. The grower in effect bears the majority of production and marketing risks. Small-scale and limited resource farmers usually lack the infrastructure, such as proper planting, harvesting, cooling, packing, and transportation equipment or facilities, to enable them to deliver on commercial agreements for fresh produce. Contracts are not typically required of small-scale farmers; e.g., Walmart stated that for local purchasing with small-scale farmers their agreements are typically done via email; they require contracts for purchases of $2.5 million and greater. Whole Foods stated they do not typically do contracts with local vendors; they want to be established with a grower for a year or two before they are interested in contracts, and after that period, most growers they are not interested in getting into a contract, preferring the limited liability of a handshake agreement.

D. Lack of Aggregation

The South lacks dedicated local farm aggregators who can combine product from multiple farms to meet demand from local buyers. Aggregators can take the form of food hubs,[5] brokers, distributors, or other entrepreneurs. They may have a facility where they can pool and repack product and distribute it to various buyers including other distributors. Also, an aggregator can act as a single point of contact for buyers and farmers, effectively serving as a conduit of information across the supply chain. Aggregators communicate with buyers about product needs,

[5] As defined by USDA, a food hub is a business or organization that actively manages the aggregation, distribution and marketing of source-identified food products, primarily from local and regional producers, for the purpose of strengthening producer capacity and access to wholesale, retail, and institutional markets. Food hubs have positive economic, social and environmental impacts in their communities, and fill a critical gap in regional food systems.

specifications, pack sizes, requirements, delivery schedule, varieties in demand, etc.; this information can be relayed to farmers, providing them a useful service. The aggregator can also act as a broker, representing not only their own interest but the interest of a farm or a group of farms to buyers. For instance, an aggregator can work with farmers to determine their cost of production, and can communicate this to a buyer when negotiating price.

E. Pricing Issues

Mississippi and Alabama have large areas where food deserts[6] limit the availability of fresh produce. Beyond issues such as the presence of retailers, a major impediment in supplying food deserts with fresh local produce is affordable pricing. Farmers have to make an adequate return on their investment, yet produce has to be affordable for low-income consumers. It is a challenge to ensure that consumers have access to affordable, fresh, high quality produce, and that farmers are paid a livable wage. Reducing the number of actors in the supply chain (shorter supply chains) and the need for long distance transport (more local food) can help reduce the costs embedded in any given product and help address this challenge. However, competing with prices resulting from large scale production and vertically integrated systems can still be challenging. In addition, current US agricultural policy does not provide the same levels of support to specialty crops as to other crops[7] often making more refined and processed food a less expensive, and frequently much less healthful way of taking in calories.

F. Lack of Value-added Processing

Value-added products have the potential to increase revenue for produce. New processing facilities for limited resource farmers are under consideration. It is important for businesses to do feasibility planning of these facilities to ensure that a need truly exists for such processing facilities and that producers will actually benefit; some facilities built in the South have not been able to run at sufficient capacity due to a lack of product supply.

G. Lack of Organic Production

The organic sector nationwide has grown from a $1 billion industry in 1990 to a $26.7 billion industry in 2010, climbing even through the recession (Organic Trade Association 2011). Organic fruit and produce often command significant price premiums in the market, offering smaller farms more value per acre. As of the 2007 Ag Census, Alabama had eight registered certified organic farmers and Mississippi had 23. Whole Foods in Birmingham stated that they have a high demand for local organic produce and cannot keep the supply on the shelves. However, organic sales to larger commercial buyers require rigorous product certification.

[6] According to the Healthy Food Financing Initiative (HFFI) Working Group, a food desert is a *low-income census tract* where a substantial number or share of residents have *low access* to a supermarket or large grocery store.

[7] Specialty crops are fruits and vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture).

V. Opportunities & Recommendations

This section examines opportunities for limited resource and historically disadvantaged farmers to develop local markets and offers recommendations for addressing identified on-farm and market/infrastructure challenges. There are multiple ways to intervene in the Deep South's food system to improve on-farm, market, and infrastructure challenges. These can be broadly characterized as production, marketing, and partnership opportunities as well as farmer capacity building opportunities.

A. Production Opportunities

1. Hoop Houses

Hoop houses are inexpensive season-extending structures in which crops can be grown in the ground under cover or as seedlings to be planted out to the field. This latter approach is an effective combination of production practices linking a hoop house to open field production. Either technique allows farmers to begin seedlings inside a hoop house during colder months and to transplant them when fields are ready. This combination can advance a farmer's production schedule to arrive at a market with a product earlier than the competition or offer products that are typically out of season for that region. Additionally, hoop houses can protect crops from aerial spraying and chemical drift from neighboring farms that employ these practices.

Due to extensive outreach via numerous programs, farmers are generally familiar with hoop houses. However, some hoop houses visited for this study were empty, in disrepair, storing farm equipment, or not functioning. Building farmer capacity to make full use of hoop houses is an area where farmers could benefit by increasing their outputs. See **Appendix A** for additional information and resources.

2. Post-harvest Handling and Food Safety

Proper post-harvest handling of fresh produce is important to maintain its quality. Farmers can utilize resources such as FamilyFarmed.org's manual, *Wholesale Success: A Farmer's Guide to Selling, Post Harvest Handling, and Packing Produce,* which describes proper harvesting, cooling, storing, and packing for 103 different crops. The Wallace Center's National Good Food Network also has a website detailing frequently asked questions that serves as a food safety primer for farmers.

In addition, universities offer helpful resources for post-harvest handling and food safety. North Carolina University Extension offers a Fresh Produce Safety Portal through the MarketReady program, which offers resources on post-harvest equipment; handling and cooling; quality and testing; storage and transportation; and packing facilities. The University of California-Davis Postharvest Technology Center offers a wealth of information on fresh produce as well as a bookstore; workshops; a newsletter; produce fact sheets in multiple languages; postharvest specialists; interactive web tools; and more. More information can be found in **Appendix A**.

3. Irrigation

Proper irrigation is necessary for farms to produce quality fruit and vegetables in the South. One potential resource for farmers is the National Resource Conservation Service, which offers cost-share for up to 90% for installing a well and irrigation. Local suppliers, such as Irrigation Mart in Ruston, Louisiana, offer irrigation equipment, and have trained staff who can help design and supply material for projects, and arrange and supervise installation. More information can be found in **Appendix A**.

4. Labor

There are ongoing discussions on a potential solution for a wider pool of labor to draw from for Alabama and Mississippi. Yet farmers may consider reaching out to new populations for labor. Alabama farmers can contact the Alabama Department of Industrial Relations to access their free job-matching services and network of career centers across the state. Mississippi's Department of Employment Security also offers job centers as well as resources for employers seeking labor. The Federal guest worker program known as H-2A is also another option for farmers seeking labor. The US Department of Labor offers guidance for farmers interested in utilizing this program. Other opportunities include posting announcements for workers at AgAds.com, the National Sustainable Agriculture Information Service (ATTRA)'s job listserv, and many others listed on the Beginning Farmers website.

5. Certified Organic Production

Moving to more certified organic production could open up lucrative markets for limited resource farmers, as this market continues to grow over time and the cost of petroleum-based farm inputs (fertilizer and pesticides) increases. For instance, Whole Foods, which is highly interested in local and regional products, now asks its vendors to follow organic standards whenever possible. There is high demand by Whole Foods for more fresh local organic non-traditional southern products from Alabama and Mississippi farms. Organic certification requires commitment, adherence to standards, and completion of inspections and required documentation of on-farm practices. USDA and state departments of agriculture can provide services to small farmers to help them comply with organic standards.[8]

B. Marketing Opportunities

1. Crop Selection

Crops that fit current market demand and windows, rather than relying on more traditional crops, can bring farmers' greater financial returns. Market windows are periods of the year when demand is strong, supplies are not traditionally available, and the price paid to the farmer is higher. Using season-extension techniques, selecting crops that suit growing conditions, and offering an opportunity to enter the market early or deep into the off-season can be winning strategies. For example, staple vegetables like peppers and tomatoes, if brought to market early,

[8] For instance, the Michigan Department of Agriculture and Rural Development offers certification cost share assistance for eligible Michigan organic farmers through September 30, 2012.

will capture higher prices through the increased demand prior to the high volumes and low prices that occur when products from larger commercial farmers in the region are available. Crops that are not traditionally grown in the South are in demand by retailers such as Whole Foods. In Mississippi, a new Whole Foods store opening in Jackson mid-2013 will need non-traditional and traditional southern products year-round.

2. Market Diversification

Producers need time to build up capacity to meet volume requirements and quality standards of larger markets. Building to this level with a diversity of markets more manageable in size and type would be an advantageous strategy. Arrangements with local institutions and businesses (i.e. small institutions, retailers, and restaurants) are a way for farmers to diversify their market opportunities instead of devoting large amounts of resources selling to one buyer. Also, high-end markets that offer higher prices to farmers can allow them to make sales to retail, institutional, and other markets at a lower cost to the consumer.

As mentioned earlier, farmers can also benefit by working through an aggregator who understands the market needs of buyers and can work with the farmer on crop planning, packing requirements, and delivery. In particular an aggregator could help farmers supply and communicate with institutions and schools, who are more likely to work with one supplier than multiple farmers for their product needs.

3. Financing

Farm financing can come from a wide variety of sources. While banks and Farm Credit lenders are an option for some farmers, limited resource and historically disadvantaged farmers may consider other sources such as those available through Community Development Financial Institutions (CDFIs), Farm Service Agency USDA grants and loan programs, and credit unions. Examples of other non-traditional funding include: Whole Foods Market's Local Producer Loan Program, which provides up to $10 million in low-interest loans to small, local producers (loans range from $1,000 to $100,000); ALA-TOM Resource, Conservation and Development Council, which has a micro-loan program in the Black Belt region of Alabama for small, limited resource farmers; and cost-share programs, such as the USDA–Natural Resources Conservation Service cost-share incentives to socially disadvantaged, beginning, and limited resource farmers, which reimburses them up to 90% for hoop houses. More information is available in **Appendix A**.

C. Partnership Opportunities

1. Aggregators as Partners

Aggregators who can effectively pool local and regional product from Mississippi and Alabama farms, handle and pack it to meet buyer specifications, and distribute it to regional buyers could open up tremendous market opportunities for limited resource and historically disadvantaged farmers in the Deep South. Food hubs or market entrepreneurs who can tap into neighborhoods with poor fresh food access are especially in demand. Aggregators, brokers, and food hubs can be effective market agents for small-scale farmers, improving the supply chain for limited resource farmers and helping to ensure that products meet buyers' specifications. An aggregator

can work with a group of farmers to schedule production so that a consistent supply of produce is available over a market window.

