Reducing Obesity and Fostering Economic Development Through Farm to School: Analysis and Recommended Actions

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Reducing Obesity and Fostering Economic Development Through Farm to School: Analysis and Recommended Actions

Nathan Rosenberg
Harvard Law School Class of 2011
January 8, 2012
Combined Course and Third Year Paper
Using Mississippi as a case study, this paper describes the potential for expanding farm to school and provides recommendations for state and local actions to encourage its growth. Part I provides a brief background of farm to school programs in the United States and the benefits of such programs to education, children’s health and economic development. Part II reviews federal regulations and statutes relevant to farm to school programs and discusses new federal legislation designed to encourage farm to school activities. Part III provides an overview of school food purchasing, including coverage of the extent to which schools currently purchase local and regional agricultural products. Part IV reviews some of the barriers that could come into play when implementing farm to school programs in Mississippi. Part V is comprised of studies of farm to school programs implemented elsewhere at the local, state and regional levels. Part VI is an overview of measures that legislatures across the country have taken to support farm to school programs. In Part VII, the paper concludes with a description of actions nonprofit organizations and the state government can take to promote farm to school activities in Mississippi.
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I. Overview of Farm to School

Background

Farm to school is a term used to refer to any initiative that connects K-12 schools with regional or local farmers or agricultural products. Although farm to school efforts originally emphasized purchasing products and conducting educational activities with local farmers, school gardens have emerged as an opportunity component of farm to school as well. The objectives of Farm to School include improving student nutrition; providing support for education on health, nutrition and agriculture; supporting economic development of local farmers, local food systems, and economies; and introducing healthy and local foods into school cafeterias, classrooms, and curricula.

The first farm to school pilot projects started in California and Florida in 1996. In 2000, the United States Department of Agriculture (USDA) financed the National Farm to School Program, a four-year project supporting farm to school program development, research, and policy. Encouraged by the program’s success, farm to school organizers from around the country worked together to create the National Farm to School Network in 2007. The National Farm to School Network’s eight regional lead agencies and national staff support farm to school programs through publications, technical assistance, online resources, research, and other

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4 National Farm to School Network, Farm to School Chronology, supra note Error! Bookmark not defined..
5 Id.
initiatives.\footnote{See National Farm to School Network, \textit{Major Accomplishments 2007 Onwards}, available at \url{http://www.farmtoschool.org/files/publications_272.pdf} (last visited Dec. 28, 2011).} Between 2000 and 2004, the number of farm to school programs grew from only a handful to approximately 400 in twenty-two states.\footnote{National Farm to School Network, \textit{About Us}, supra note Error! Bookmark not defined..} Since then, the number of farm to school programs has more than doubled every few years, with approximately 1,000 programs operating by 2007 and over 2,000 by 2010.\footnote{Id.}

The number of programs is likely to continue to grow rapidly as government officials highlight the potential for farm to school programs to play an important part in rural development and in reducing childhood obesity.\footnote{USDA Secretary Tom Vilsack’s statement that farm to school offers “new income opportunities for . . . farmers and ranchers” and supports “off-farm jobs in rural America while giving children the opportunity to eat healthy, local fruits and vegetables and learn to be healthy eaters” is typical. Michael Gibney, \textit{Tester and Vilsack Discuss Farm to School Program in Bozeman}, BOZEMAN DAILY CHRON., Mar. 7, 2010, available at \url{http://www.bozemandailychronicle.com/news/article_5affea24-2996-11df-9846-001cc4e002e0.html} (last visited Dec. 28, 2011).} As discussed in the “Federal Laws and Regulations,” part below, recently passed legislation also encourages greater participation in farm to school through competitive grants and the establishment of new school meal standards. These standards, which are likely to take effect in 2012, are expected to double the required minimum daily servings of fruits and vegetables, dramatically increasing school expenditures on produce and local farmers’ opportunity to get involved in providing for schools.\footnote{Philip Brasher, \textit{More Veggies Will Fill School Lunches}, DES MOINES REG., Jan. 14, 2011, at A1.}

\textbf{Health Benefits}

Childhood obesity is a rapidly growing problem throughout the county. The economic, social, and health consequences of childhood obesity have been particularly severe in Mississippi, which has the highest rates of childhood obesity in the nation.\footnote{Mississippi Department of Education’s Office of Healthy Schools, \textit{Obesity in Mississippi}, available at \url{http://msdh.ms.gov/msdhsite/_static/resources/3593.pdf} (last visited Dec. 28, 2011).} Over 40\% of Mississippi
children are obese or overweight, and the percentage of overweight children in Mississippi is almost 7% higher than the rate in the second highest state.\textsuperscript{12}

The health consequences of childhood obesity can be severe. As a result of the quickly growing rate of childhood obesity, the incidence of type 2 diabetes among adolescents has grown by a factor of 10 in the past two decades.\textsuperscript{13} Fatty liver disease associated with excessive weight, previously believed to not occur in children, is found today in about one in three obese children.\textsuperscript{14} Almost every organ is affected by obesity-related complications, causing a range of problems in children from severe chronic back pain to sleep apnea.\textsuperscript{15} Overweight and obese children are also at much greater risk for medical complications as adults. A Harvard School of Medicine study recently found that obese adolescent girls were two to three times more likely to die by middle age than adolescent girls of normal weight, even after other lifestyle factors were taken into account.\textsuperscript{16} A group of leading pediatric obesity researchers estimated that pediatric obesity may shorten life expectancy in the United States by 2 to 5 years by 2050, an effect equal to that all of cancers combined.\textsuperscript{17} In addition to the numerous health issues associated with obesity, recent studies on overweight children show that they are at greater risk for depression, more likely to perform poorly in school, and are absent from school more often.\textsuperscript{18}

Childhood obesity is also believed to cost the United States hundreds of millions of dollars annually.\textsuperscript{19} This number is expected to rise sharply without effective intervention, as medical

\begin{flushleft}
\textsuperscript{12} Id.
\textsuperscript{14} Id.
\textsuperscript{15} Id.
\textsuperscript{16} Id.
\textsuperscript{17} Id.
\textsuperscript{18} Id.
\textsuperscript{19} Id.
\end{flushleft}
expenses escalate and childhood obesity leads to diminished health later in life, reducing worker productivity through an increasing number of physical and psychological disabilities.\(^\text{20}\) One recent commentary on childhood obesity in *The New England Journal of Medicine* argued that the costs of the pediatric obesity have “profound implications for our [country’s] international competitiveness,” stating that the human costs of the economic losses induced by pediatric obesity “incalculable.”\(^\text{21}\)

Mississippi children, like children throughout the United States, are also not eating the recommended amounts of fruits and vegetables. The 2009 Mississippi Youth Risk Behavior Survey found that during the seven days before the survey