Aggregators are key players in creating a large, consistent, and reliable volume of mostly local and/or regional foods for local markets. As a go-between, they coordinate supply chain logistics for producers and enable them to access wholesale markets; at the same time, they work on the demand side by coordinating with distributors, processors, retailers, institutions, restaurants, wholesale buyers, and even consumers. Aggregators can facilitate on-time payments to farmers. They can also lower costs by aggregating produce from a group of producers to meet buyers' scale requirements, and by reducing costs of shipping and handling product.

Aggregators can also save producers time in searching for markets that both would otherwise have to find themselves. The entrepreneur-distributor representing their business interests can serve several functions to forge linkages between farmers and buyers and to maintain necessary communications between them, conduct research on new markets, and facilitate payment to farmers for their produce.

Partnerships with aggregators such as food hubs can help farmers save money on transportation costs, permitting farmers to put resources toward other on-farm operations such as enhancing production practices and food safety to better meet wholesale buyers' requirements.

2. Farmer Collaboration

Limited resource and historically disadvantaged farmers can collaborate in many ways to increase their market share, utilize resources, and lower input and transaction costs. For instance, a lead farmer in the group could demonstrate new technologies and share with the group results of new varieties and production practices. Farmers in a group can be certified as minority growers, promote their product as such, and sell into certain outlets that give preference to minority producer groups.

Farmer groups could lease and purchase equipment, or buy it second hand, to be shared by members Many need specialized farm machinery (e.g. mulching, irrigation, plastic-laying, harvesting tractor, trailer, disk, rotary mower, etc.) and value-added processing equipment (e.g. shelling, harvesting and cooling equipment, and refrigerated trucks). For example, certain types of ice injector cooling units can be rented, but the volume and value of the crop has to justify the rental (sweet corn and broccoli are two crops that may qualify). Farmers can also share cold storage to maintain the critically important cold chain. Farmers may also consider sharing resources such as transportation of product across farms to local value-added processing facilities.

Key to successful collaboration is good management of the farmer group and the common commercial business in which they are involved; this will often require externally hiring a manager versus using an internal group member. Working collaboratively with trusted intermediaries or groups is a key mechanism for farmers to gain critical technical assistance, training, and capacity building, along with the financial investments to ensure success and tangible impact.

3. **Regional Networks**

A regional learning network for limited resource and historically disadvantaged fruit and vegetable farmers would be valuable to connect farmers to each other, share resources and information, and direct needed support. A need exists for current networks to be effectively linked together and to reach into limited resource and historically disadvantaged communities.

D. Capacity Building Opportunities

In order to take advantage of opportunities, farmers and groups of farmers would benefit from capacity building support in a variety of areas:

- Record keeping and business planning for successful operations and accessing credit
- Risk management assistance to assess costs and returns for taking market risks
- Hoop house training to maximize revenues for profitability
- Quality control, harvest and post-harvest techniques to extend the shelf-life of products
- Food safety and traceability training and certification to access many wholesale markets
- Marketing, market information, and pricing to expand from direct markets
- Farm to institution training
- Selling requirements and contracts for more complex direct and wholesale markets

Key to successful implementation of capacity building programs is farmer participation in identifying their challenges and needs to ensure that the technical assistance, training, and capacity building is appropriately matched and will result in tangible benefit to their work.

VI. Moving Forward

This analysis identified major challenges that farmers face in accessing local and regional fresh produce markets, and explored the market/infrastructure barriers that further limit their involvement. Even in light of these challenges, many opportunities exist for interventions that build the capacity of farmers and begin to dismantle barriers to thriving market relationships.

This study highlights a number of key insights and findings:

1. **Collaboration**: The local and regional food system in the Deep South will benefit most from a collaborative approach, with groups working together to achieve mutual goals. These groups will be made up primarily of farmers, but are not limited to farmers, as there are a growing number of organizations and individuals working to support the success of regional food systems. Transparency, information sharing, and accountability among members build the basis of trust, which is critical to scaling up a supply chain.

2. **New Partners**: Despite resources invested in the region, farmers emphasized that they are not receiving the assistance needed to overcome the challenges they face, and many programs funded in Mississippi and Alabama do not provide sufficient support at the farm level. With some notable exceptions, continuing to work through the same groups and individuals that are frequently funded to build farmer capacity and to develop supply chains has not yielded great successes, and will likely not build vibrant, lasting local and regional food systems in the Deep South. New champions are needed. Activities linked to commercial returns must be prioritized, and farmer buy-in should be secured early on.

3. **Accountability**: Investment at the farm level needs to be accompanied by an articulated system of accountability with built-in technical assistance to ensure that farmers and farmer groups are supported in completing tasks they aim to undertake and to achieve long-term success. Without the guidance of a supporting organization or market intermediary, outside funding is susceptible to use for other than the intended purposes. Such an intermediary would provide technical assistance, training and capacity building, enabling market success. This is similar to the approach taken by Community Development Banks or social venture investors where the investor and the business work as a team to navigate and respond to challenges and opportunities.

4. **Incremental Progress**: Many limited resource and historically disadvantaged farmers in Mississippi and Alabama are not ready for large-scale commercial wholesale markets. The requirements are too great to fulfill. Rather, an incremental process for farmers to access large-scale commercial wholesale markets is recommended for many of these farmers. Identifying and pursuing the next level of market that is a challenge, but is within reach, will help farmers develop capacity and experience success in a stepwise fashion. For many farmers more appropriate markets are institutions such as schools, hospitals, restaurants, and local/regional grocery stores.

5. **Intermediaries**: Producing at sufficient scale and handling the necessary off-farm activities discussed are major challenges for many small- and medium-sized farmers no matter the region where one operates. Utilizing intermediaries that take on a role in the supply chain (from information collection and dissemination to aggregation), is key to increasing farmers' capacity to reach larger markets. Intermediaries can be in the form of supporting organizations, extension, aggregators, shipper/packers, brokers, distributors, and food hubs.

Opportunities abound for farmers as the produce sector is growing steadily with strong demand from consumers for year-round supply of fresh produce. Simultaneously, the US government is supporting healthy eating initiatives, such as Michelle Obama's "Let's Move" and USDA's "Know Your Farmer, Know Your Food." USDA's Supplemental Nutrition Assistance Program (SNAP) and its Women, Infants, and Children program (WIC) also encourage participants to consume fresh fruits and vegetables and facilitate ease of purchase through the use of electronic benefit transfer machines.

There is significant room for growth in local and regional food systems in the Deep South states of Alabama and Mississippi, which are currently underdeveloped. The Wallace Center intends this report to be a resource for farmers, farmer groups, and entrepreneurs to learn of new

markets, stimulate collaboration, and encourage strategies to begin to address limitations in the food system.

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These appendices are designed as resources for farmers, farmer groups, and supporting organizations. The farmer resources in Appendix A include information on operations, funding, training, inputs, equipment, and pricing. Appendix B provides charts to correlate fruit and vegetable crops with their peak seasons and major crops grown in Alabama and Mississippi. Appendix C offers packing, processing, aggregation, and distribution facilities in the region; Appendix D includes market information for local/regional products including direct sales, wholesale, retail, and foodservice. Appendix E lists farmer groups in Alabama and Mississippi, and Appendix F lists supporting organizations including government, higher education, food policy councils, and community groups. Appendix G is a map of local and regional food system infrastructure in Mississippi and Alabama.

Appendix A: Farmer Resources

The information in this appendix is based on discussions held during the Value Chain Assessment fieldwork and Wallace Center staff fieldwork and research, including visits and interviews with farmers, farmer groups, supporting organizations, buyers, and other organizations in the Deep South. This information is not considered comprehensive but includes resources for funding, training, inputs, equipment, and pricing.

Farm Operations

Hoop Houses

The USDA–Natural Resources Conservation Service (NRCS) provides cost-share incentives to socially disadvantaged, beginning, and limited resource farmers, and reimburses them up to 90% for hoop houses.[9] Hoop houses help extend the growing season for vegetable farmers by permitting them to start crops earlier in the season and then move them to the field. They also allow farmers to grow high-value crops in the winter months. Winter crops suitable for hoop houses include collards, spinach, green onions, and garlic. High tunnel suppliers are also listed on the MSU Extension website.

Victor Khan, a researcher and instructor at Tuskegee University, offers hoop house training and alternative hoop house plans known as the "Tuskegee Model Tunnel House." These plans can significantly reduce the cost of erecting a hoop house. The Tuskegee Model tunnel house is framed with lumber instead of steel pipes, making construction simpler. Also, materials are generally locally available, which reduces shipping costs and circulates dollars in the local economy. The model costs between $1,500 and $1,600 for all materials, whereas NRCS kits are $6,300 and more. At no charge Mr. Khan can provide plans for Tuskegee Model Tunnel Houses, on-site and tunnel management advice and guidance to farmers, and planting plans.

[9] NRCS offers an opportunity for farmers to participate in the Seasonal High Tunnel Initiative offered through the Environmental Quality Incentives Program (EQIP). This initiative provides financial and technical assistance to farmers. Visit this link for more information.

Wells and Irrigation Systems

Irrigation is critical in the South. The NRCS provides cost share up to 90% for installing a well and irrigation.[10] A common well can cost approximately $5,000 depending on the water depth. In some cases the well may need a booster to cover a large area of land. Irrigation equipment can be purchased from suppliers such as Irrigation Mart[11] in Ruston, Louisiana.

Field Preparation

Mississippi State University extension offers equipment for mulching and preparing beds, lay pipe, and cover beds with plastic sheeting in one pass over the field. Farmers can look to their county office for support.

Seed Suppliers

A number of seed companies selling quality seeds were mentioned by farmers, including Kelly Seed Company in Hartford, Alabama and Johnny Green Seed in Birmingham, Alabama. Some farmers rely on specialized nurseries to produce seedlings in flats for transplanting, such as Champion Seed Company.[12] This can be less expensive than direct seeding for certain high-value produce like 1,000 watermelon seedlings for $18.

Joint Purchasing of Fertilizer and Chemicals

Some cooperatives discussed the need to reduce the costs of fertilizers. Bulk purchasing of chemicals and fertilizers would save money for co-op members. Joint purchasing of truckloads of chicken manure for both open field production and hoop house production could also save money for farmers.

Post-Harvest Handling and Food Safety

FamilyFarmed.org provides a manual for farmers: *Wholesale Success: A Farmer's Guide to Selling, Post Harvest Handling, and Packing Produce,* which offers crop profiles for 103 specialty crops, including specific harvesting, cooling, storage, and packing information. It addresses issues such as Building Relationships with Buyers and Calculating Return in Investment Food Safety. FamilyFarmed.org is currently working to distribute the manual to growers and farmer organizations. Copies can be purchased at http://www.familyfarmed.org/wholesale-success/.

North Carolina University Extension's Fresh Produce Safety Portal offers resources on postharvest equipment, handling and cooling, quality and testing, storage and transportation, and packing facilities. Resources are for both large- and small-scale farmers. The University of California, Davis, offers an online Postharvest Technology Center with information on short

[10] More information at http://go.usa.gov/Kow.

[11] Visit http://www.irrigation-mart.com/ for information.

[12] Visit http://www.championseed.com/index.php for more information.

courses and workshops, a bookstore, fact sheets, newsletter, and much more. The Center's Small-Scale Postharvest Handling Practices: A Manual for Horticultural Crops is a resource targeted specifically at small-scale farmers.

Additionally, there are plans for the fresh vegetable processing facility in Marks (Quitman County, MS), to be used to educate farmers on sanitation and post-harvest handling techniques.

Cooling and Refrigeration

Crop cooling and refrigeration is part of a certification (good handling practices) program for produce. Davis Refrigeration and Electrical[13] in Jackson can be approached about assessing cooling facilities in a number of locations in Mississippi.

Pricing Information

Wholesale and shipper prices are available online for farmer reference for the Atlanta market (www.marketnew.usda.gov/portal.FV). Distributors mentioned that they may require a lead time of one month to arrange for product delivery.

Farmer Support

Beginning Farmer Programs

The number of beginning farmer and rancher programs[14] is growing nationally. Farmer to farmer mentoring is important to show young farmers profitability and lifestyle benefits and can help diminish negative perceptions of farming. Alabama Sustainable Agriculture Network's Farmer-to-Farmer program links experienced producers to new farmers for one-on-one training, business planning, workshops, and other mentoring opportunities.

The Wallace Center, in partnership with Farm Credit Council, leads a Community of Practice on financial and business literacy. The project targets the Southern region, and is improving beginning farmer and rancher training programs' ability to provide financial education. The Community of Practice is a mechanism for networking and communication, enabling participants to share best practices, identify obstacles, and test new approaches in a supportive, facilitated environment.

Farmer Training

Resources[15] are available for small farm outreach and training. Alcorn State University Extension and the Mississippi Small Farm and Agribusiness Center provide numerous programs

[13] More information at http://davisrefrigerationandelectrical.com/.

[14] More information is available through a new USDA website, http://start2farm.gov/. Planning resources are available at http://foodshedguide.org/ and http://www.beginningfarmers.org/. Training programs are also offered through Mississippi and Alabama extension offices.

[15] More information is at http://www.nifa.usda.gov/nea/ag_systems/part/smallfarms_part_coordinators.html#ms.

to promote sustainable small farms in Mississippi. Alabama A&M University's Small Farms Research Center, Alabama Cooperative Extension, Tuskegee University, and the Federation of Southern Cooperatives Land Assistance Fund also offer training programs. USDA is expanding its Strike Force Initiative, which increases the focus of technical programs for underserved farmers in several Southern states, including Mississippi.

In addition, MarketMaker has a team of specialists in each state. Gaining Ground in Mississippi and the Alabama Sustainable Agriculture Network[16] have technical experts in their respective states. These organizations can be contacted for assistance. Following are examples of available technical training and other potential opportunities:

Alabama and Mississippi

- Local consultants from university or private consulting companies can be engaged to work with producer groups on planning and managing production and marketing technical training. For example, the Holmes County Alliance for Sustainable Agriculture Production engages Preston Sullivan as a consultant for planning activities with groups in Holmes County.

Mississippi

- Demonstration farms can be used for farmer training in good agricultural practices. For example, in Holmes County Keith Benson of Alliance for Sustainable Agriculture Production is planning to install four demonstration hoop houses with assistance from the NRCS. Dr. Evans of Mississippi State University is advising on the effort.

Alabama

- Farmers are putting in varietal trials on demonstration plots on a farm in Autauga County to potentially supply different market windows. An active group of producers is currently interested in working on improving their production practices.

- Victor Khan at Tuskegee University specializes in net returns from hoop houses. He works in Hobbs City near Birmingham on a community garden with a hoop house. Dr. Khan can be instrumental in working with groups that want to improve varietal selection and agronomic practices.

Market Information

Market Connectors

The Farmers Market Authority in Alabama offers "Farmer Connect," a website that connects farmers with local chefs, restaurants, other farmers, and potential consumers who want Alabama-grown produce. The MarketMaker websites for Alabama and Mississippi also offer ways for farmers to connect with new markets and consumers.

[16] Gaining Ground can be contacted at info@ggsim.org. ASAN can be contacted at info@asanonline.org or at 559-546-1090.

Value-added Processing

An opportunity exists to expand local value-added processing in the South. In Montgomery, Alabama, the feasibility of a small processing facility needs to be explored for the Browntown producer group in Autauga County. In Holmes County, Mississippi, the feasibility for a planned processing facility needs to be evaluated.

Capital

Investment Capital

Farm Credit and Farm Security Agency have programs for first-time farmers that may help limited-resource producers get started in farming. USDA offers other grants and loans for farmers. Some examples of lending institutions are Hope Community Development Authority in Biloxi, Mississippi; Southern Bancorp based in Arkansas; and Shreveport Federal Credit Union in Shreveport, Louisiana. USDA's Regional Food Hub Resource Guide, which describes food hub impacts on regional food systems and presents resources available to support their growth and development, includes an extensive list of federal loan and grant programs.

Shreveport Credit Union is a new source of loan funds to agricultural producers in the Delta region of Mississippi. The credit union has an office in Marks, Mississippi. The lending limit is $75,000 and the current interest rate is 3%.

Alcorn State University offers limited resource farmers access to operating capital. Credit limits are $25,000 to an individual farmer and $50,000 to a cooperative. These loans have a short payback period.

Whole Foods Market's Local Producer Loan Program provides up to $10 million in low-interest loans to small, local producers. Loans range from $1,000 to $100,000 and can be used for purchasing more animals, investing in new equipment, or converting to organic production. Whole Foods minimizes the fees, interest rates and paperwork that can often get in the way of a small local farm or business taking the next step to expand its operations.

ALA-TOM Resource Conservation and Development (RC&D) Council has a small revolving micro-loan program to help small, limited resource farmers either continue to farm or begin farming. ALA-TOM loans to farmers in the following nine Alabama counties: Choctaw, Clarke, Washington, Monroe, Conecuh, Wilcox, Marengo, Perry and Dallas. Typically, they lend annually and loans are up to $5,000 per farmer. The ALA-TOM RC&D Council makes direct loans to farmers, cooperatives, and value-added agribusinesses. The interest rates charged are less than charged to the typical high-risk borrowers that this program targets.

Seedco Financial is a national nonprofit organization based in Birmingham that offers affordable financing to small businesses and nonprofits in the Birmingham/Tuscaloosa area, Mobile, Huntsville, Selma, Montgomery, and their surrounding areas.

Emerging ChangeMakers

An opportunity exists to collaborate with Emerging ChangeMakers to facilitate groups to obtain loans and investments. Other institutions have lending programs for underserved groups, such as USDA, community development financial institutions, and credit unions. Emerging ChangeMakers can identify potential sources of grant and debt capital. Collaboration is possible with Emerging ChangeMakers in 17 counties of the Black Belt Region to initiate loans from Seedco.

Appendix B: Deep South Vegetable Production

Crop Selection by Season of the Year

Each of three growing periods—spring, summer, and fall/winter—has suitable high-value fruit and vegetable crops for the Deep South. The tables below display produce windows by season.

Crop Selection by Season of the Year				
Spring	Collard, April	Turnips, April	Mustard, April	Kale, April
	Cabbage, April	Broccoli, April	Lettuce, April	Onion, April
	Rutabagas, April	Spinach, April	Carrots, Trial	
	Red Potato, May	Strawberries, May	English Peas, May	Pole Beans, May
	Snap Beans, May	Spring Squash, May	Spring Zucchini, May	
Summer	Long Neck Squash	Hybrid Squash	Crook Neck Squash	Cucumbers
	Zucchini	Purple Hull Peas	Lady Finger Peas	Crowder Peas
	Watermelons	Cantaloupe	Okra	Bell Peppers
	Banana Peppers	Cantina Peppers	Tomatoes	Corn
Fall/Winter	Collard	Turnips	Mustard	Kale
	Cabbage	Broccoli	Lettuce	Rutabagas
	Spinach	Carrots		

High-Value Crops in the Southeast by Month

Crop	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
VEGETABLES												
Arugula				x	x	x	x	x	x	x	x	
Beans, Bush					x	x	x					
Beets				x		x				x	x	
Broccoli, Rabe				x	x						x	
Cabbage				x							x	
Carrots						x					x	
Collards									x	x	x	
Chard				x	x						x	
Bok Choi				x	x					x	x	
Cucumber					x	x				x		
Eggplant						x				x		
Fennel					x							
Garlic						x	x					
Kale				x	x					x	x	
Kohlrabi				x						x		
Lettuce											x	
Lettuce Mix				x	x					x		
Okra						x	x	x				
Onions, Spring				x	x							
Onions (Storage)						x	x					
Garden Peas				x								
Peas (Field)						x	x					
Peppers (Sweet)						x	x	x	x	x	x	
Peppers (Hot)						x	x	x	x	x	x	
Potatoes (Irish)						x	x					
Potatoes (Sweet)									x	x	x	
Radishes				x	x					x	x	
Spinach				x	x					x	x	
Squash (Summer)					x				x	x		
Tomatoes (Slicing)						x	x					
Tomatoes (Cherry)						x	x	x		x	x	
Turnips (Purple Tops)				x	x						x	
Turnips (Salad)				x					x	x		
HERBS												
Basil					x	x	x	x	x	x		
Cilantro				x	x	x			x	x	x	
Dill				x	x	x			x	x	x	

Chives				x	x	x	x	x	x	x	x	
Rosemary				x	x	x	x	x	x	x	x	
Parsley					x	x	x	x	x	x	x	
FLOWERS												
Sunflowers						x		x		x		
Zinnias					x	x	x	x	x	x	x	

Alabama Major Crops

The list below includes the top-producing vegetables, orchard crops, and nuts, based on producers and area under cultivation in Alabama. The top six crops represented by the number of farms are cantaloupes, cucumbers, okra, peas, tomatoes, and watermelons. The top fruit is peaches.

Major AL Crops	Number of Farmers	Number of Acres
Apples	231	393
Bell Peppers	101	57
Blackberries	120	75
Blueberries	372	616
Cantaloupes	323	475
Collards	122	323
Cucumbers	312	312
Grapes	284	468
Green Peas	121	135
Okra	309	371
Oranges	14	12
Pears	202	144
Peas	371	1,580
Pecans	1,323	18,025
Plums	134	111
Potatoes	267	1,062
Squash	258	817
Strawberries	78	112
Sweet Corn	674	1,204

Sweet Potatoes	83	2,297
Tomatoes (Open Field)	727	1,336
Turnip Greens	134	425
Watermelons	732	3,051

Mississippi Major Crops

This table includes the top-producing vegetables, orchard crops, and nuts based on producers and area under cultivation in Mississippi. The top categories of high-value crops reflected by the number of farms are snap beans, cantaloupes, cucumbers, sweet corn, sweet potatoes, tomatoes, and watermelons.

Major MS Crops	**Number of Farmers**	**Number of Acres**
Apples	80	145
Apricot	9	n/a
Bell Peppers	32	36
Blackberries	33	57
Cantaloupes	172	265
Citrus	14	n/a
Collards	25	74
Cucumbers	201	n/a
Eggplant	19	n/a
Figs	34	n/a
Grapes	115	631
Herbs	8	4
Kale	6	
Lettuce	2	n/a
Lima Beans	35	153
Mustard Greens	33	140
Nuts	697	14,500
Okra	103	94
Onions (Dry)	6	2

Major MS Crops (cont.)	Number of Farmers	Number of Acres
Onions (Green)	9	14
Other Non-Citrus	55	91
Other Vegetables	85	532
Peaches	121	372
Pears	116	77
Plums	35	22
Potatoes	178	166
Pumpkins	24	160
Raspberries	6	4
Snap Beans	288	402
Squash (All)	100	132
Squash (Summer)	97	109
Squash (Winter)	9	23
Strawberries	13	38
Sweet Corn	383	2507
Sweet Potatoes	122	21,027
Tomatoes (Open Field)	426	431
Turnip Greens	20	55
Turnips	20	55
Watermelons	485	2405
Apples	80	145
Apricot	9	n/a
Bell Peppers	32	36
Blackberries	33	57
Cantaloupes	172	265

Crop production in AL and MS is quite diverse. According to our market research the following crops have potential as higher-value products that are in demand in the South: blueberries,

peaches, Asian pears, persimmons, blackberries, and strawberries. Specific demand varies with market, season, and location.

Appendix C: Packing, Processing, Aggregation and Distribution Facilities

A packing facility is necessary to achieve added value in products if a farmer is selling in larger volumes to buyers. At the same time, construction of a packing shed by itself will not result in increased profitability to farmers unless it is properly managed, adequate supply is available and market connections are developed. Several packing facilities are currently operating, were operating, or plan to be operating in Alabama and Mississippi.

At the heart of any supply chain is an efficient and effective means of aggregating products for quantity, quality, package, storage, and distribution to buyers. It can be burdensome for a buyer to arrange delivery, unload, and cut checks to 20 farmers. With an aggregator, a buyer can pay one entity directly, coordinate requirements and preferences, and have their products already processed if necessary. For instance, an aggregator can charge a fee and work with a school on its needs, and has flexibility to be paid within the school's system of 30 days, which can sometimes extend to 40 days. An aggregator can provide tracking and traceability and good handling practices certification if required. Farmers generally receive payments promptly from an aggregator, depending on the type of system established.

Alabama

Alabama Current Packing and Processing Facilities

- **Al Hooks Produce Farm, Tuskegee**: Al and Demetrius Hooks have a packing shed near Tuskegee where they do minimal processing and cooling of produce. Al Hooks is also a grower and shipper, working with farmers who deliver produce to his packing shed.
- **Sunshine Farms, Clanton**: There is a strawberry and peach packing shed in Clanton.
- **Cottage House, Ariton**: The Cottage House is a multi-use facility that offers programs to local residents including cooking and marketing such as canning, making syrup and jellies, and producing homemade breads and rolls, all in a certified kitchen. They also bring in a community 4H group as well as work with a school garden to teach farming skills.
- **Alabama Rural Heritage Foundation, Thomaston**: This community center houses the Heritage Gift Shoppe, a dining space to seat 50, and an FDA-certified industrial kitchen and the administrative offices. The center hosts community events in support of agriculture such as training workshops for farmers.

Potential Future Alabama Packing and Processing Facilities

- **Carver Center for Integrative Sustainability and USDA Service Center, Tuskegee:** The Carver Center will be a state-of-the-art agricultural, technological, and research facility where federal, state, and local agencies, extension agents and university researchers could lead research initiatives in agricultural and technological advancements, and collaborate with farmers to improve crop productivity, enhance the

lives of community residents and further sustainable development of the area's economy. The Center will be on the corner of Mortley Lane and Franklin Road across from the Tuskegee University Research Farm in Tuskegee, AL. The groundbreaking is complete but construction has not started yet on this facility. The facility is expected to open by Dec. 1, 2012. In addition to the Carver Center for Integrative Sustainability, the facility will also house a USDA Service Center, which will serve eight Alabama counties by providing research and Extension-based programming.

- **Black Belt Family Farm Fruit and Vegetable Marketing and Innovation Center, Selma**: The innovation center, planned for construction in the fourth quarter of 2012, will be located west of Selma, AL on Highway 80. The Center will be used by farmers to receive, package, temporarily store, and ship produce. The Center will serve as a packing and value-added processing facility for local fruits and vegetables, as well as provide technical and outreach assistance to the Selma/Dallas County Small Farmers Association, a newly formed cooperative of family farmers, who provided the local leadership and facilitated the land purchase. The Center will be owned by the Alabama Agricultural Land Grant Alliance, (AALGA) a joint venture of Auburn, Alabama A &M and Tuskegee Universities. Tuskegee will coordinate the Center's research, education, and extension activities and services.

  The Center's produce marketing activities will be operated by the Selma/Dallas County Small Farmers Association in the Black Belt and surrounding counties. The Federation of Southern Cooperatives will organize and train farmers in cooperative principles, practices, and operations. The Center aims to provide new opportunities, markets, and incomes for family sized farmers and to further the economic development of this depressed area. A feasibility study of the plant was conducted by staff at Auburn University.

- **Browntown Group, Autauga County**: This group is seeking assistance for doing value-added processing for Farm to School programs at Alabama State University and the Montgomery Public School System. Producers require a food hub to process produce for the institutions.

Alabama Aggregators

- Flora Brown, representing Browntown producers near Montgomery, is developing programs to supply fresh and processed vegetables to Alabama State University and the public schools of Montgomery.

- Marshall Hunt is delivering produce to a number of senior centers in Mobile and has a vision for increasing his supplies to public institutions. He hopes to have his design for a farmers' market built in Mobile and wants to link with farmers around Mobile, and in Waynesboro County in Mississippi.

- Sam Crawford at Main Street Birmingham is developing a program for supplying fresh produce to local grocery stores. He wants to link with producers to supply these markets.

- TUCCA (The United Christian Community Association) works in conjunction with the Alabama Rural Heritage Center to aggregate resale at farmers markets on a small scale. Andrew Williams is the CEO.

Alabama Distributors

- Birmingham is the center of produce distribution for Northern Alabama. A few distributors are buying from local producers. **Flavor-Pic Tomato Company**, a distributor with offices in Atlanta and Birmingham, has a contract with a group of farmers to buy their tomatoes from Sand Mountain. **Regional Produce Distributors** is another Birmingham-based foodservice distributor specializing in fresh produce and dairy products. They sell to a wide range of customers from restaurants to large institutional foodservice providers, such as school districts and healthcare facilities. **Douglass Produce Company** is another fresh produce distributor located in Birmingham that provides wholesale fresh produce to retailers and institutional foodservice operations. **Forestwood Farm Produce** in Birmingham and in Huntsville is another distributor servicing Central and Northern Alabama and Southern Tennessee. **Bama Tomato Company** in Birmingham distributes fresh produce into Louisiana, Mississippi, Alabama, and the Gulf Coast Region. The company buys from local farmers and farmers in Florida. **Alex Kontos Fruit Company** in Birmingham specializes in fresh produce. The company delivers to the entire Southeast region.

- **Kelley Foods of Alabama**: Located in Elba in Southeast Alabama, this company is a wholesale distributor offering fresh and pre-cut produce items. Their customer base includes restaurants, retailers, healthcare, government facilities, convenience stores, country clubs, schools, churches, and other foodservice operations. The company services a 150 mile radius from their facility in Elba and includes South and Central Alabama, the Florida Panhandle, Southwest Georgia, and Southeast Mississippi.

- **Fresh Produce Distributors, LLC**: Located in Robertsdale, Alabama, this distributor carries primarily citrus fruits, nuts, and other fresh fruits.

Mississippi

Mississippi Current Packing and Processing Facilities

- **Blueberry Packing Shed, B&M Blueberry Farm, Purvis, Collins and Waynesboro**: The Miss-Lou Blueberry Growers Cooperative is an organization of blueberry growers in Mississippi and Louisiana founded in 1983. The blueberry producer groups are in Southeast Mississippi. The groups sell both fresh and frozen blueberries, and the 2012 harvest is estimated at $6 million. The Miss-Lou co-op packing shed located on Luis Monterde's farm, B&M Blueberry Farm in Purvis. The farm grows 35 acres of blueberries and processes both fresh and frozen berries for about 40 area growers. State blueberry growers have two marketing facilities from which to choose, located in Collins and Waynesboro.

- **Sweet Potato Packers:** There are a number of sweet potato packing sheds in Mississippi including Penick Farms, Edmondson Farms, C&W Farm, N&W Farms, Topashaw Farm, Bailey Farm, and Perfect Pack Sweet Potato Packing Company.

- **Indian Springs Farmers' Cooperative, Petal:** The co-op has a packing shed in Petal, Mississippi. It has a cooler for storage, washing tubs, sorting tables, and other equipment for processing the produce from co-op members.

- Marks Processing Facility: The Marks facility is jointly owned by the Mississippi Association of Cooperatives and Alcorn State University Extension Program; Alcorn staff provides oversight of the facility. Alcorn State University Extension Program worked closely with the Quitman County Board of Supervisors, North Delta Mississippi Enterprise Community, North Delta Produce Growers and Association, and Mississippi Association of Cooperative to establish a fresh vegetable processing facility in Marks (Quitman County), Mississippi. This facility serves as a value-added processing, assembly-line and temporary storage facility for fresh vegetables that are either ready for immediate consumption or prepared for additional processing. The facility is not currently operating near capacity.MS Non-Operating Packing and Processing Facilities.

- **Louisville Facility**: A small facility with walk-in coolers, a grading system, and a loading dock is not currently operational. The facility is owned by MS State University. It could be put into operation to serve farmers in the Louisville area.

MS Forestry Commission Processing Facility, Waynesboro: A huge storage and processing plant is owned by the MS Forestry Commission. The facility is an old pine tree processing center that the MS Forestry Commission no longer uses for processing, but it is in very good shape. It could be used for vegetable processing.

MS Potential Future Packing and Processing Facilities

- **Wayne County Self Help Organization**: The group is considering leasing a cold storage facility for packing produce for sale by the Highway 45 Producer Organization. Marshall Hunt is looking into buying it from the facility and transport to Mobile, Alabama.

- **Packing Shed, Holmes County**: A packing shed is being discussed for farmers in Holmes County seeking funding from the Kellogg Foundation. Once in operation, an aggregator will be needed (see **Appendix D** below).

- **Family Farm Producers, Memphis**: This group is seeking assistance for renovation of a building in Memphis for preparing produce for sale.

Mississippi Aggregators

- Ben Burkett and his daughter, Damella Burkett-Winston, manage deliveries for the Indian Springs Farmer Association, but demand is greater than the current supply in Mississippi. An aggregator is needed for producers interested in selling to markets in New Orleans.

- Eubanks Produce on the Mississippi Coast in Lucedale is a family owned and operated farming business and is the largest farmer/shipper for fruit and vegetables in the state serving primarily the Gulf Coast.

- 3 Eagles Produce in Pontotoc is another fruit and vegetable aggregator that serves the region.

Mississippi: Needed Aggregators

- An aggregator is needed for Holmes County's three farmer groups. Described in **Appendix C** above, one producer group is seeking financial assistance for construction of a small packing shed sometime in 2012.

- An aggregator is needed for producers in Northwest Mississippi, selling to 16 farmers markets in Memphis, and eventually to the public school system. New North Florida Cooperative is also active in Memphis and may be an option to work with farmers in the Northwest region of Mississippi.

Mississippi Distributors

There are reported to be 34 registered produce shippers in Mississippi. Below are some of the key distributors interested in buying local produce.

- **Four Season Produce**: Located in Moss Point, this distributor has good contacts with institutional buyers and is ready to consider joint ventures with farmers in West Alabama. Four Seasons has a history of managing Farm to School accounts.

- **Coomes Distribution**: Billy Coomes supplies casinos in Mississippi. The company is interested in purchasing locally grown produce. His product selection includes cherry and grape tomatoes, squash, watermelons, and cucumbers. He is not interested in okra.

- **Cockrell Banana Company**: This wholesale produce delivery company is located in Tupelo, Mississippi, and delivers to restaurants, schools, and grocery stores in Mississippi, Tennessee, and Alabama.

- **Farmer Fresh Produce International LLC**: This full-service produce company services restaurants, grocery stores, institutions, wholesalers with conventional and specialty produce in the Southeast US. The company has facilities in Picayune, Mississippi, and Robertsdale, Alabama.

Other States

Aggregators in Multiple States

- New North Florida Produce Cooperative is working with producers in aggregating, processing, and distributing to school feeding programs and some local grocery stores. States of distribution include Florida, Arkansas, Mississippi, Alabama, Tennessee, and Georgia.

- Jamal Elhayek is a sole proprietor selling produce in the Sankofa Farmers Market in New Orleans. Jamal uses a small van to transport produce from local farmers. He is currently constructing a 7x9-foot cold storage room for produce. Mr. Elhayek is interested in handling other accounts from Mississippi.

Tennessee Aggregator/Distributor Opportunities

- Several opportunities may be available in the Memphis market to set up a food hub and/or aggregators and distributors.

Atlanta Distributors

A number of shippers/wholesalers are located in the Atlanta Farmers Market. Some distributors have trucks that distribute to accounts in the Atlanta area, and other clients buy directly off the dock. One distributor mentioned that he has 600 restaurant clients who he supplies weekly. Several key buyers said they were interested in buying produce from Alabama farmers.

- **Coosemans of Atlanta, Inc.**: This firm purchases specialty produce and will arrange a truck for on-farm pickups. About 80% of the company's produce is delivered to restaurant accounts. The buyer cautioned that specialty products can quickly saturate a "thin" market, driving down the price and hurting farmers. Produce in demand includes baby carrots and heirloom tomatoes.

- **Vasquez Produce**: The buyer for the company said there is a good market for watermelons (large and small), cantaloupes, and Cinderella pumpkins. Vardaman sweet potatoes from Mississippi have name recognition.

New Orleans Distributors

New Orleans has a number of distributors interested in purchasing local produce.

- **Louisiana Fresh**: This company is a specialty produce distributor that sells to a number of restaurants in the city.

- **Hollygrove Market and Farm**: This is an urban farm, local produce market, and community garden space. The assistant market manager, Mike Fabianski, coordinates delivery of local produce to restaurants and other institutions.

- **Jack and Jake's**: This distributor (food hub) purchases from Louisiana, Mississippi, and Alabama farmers and distributes them to customers in New Orleans. They provide local food to schools, hospitals, universities, retail markets, restaurants, caterers and institutions in the New Orleans metropolitan area, St. Tammany Parish, and Baton Rouge.

National Distributors and Wholesalers

Large buyers must be able to count on supply and to manage merchandising programs in collaboration with suppliers.

- **C. H. Robinson**: C. H. Robinson is the procurement and logistical services company for Walmart. The company provides category development services for its customers, and sources products from several growing areas. The company has been successful in adjusting its supply base to meet changing seasonal demand for produce from large buyers like Walmart. Jim Carpenter is the regional field service manager and works with farmers to coordinate their production schedules.

- **Sodexo**: Sodexo manages foodservice accounts with public school systems. Farmer groups have difficulty supplying schools directly because of these pre-existing contracts, which protect Sodexo from outside competition. Sodexo is engaged in discussions with some producer groups.

- **Broadline Distributors**: US Foods and Sysco[17] are companies engaged in the food distribution industry. Both have commented on their interest in purchasing local produce. Sysco has offices in Calera, Alabama; Jackson, Mississippi; and Atlanta, Savannah, and Forest Park, Georgia. US Foods has offices in Montgomery, Alabama; Atlanta, Georgia; and Jackson, Mississippi.

[17] More offices for Sysco are listed at http://www.sysco.com/contact-us.html. More offices for U.S. Foods are listed at http://www.usfoods.com/USFLocations.aspx.

Appendix D: Market Information

Farm Direct Sales

A wide variety of direct market outlets are widely used by limited resource farmers. The opportunity exists for farmers to be certified to accept electronic benefit transfer transactions that are key to USDA's SNAP and WIC programs.[18] Farmers can also sell produce directly to food banks.

1. **You-Pick / Pick Your Own:** Most you-pick operations are similar to gardens and situated in urban areas. Consumers themselves harvest from farm fields and orchards. You-pick operations are located all over Alabama and Mississippi.

2. **Road-Side Stands:** Limited resource and historically disadvantaged farmers are more likely to sell at roadside stands because of the ease of access and lack of entry fees. One constraint is someone has to stay in the booth to sell product. This can take time away from production activities. Roadside stands are seasonal, and the availability of produce can be erratic.

3. **Mobile Markets**: A few cities are testing mobile markets where produce is sold by a vendor traveling into designated areas on specific days of the week. Mr. Okra is a mobile vendor in New Orleans. The Hollygrove market operator in New Orleans is considering establishing a route to sell produce from a van. The Mississippi Roadmap to Health Equity project in Jackson is operating a mobile farmers market targeted to seniors.

4. **Community Supported Agriculture**: CSAs exist all through the states of Mississippi and Alabama. For example, the Hollygrove Farmers Market has 60 shareholders who purchase at the market on Saturday from a set selection of produce. The cost is $25 per box. For a list of CSAs, visit http://www.localharvest.org/csa/ and choose a state.

5. **Community organizations**: The following community organizations aim to link with sustainable supplies of produce from farmers groups in Mississippi and Alabama:

- **New Orleans:** Emery Van Hook of Market Umbrella, Inc. and Rashida Ferdinand of Sankofa Market.

    - **Memphis**: Chris Peterson of GrowMemphis supports farmers markets in the area.
    - **Birmingham:** Sam Crawford at Main Street Birmingham.

6. **Farmers Markets:** This is the most popular outlet for limited resource farmers. Alabama has 87 farmers markets, and Mississippi has 52.[19]

[18] SNAP is an acronym for Supplemental Nutrition Assistance Program. WIC stands for Women, Infants, and Children.

[19] For a map of Alabama farmers markets visit http://www.fma.alabama.gov/FMCounty.aspx. A list of Mississippi farmers markets can be found at http://msucares.com/crops/market/farmersmarkets.pdf.

- **Atlanta Wholesale and Farmers Market**: This is a terminal market for produce for the Atlanta area. The location is both for the commercial wholesale industry (distributors) and for smaller wholesalers.

- **Montgomery:** There are three markets in Montgomery. The Fairview market is owned by Alabama State University and operated by producers from the Browntown Association. The other two markets are operated under the supervision of Wright's Produce.

- **Main Street Birmingham:** The Main Street Birmingham project promotes the supply of fresh produce to low-income neighborhoods. The organization is experimenting with setting up farmers markets in different parts of the city. It is expected that this will benefit urban farmers.

- **New Orleans:** The city has a number of farmers markets. These markets are open on certain days of the week. Three important markets are the Crescent City, Hollygrove, and Sankofa markets.

- **Memphis:** Memphis has four markets in the city: at the botanical garden, train station, mid-town, and downtown. Several farmers in North Mississippi supply to these farmers markets.

- **Nashville**: The city built two modern buildings—one for vegetables and a second for flowers. These markets operate daily.

- **Jackson**. Two farmers markets operate in the state under the auspices of the Department of Agriculture and Industries.

7. **Food Banks**: Food Banks serve the food needs of low income households. Food is both donated to and purchased by these banks. Several food bank operators mentioned their willingness to buy produce. Though not technically a "direct to consumer" model, food banks are likely to accept produce without the stringent standard that standard wholesale buyers require. Kathryn Strickland of the North Alabama Food Bank said that food banks have an interest in the development of the local food economy in North Alabama. The group aims to seek assistance from the Alabama Department of Agriculture and Industry and the governor to fund this concept because of its economic potential.

One important revenue stream for direct sales for some farmers is electronic benefit transfer (EBT) transactions. For consumers on USDA's SNAP and/or WIC programs to buy from farm vendors using their benefits, the vendor must have an EBT machine. There are monies available from the US government to assist in purchasing EBT machines.

Wholesale Markets

There are a few wholesale markets in Alabama and Mississippi. The USDA Agricultural Marketing Service cataloged and described each of the following markets in its 2003 publication, The Green Book: Produce Market Information Directory. The Green Book includes maps of each market.

Alabama

Jefferson County Truck Growers Association: This market is located at 344 Finley Avenue, West, in Birmingham, Alabama. The market opened in July 1956. It is 37.4 acres and is a combination of wholesale, terminal, shipping point, and retail operations. There is also a restaurant located in the market.

Montgomery State Farmers' Market: This market is located at 1655 Federal Drive in Montgomery, Alabama. The market opened in 1986 and is located on 28 acres. There is a combination of wholesale and retail operations here. The market includes a restaurant, garden center, and truck scale.

Mississippi

Mississippi Farmers' Central Market: This market in Jackson, Mississippi, was opened in 1948. Located on 24 acres, it is a combination of wholesale and retail operations. There is on-site parking for truckers, a truck scale, a restaurant, and a gas station.

Retail Sales

Local Grocery Stores

A number of grocery stores are interested in purchasing from local farmers. The requirements are not as stringent as at the larger national chains, and these stores will accept deliveries.

Atlanta: Sevananda Natural Foods Market is a specialty grocery store. The produce manager is interested in purchasing local produce. Other specialty grocery stores are located throughout Atlanta. It will be necessary to have a distributor to develop these accounts.

Birmingham: City Meats & Vegetables is a grocery store in the inner city that purchased produce from local producers last summer, but stopped after the Alabama immigration law passed. The produce buyer is interested to continue purchasing locally this summer.

Jackson: Rainbow Natural Grocery Cooperative is a cooperative store that is currently purchasing from a few local farmers. The potential exists to supply more produce to the store, as much is currently shipped in from California and Mexico.

Montgomery: Fresh Market is an up-scale supermarket with five stores in Alabama. The produce manager mentioned an interest in purchasing local produce. Items needed include peaches, berries (strawberries and blueberries), collards, and kale. The store will accept direct delivery from farmers.

New Orleans: The New Orleans Food Co-op recently opened in the Upper 9th Ward. The retail outlet purchases produce from Indian Springs Farmers Association. Another local chain retailer is BreauxMart, which carries a good selection of produce.

Regional Chains

State and regional grocery chains are potential markets for local farmers. Piggly Wiggly, Calhoun Foods, Food Tiger, Food Depot, Food Outlet, Grocery Outlet, Save-A-Lot, and Hometown Grocery are some of the local retailers. A central warehouse distributor generally supplies these stores. It would be necessary to network with these distributors. Two distributors in Birmingham are Associated Grocers and A.G. Grocery. A local chain in the Jackson area is McDade's Market, which has several stores.

National Supermarket Chains

Trader Joe's: Trader Joe's is located in Atlanta and Nashville. An Atlanta store was visited for this study. The process for approval as a vendor is time consuming and requires a number of certifications. In the produce section, the main suppliers were large national brand suppliers.

Costco: Costco has certain protocols for a farmer to become a vendor. All vendor decisions are made out of the West Coast office. The chain has two store formats: a grocery store format that caters to the household segment, and a business center format supplying restaurants and businesses. The latter has a higher-end but smaller product selection. It would be necessary to follow up with a produce buyer.

Walmart: The company has distribution centers in the Southern region. The Opelika distribution center supplies 100 stores with watermelons and peas. C. H. Robinson is the buying agent for Walmart. Farmers are in contact with the company on planned buying programs. Walmart bought from 142 growers in the South in 2011, purchasing blueberries (67 growers), melons (13), chili peppers (9), tomatoes (21), okra (10), sweet corn (10), and herbs (6). The value of the produce was $33 million.

Whole Foods: Whole Foods has one store in Birmingham, eight in Georgia, three in Louisiana, and four in Tennessee. The chain is considering opening a store in Jackson in 2013 with other store openings planned in the region. The Whole Foods distribution center is located north of Atlanta and serves the Southeast region. A center in Austin serves the Southwest region, which includes Texas and Louisiana. The store and distribution managers have been very positive about procuring local produce from growers.

The challenge for farmers working with Whole Foods is to price appropriately and to deliver produce in small quantities to its stores. In the case of Louisiana, certain core groups of farmers already supply Whole Foods. The next challenge will be supplying organic products. Conventional products are saturated at this time. Farmers could consider different crops (for instance, hydroponic crops and varieties with unique qualities) but only small quantities of these are needed. Watermelons are slated to come from Washington Parish in Louisiana and are a market that will be hard to break using Mississippi product. Purple hull peas are needed in only small quantities. Blueberries and strawberries are flooding the market in Louisiana, and Whole Foods has a few strong suppliers there. The chain can source organic blueberries from Mississippi, but there is no similar opportunity for blackberries.

Foodservice

Farm to School Programs

State inspection and Good Agricultural Practices (GAP) certification requirements have prevented some Mississippi farmers from participating in the statewide Farm to School program. This limits the economic opportunities for small farmers throughout the state. Until now, several barriers have made it challenging to operate a Farm to School program in Mississippi:

- Small- and mid-sized farmers may not have the equipment or required certification to participate in statewide purchasing programs. It is necessary to check what each school district requires in the way of record keeping and inspections.
- Farmers and foodservice directors do not communicate with each other and may not be aware of the opportunities presented by Farm to School programs.
- Most school foodservice directors in Mississippi do not have any experience in purchasing products directly from farmers and may not know how to start or that they are allowed to purchase fresh produce in this way.
- Schools are often not equipped to buy and prepare local products.
- Many school systems in Mississippi are extremely small and located in rural areas. As a result, an individual school district may not have enough demand to attract farmers.

Some produce items that seem to be most amenable to farm to school programs are collard greens, sweet potatoes, green beans, watermelons, berries, and salad mixes.

Jackson: The New North Florida Cooperative, for the Indian Springs Farmers Association, executed a trial shipment of produce to the Jackson public school district starting in spring 2012.

Memphis: The public school district has a budget of about $100 million a year for food procurement and has set a target of using 24% to purchase local food. The school system has a breakfast, lunch, and after-school feeding program.

Montgomery: Leaders of the Autauga producers are in discussions with Alabama State University, which owns the farmers market near campus. Similar discussions are underway with the Montgomery public school district for the Browntown Farmers Group to supply the school district. Dr. Booth at the university has agreed to introduce farmers to food buyers in the Montgomery public school system.

Regional: New North Florida Cooperative aggregates, does light processing, and sells to schools throughout the South. The cooperative has been very successful with its approach and could serve as a model to help lead other groups.

Restaurants

Some chefs in larger cities have a reputation for promoting and purchasing local produce. In New Orleans, chefs either buy directly from area farmers markets, or they arrange for a company (e.g. Louisiana Fresh) to deliver produce to the restaurant. In these markets, farmers need a distributor who is willing to take on their accounts and promote their produce to restaurants.

Birmingham: Several well-known chefs in Birmingham are interested in purchasing local produce. Chris Hastings is the chef and owner of Hot and Hot Fish Club. Frank Stitt, a James Beard Awardee,[20] owns the Highlands Bar and Grill. Both chefs promote the use of local produce on their menus.

New Orleans: The owner of Tartine restaurant near Crescent City Farmers Market is interested in purchasing local produce from the farmers market. The staff of Hollygrove is interested in expanding their list of restaurants to supply with fresh vegetables.

Mississippi Hospitality & Restaurant Association: This association is developing a memorandum of understanding for restaurants to buy local produce whenever possible. Eat Healthy Mississippi is encouraging restaurants to purchase locally grown products. Farmers can build a relationship with chefs to supply seasonal produce throughout the year.

Cracker Barrel and Piccadilly: These are restaurant chains in the southern United States which serve Southern-style produce (e.g. collard greens, purple-hull peas, etc.). The chains purchase in volume and will buy canned and frozen products in industrial package sizes to keep food costs low.

Casinos

The 14 casinos located in Mississippi require large amounts of produce on a regular basis. Foodservice managers have an interest in purchasing locally. The foodservice manager of one casino, Ameristar, referred their distributor, Coomes Produce in Vicksburg. Mr. Billy Coomes expressed an interest in purchasing Mississippi-grown produce.

[20] James Beard Awards are given annually in a number of categories. The Outstanding Restaurant and Outstanding Chef categories are considered the highest honors. Chris Hastings of Hot and Hot Fish Club has also been nominated for Best Chef multiple times.

Appendix E: Farmer Groups

Producer Groups in Alabama

Al Hooks Farm. Mr. Al Hooks and his son, Demetrius, grow and pack vegetables for local farmers markets, local restaurants, supermarkets, and the Walmart program for purple hull peas. Other farmers bring produce to their facility. Mr. Hooks constructed a processing room with federal grant funds. They currently use stand-alone refrigerated trailers to store products before shipping.

Browntown Producers Association. This group of farmers is located in Autauga County and has a long history as a production group. The producers require cooling infrastructure for reducing field heat to enable them to better supply the market. Farmers act individually but did mention an interest in sharing equipment and purchasing inputs. Ms. Flora Brown from the Browntown community is the manager of the farmers market in Montgomery. The group is interested in cooperating on input supply programs as well as serving as an aggregator for produce for the Farm to School program in Montgomery. The farmers grow leafy greens in the winter, and squash, okra, tomatoes, and potatoes in the summer. Their main market outlets are farmers markets and C. H. Robertson, which purchases for Walmart stores.

Greene-Sumter County Producer Group. Mr. Childs is the contact person for this group of 12 farmers. Each member has between 5 and 10 acres of land. The main crops are greens, sweet corn, watermelon, okra, tomato, peas, and sweet potatoes. The group meets regularly and is looking for ways to share information and purchase inputs in bulk, such as chicken manure. Mr. Childs has the only hoop house in the group; he is also building a cold storage facility on his farm from used panels and equipment. Mr. Childs sells mainly in local farmers markets and directly from his farm. He sells watermelons to local schools in the fall.

Randolph County Producers. Mr. Gene Thornton operates Sneaky Crow Farm north of Auburn in east central Alabama. There are eight members in the group. Mr. Thornton has a high tunnel and grows winter and summer vegetables. His farm is certified organic. Farmers markets are the main sales outlet.

Selma-Dallas County Small Farmers Association. This cooperative has about 15 active members. Producers sell directly to markets and contract with C. H. Robinson. Only about half the active farmers have adequate access to working capital. Members of the group need to irrigate because of the growing uncertainty in rainfall. The group wants to enter into contracts with Walmart, but it requires implementing good agricultural practices such as hand-washing stations and restroom accommodations for farm workers within the production fields. The group needs support to move large amounts of leafy greens during the fall and winter months, and will require access to capital.

South Alabama Food Network and the Highway 45 Farmers' Market. Mr. Marshall Hunt started the South Alabama Food Network and the Highway 45 Farmers Market. At this point Mr. Hunt has built relationships with Four Season Produce, Inc., which is a produce broker in Moss Point, MS. This relationship could jump start sales to institutional accounts. Four Seasons has a history of serving Farm to School accounts. Mr. Hunt has developed linkages with fruit and

vegetable producers in Mobile and Baldwin Counties that have the capacity to help supply accounts that have been obtained by limited resource and socially disadvantaged producers.

Farm Group Name	No. of members in group	Produce Grown	Average Acres	Number No. of Hoop Houses	Primary Markets
Al Hooks Farm	Family operation	Peas, greens, tomatoes, pepper, beans squash	50	None	C.H. Robinson, Farmers Markets
Alabama Rural Heritage Foundation, Thomaston, AL (West Alabama)	10-12	Pepper, greens, okra greens, beans, tomatoes	1-2	1	Local Farmers market, Direct sales
Browntown Producers Association (Autauga County)	25-30	Peas, greens, water melons, okra, squash	30-40	None	C.H. Robinson, Direct sales, Farmer markets
Greene-Sumter County Farmers Market Cooperative	10–12		10-12	1	Sells on the farm, farmers market
Mockingbird Farm Perry County West, Alabama	Family Operation	Mixed greens, herbs, spinach etc.	2-3	1	CSA, direct Sales
Randolph County (Gene Thornton)	5-10	Greens, peas, potatoes, squash, beans	5-10	1	Farmers market, Direct sales
Sand Mountain Farmers	15 Farmers				Other farmers
Selma-Dallas County Cooperative	15 total 5 active	Greens, water melons, peas	25	2	C. H. Robinson, Farmers Market Direct Sales
Southeast Alabama Cottage house	Family Operation	Greens, beans, squash, mixed greens, herbs	2-5	1	Direct sales, Farmers market
Southeast Alabama Snell Farms naturally grown produce	Family Operation	Watermelons, greens, peas, beans, peanuts	25	2	Direct sales, Farmers Markets
Southeast Alabama River Road Coop	6-12	Water melons, peas, beans, greens	20-30	1	Direct sales, Farmers markets
Sundown Ranch (West Alabama) Jacob Waddy	Three farmers work together	Okra, peas, Squash, corn, greens	5-10	2 existing 2 ready for Construction	Farmer market, Direct sales, C.H. Robinson

Producer Groups in Mississippi

Attala County Self-Help Cooperative. Attala County Self-Help Cooperative, established in 2005, is a group of about 25 farmers who produce crops such as greens, corn, and peas as well as raise cattle, chickens, and goats. They also own one hoop house. The co-op aims to preserve

rural resources in central Mississippi through the use of educational outreach programs that target small landowners with limited assets. The group has a strong youth component and desires to bridge the generation gap in farming. The president is Mr. Jessie Fleming of Sallis.

Beat Four Cooperative. This cooperative, established in 1973/74, is located in Noxubee County in the town of Shuqualak. There are 35 members. Producers are primarily "truck farmers" who specialize in okra, peas, and Southern peas. Ms. Jessica Foxx and Mr. John Williams serve as leaders of the cooperative. They sell in at the Noxubee County Farmers Market and also work with the Beat Four Farm Cooperative Youth Project. The co-op could better utilize their resources as members are not growing in large quantities as a whole.

Real Food Gulf Coast. This nonprofit works to increase local food production along the Central Gulf Coast and engages in education and policy advocacy in matters concerning local food and sustainable agriculture. The organization manages the Long Beach Farmers Market and the Ocean Springs Fresh Market, both made up of small and sustainable local farmers. According to Ms. Diane Claughton, director of the 90% of the farmers earn less than $12,000 per year.

Family Farmers' Cooperative. This group has 37 farmers with 12 active growers. The contact person is Mr. Andre Mathews of Memphis, Tennessee. The group is seeking marketing contracts for their produce. Last year, the members sold to facilities in Petal and Marks. Mr. Matthews takes produce to farmers markets in Memphis and to communities of senior citizens. He also sells at markets in Oxford and Holly Springs. The group has a building in Memphis, which could be used for preparing fresh produce for institutions and restaurants.

Holmes County Co-op. This group is newly formed in Cruger. Products sold include peas, sweet corn, watermelons, mustard greens, collard greens, turnip greens, tomatoes, and mushrooms. The co-op's members are interested in joining with other groups to market their produce. The packing shed at Marks has a contract to purchase their produce for the Walmart pea program. Farmers have submitted 50 applications for government assistance for hoop houses. The group plans to build a processing facility later in 2012 with assistance from the Kellogg Foundation.

Indian Springs Farmers Association. Formed in 1978, this cooperative has three-dozen members with an average farm size of 20 acres in Southern Mississippi. Major crops include greens, kale, okra, watermelon, tomatoes and squash. They own a $500,000 packing facility in Petal that enables them to box, market, and truck their produce to a wide variety of wholesale and retail buyers in the US Markets include direct-to-consumer markets (i.e. farmers markets), and also wholesale markets, including foodservice distributors Sysco, Albertsons, and US Foods. This association is featured in the Field Guide to the New American Foodshed.[21]

Mileston Cooperative Association. This cooperative,[22] located in Mileston in the Mississippi Delta, is one of the oldest in Mississippi serving African-American farmers. The co-op sells to

[21] The Field Guide to the New American Foodshed site offers one-page planning, decision trees, case studies, and other information.

[22] This cooperative was featured in an NPR article, Tackling Obesity Amid Poverty in a Mississippi County, by Debbie Elliot on August 9, 2011.

local markets and also provides fresh produce to nutrition programs in the region. Calvin Head is the point person for the producer association. Twelve members of the cooperative grow produce including peas, sweet corn, watermelon, cantaloupes, yellow squash, okra, greens, sweet potatoes, and Irish potatoes. In 2013 the group will have peaches and blueberries available. All 12 members expect to receive hoop houses within this year. Total annual sales have been $100,000. A packing shed is expected to be constructed in late 2012 with funding from the Kellogg Foundation.

Mid-South Progressive Agricultural Group. Located in Holly Springs, this new community-based organization was created to meet the needs of at-risk farmers. It aims to aid African-American and other minority farmers losing their family farms. There are 20–22 members, most who are women farming 2–10 acres. The group has nine greenhouses. The farmers market in Holly Springs is an outlet for their produce operating on Saturday at the courthouse. Some discussion is taking place on constructing a processing facility in Marshall County.
The group offers training in farm management, educational and financial seminars, farm assistance, grant application assistance, financial report assistance, and other forms of training. Evelyn Cummings is the point of contact.

Mississippi Delta Southern Rural Black Women in Agriculture. This organization under the leadership of Bonita Conwell was started 6 to 7 years ago as an umbrella organization under the Children's Defense Fund. Members are made up of women in five counties in the MS Delta who agreed to preserve the land and generate income as a cooperative. The chief crops include sweet potatoes and greens. Combined they farm 50 to 75 acres. The group has a partnership with an organization, the Delta Conservation Demonstration Center, in Greenville, which provides land and equipment, and the Delta Research and Extension Center in Stoneville. They have received support from Alcorn University and Mississippi State University, which helped them with market access, as well as from W.K. Kellogg and Ford Foundations.

North Delta Produce Growers Cooperative. Operating since 1994, this cooperative currently has more than 60 members located in nine counties: Bolivar, Coahoma, Grenada, Lafayette, Panola, Quitman, Sunflower, Tallahatchie, and Tunica. This co-op uses a processing facility in Marks equipped to process greens, beans, peas, okra, squash, cabbages, and sweet potatoes. They also have a refrigerated truck to transport produce to markets. Mississippi Association and Alcorn State University Extension Program own the processing facility. C. H. Robinson is working with the cooperative on contracting for watermelons and purple hull peas.

South Rankin County Farmers Association. Founded in 2002 with 10 members, this nonprofit is dedicated to educating, engaging in, and promoting more efficient methods of production/breeding, growing, storage, processing, marketing, and distribution of agricultural produce and livestock. The co-op has since grown to 37 members. Key crops include greens, squash, zucchini, and eggplant. Located in Florence, the group has acquired 25 acres of land and constructed a shed for storing equipment, a silo for livestock feed, and a meeting room for its members. Twenty members have been trained in vegetable production and marketing. The group has a strong orientation to supporting youth in agriculture. Farms purchase in bulk and sell to members at reduced prices. Markets include farmers markets and grocery stores.

Wayne County Self Help Organization. This is the Wayne County Chapter of the Winston County Self-Help Cooperative located in Waynesboro. Main crops grown include tomatoes, watermelon, peas, squash, okra, and potatoes. There are 20 to 30 farmers in the organization with an average farm size of 10 to 15 acres. Markets include direct sales, farmers markets, and grocery stores. Sales averaged $80,000 in 2011. The cooperative and its leadership invited other fruit and vegetable producers to participate in a fact-finding venture to determine farmer's needs. Farmers want to grow and sell produce to an aggregator and receive payment up front. Producers need access to capital, stable markets, and infrastructure such as irrigation systems. The group is considering leasing a cold storage facility belonging to the Mississippi Forestry Commission, which could serve as a distribution center for West Alabama and East Mississippi.

Winston County Self Help Cooperative, Jackson, Mississippi. This group formed in 1985 to help small farmers to purchase and sell in bulk with the goal of creating sustainability in rural communities by connecting with USDA and other organizations to provide services in a timely manner. It is currently under the leadership of Frank Taylor. The cooperative has 40 to 50 members with an average farm size of 25 to 30 acres. Main crops include peas, greens, watermelon, beans, and tomatoes. Markets include farmers markets, direct sales, and some area casinos. The group needs access to stable markets for members' produce, and access to irrigation, cooling facilities, and transportation. Members mentioned the need for training and helping to transition youth into the fruit and vegetable production.

Appendix F: Supporting Organizations

Local organizations play a key role in promoting local and regional healthy food initiatives. These organizations can be called on as collaborators toward building a healthy food system.

Community-Based Organizations

Community-based organizations are active in several cities to establish gardens, markets, and other activities to improve the health of low-income residents. These groups support sustainable food systems.

Organization	Activity	Location	Contact Person
Jones Valley Teaching Farm	Community garden and school education program	Birmingham, AL	Grant Brigham
West End Community Gardens	Community garden and awareness building	Birmingham, AL	Ama Shambulia
Raise 'em Right Agricultural/Horticultural Self-Development Program	Community gardens in Anniston, AL	Anniston, AL	Derek Muhammad
WAS Youth Community Garden Club.	Community garden and hoop house assisted by V. Khan	Hobson City, AL	Elijah Moore
Hampstead Institute	Community Garden and outreach to schools	Montgomery, AL	Edwin Marty
Mississippi Roadmap to Health Equity Project	Garden, Food Corps and community engagement	Jackson, MS	Willie Nash, Mgr.
Our School at Blair Grocery	Community garden in the 9th Ward	New Orleans, LA	Jamie Katz

Food Policy Councils

Food policy councils in Mississippi and Alabama are addressing issues of obesity and health problems in underserved segments of the population, and supporting legislation for a healthy food system.

Alabama Food Policy Councils

Three councils are developing in Auburn, Birmingham, and North Alabama. These councils aim to increase local economic development, improve the environment, and advance food security and community health.

Mississippi Food Policy Council

The mission of the statewide MS Food Policy Council is to advocate for food and farm policies that build healthy communities and strengthen local food systems. A wide variety of nonprofits, associations, universities, government agencies, individuals, and other organizations are involved. The council is promoting Farm to School programs and the wide use of SNAP and WIC benefits at farmers markets using electronic benefit transfers.

Education and Research

Several colleges and universities, including Tuskegee, Auburn, Alabama State, and Alcorn State, offer outreach programs to communities.

Alabama A & M University

The 2501 project (Small Farm Outreach Training & Technical Assistance Program) at this university received its first funding in 1994. The overall goal of the 2501 project is to provide technical assistance and training in record keeping, and delivery of production and marketing information to farmers not reached by traditional extension programs. The project's service area includes 12 counties in northern Alabama.

Alabama State University

The university owns the building where the local farmers' market operates. Discussions have taken place on linking the market's growers with university foodservice.

Alcorn State University

The Alcorn State University Small Farm Development Center provides technical assistance to the North Delta Produce Growers Association, other agriculture-based cooperatives, as well as individual farmers in Mississippi. The center has established a system to deliver managerial and technical assistance to small farms using the resources of local, state, and federal government programs; various segments of the private sector; and universities and colleges throughout the state. Alcorn State University conducts vegetable research at the Mound Bayou station in Bolivar County. The Marks processing facility is jointly owned by the Mississippi Association of Cooperatives and Alcorn State University Extension Program, and Alcorn staff provide oversight of the facility.

Auburn University

A number of professors in the College of Agriculture provide services to small fruit and vegetable farmers. The state representative for MarketMaker is Dr. Deacue Fields in the Department of Agricultural Economics and Rural Sociology, who directs a team to train farmers in market-ready activities.

Mississippi State University

Drs. Evans, Sheffert, and Hood are among the university faculty and staff who work with limited resource farmers. Dr. Evans is at the research station working in vegetable and fruit production

and does outreach to groups of farmers on GAP and GHP. Dr. Sheffert is engaged with Annie's Project[23] supporting women's groups to improve their livelihoods. Dr. Ken Hood, the state representative for MarketMaker, directs a team implementing training in market-ready activities.

Tuskegee University

Tuskegee University is another recipient of the USDA's 2501 Small Farmer Outreach, Training and Technical Assistance Program. The overall goal of the program is to encourage and assist socially disadvantaged farmers and ranchers to own and operate farms and ranches and provide information on loan application and farmer programs. A key resource is Victor Khan, who is a plant breeder and researcher at Tuskegee. He is a specialist on the construction and operation of low-cost hoop houses.

Resource Conservation and Development Councils

Resource conservation and development (RC&D) councils are nonprofit rural development organizations located throughout the United States. Each state has a number of RC&D districts. These councils had received funding from USDA/NRCS until 2011; each office is now autonomous and is expected to seek its own funding to be self-sustaining and to carry out its plan of work using other partnerships and fund-raising strategies.

An RC&D council conducts outreach programs for limited resource farmers. Alabama has nine RC&D councils. The Ala-Tom RC&D Council is strong and moving forward. One of its strongest projects is its micro-revolving loan fund. Created in 1996 with a $50,000 grant from USDA, this fund has supported small farmers with short-term loans throughout the state of Alabama and some surrounding states. The council's loan committee has learned how to manage the loan fund well with very few losses, while working with socially disadvantaged and high-risk farmers. The council would like to serve as a model for providing farmers with access to capital.

State Government Programs

1. Alabama

The state established a Farmers Market Authority to assist in the marketing of agricultural products by providing information, leadership, and modern facilities necessary to move agricultural products from the farm to the consumer.

2. Mississippi

The Department of Agriculture and Commerce supports farmers markets and industry. One of the most progressive markets is the Jackson farmers market, which is surveying its clientele and considering innovative ways to interact using social media.

[23] "Annie's Project" is a national risk management education program designed for women who are interested in farming and ranching.

USDA, NRCS, and Other US Agencies

Outreach and Assistance for Socially Disadvantaged Farmers & Ranchers Program

The primary purpose of the Outreach and Assistance for Socially Disadvantaged Farmers & Ranchers Program (formerly the "2501 Program") is to enhance coordination of outreach, technical assistance, and education efforts to reach socially disadvantaged farmers and ranchers and to improve their participation in the full range of USDA programs.

Environmental Quality Incentive Program

The Environmental Quality Incentive Program is a cost-share incentive program administered by USDA/NRCS. The program has several pots of funds focused on helping socially disadvantaged, limited resource, and new and beginning farmers. These categories have a cost-share incentive of up to 90%. The program can help with costs for high tunnels, hoop houses, micro irrigation, organic farming, and conservation activity plans.

SNAP and WIC Programs

SNAP and WIC are important federal programs addressing food and nutrition needs of low-income people by providing food vouchers for produce. Sellers can use an electronic benefit transfer machine to accept SNAP and WIC payments. This makes healthy foods more readily available to vulnerable groups.

Agricultural Marketing Service

The Agricultural Marketing Service at USDA has programs and grants to support limited resource farmers with direct marketing activities. Farm-to-market, food hubs, distribution infrastructure, and market news reports help small farmers to better access markets. AMS has grants and cost-share programs available to help small producers.

Nonprofit Organizations

Alabama Sustainable Agriculture Network

The Alabama Sustainable Agriculture Network is a statewide 501(c)3 nonprofit organization dedicated to promoting the development of community food systems in Alabama that will conserve natural resources, support family farmers, and provide access to healthy and nutritious food for all citizens. To that end, the network provides direct technical support to farmers wanting to grow for local markets. The organization strives to increase public awareness on the importance of locally grown food, and supports local and regional grassroots organizations that support sustainable farmers and community foods systems.

Delta Fresh Foods Initiative

Delta Fresh Foods, an initiative funded by WhyHunger, is a project that works in 18 to19 counties to build comprehensive, sustainable, community-driven food systems that strengthen the local economy and promote healthy lifestyles in the Mississippi Delta. Judy Belue is the project director.

Delta SEEDS

Delta SEEDS is a nonprofit based in Jackson, Mississippi that is devoted to eliminating food deserts in poor areas of the state. Their work is primarily in Holmes County. Projects aim to increase healthy food access, get fruits and vegetables into schools and community centers, among other initiatives.

Emerging ChangeMakers Network

Founded in 2005, this organization with headquarters in Mobile currently has 350 members. The organization has two years remaining on a grant from the Ford Foundation (see below). Its target area comprises 17 counties in the Black Belt region of Alabama, where it focuses on agriculture and cultural heritage. Efforts are underway to identify entrepreneurs in the food industry to match with commercial lenders.

Feeding America Program

The Feeding America Program supports food banks in Alabama and Mississippi by facilitating their food intake. Other state agencies also work to support these food banks; for example, the Farm Bureau may provide financial assistance for food banks to buy surplus food when it becomes available.

FoodCorps

This national program supports the use of gardens to supply schools. Volunteers under FoodCorps work for a year to support improved food systems. FoodCorps in Hinds County, Mississippi, promotes Farm to School programs.

Ford Foundation

The Ford Foundation supports a program targeted at poor areas called Wealth Creation in Rural Communities. The Black Belt and Mid-South Delta areas have chronic poverty. Eight grantees received funds to explore opportunities for small value chains. It is possible that value chain construction grants will be awarded after the preliminary value chain studies are completed, however the future of the program is uncertain. A team of McIntosh Seed (John Littles) and Rural Support Services (Thomas Watson) is facilitating the work of the value chain groups.

As a complement to its wealth creation program, the Ford Foundation is funding Emerging ChangeMakers (see above), to identify financial and other resources to support value chain projects.

W.K. Kellogg Foundation

The W.K. Kellogg Foundation has chosen Mississippi as one of three priority states in the nation. Although its grant making in the state is just ramping up, the foundation does currently support a Farm to School program with $100,000 over two years. In addition, the foundation is funding Emerging ChangeMakers to link producers to markets, as well as the Mississippi Roadmap to Health Equity.

Mississippi Association of Cooperatives (MAC)

The Mississippi Association of Cooperatives was established in 1972 as an affiliate of the Federation of Southern Cooperatives / Land Assistance Fund. A nonprofit organization, the association serves farmers, their families, and communities in increasing their livelihood security and improving quality of life. The MAC provides technical assistance and advocates for the needs of its members in the areas of cooperative development and networking; sustainable production; marketing; and community food security. The MAC is the parent organization of the Mississippi Center for Cooperative Development.

Member organizations of this association include nine cooperatives, credit unions, and two associate organizations, all community-based groups located across the state. Those involved in agriculture use diverse production and marketing strategies. Popular crops include watermelons, southern peas, okra, leafy greens, and sweet potatoes, among others. Member organizations market their goods through a wide variety of avenues such as farmers markets, grocery stores, and distributors.

Produce for Better Health

The Produce for Better Health Foundation, United Fresh, and Produce Marketing Association have played a leading role in stimulating public policy change. The Produce for Better Health Foundation also has active online consumer communication programs, including using social media, and is targeting young mothers with tools for including more fruits and vegetables in their family's diets.

Southern Echo

Southern Echo is a leadership education, training, and development organization founded in 1989 and based in Jackson, Mississippi. It helps facilitate grants and training in Winston, Holmes, and Carroll Counties. Its contact person is Hollis Watkins.

Gaining Ground Sustainability Institute of Mississippi

The Gaining Ground Sustainability Institute of Mississippi is a statewide educational, research, and outreach network. Its interdisciplinary focus is on improving quality of life through sustainable building, farming, recreation, and conservation practices. The institute collaborates with Mississippi State University, private businesses, and local volunteers, focusing on showcasing advances in ecological design, environmentally sound farming, and forestry practices, and in sustainable living through research, scientific inquiry, community service, regional outreach, and tourism. The institute is currently establishing a sustainable agriculture network in Mississippi.

Southern Sustainable Agriculture Working Group

The Southern Sustainable Agriculture Working Group (SSAWG), founded in 1991 by a diverse group of leaders committed to just and ecological farm practices, is distinguished by its efforts to bring sustainable food solutions to farmers, families, and communities in the southern United States. This working group has provided education and outreach to more than 10,000 farmers

and food advocates and linked with more than 150 organizations in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

WhyHunger

Founded in 1975, WhyHunger is a leader in building the movement to end hunger and poverty by connecting people to nutritious affordable food and supporting grassroots solutions that inspire self-reliance and community empowerment.

Appendix G: Mississippi and Alabama Local Food System Map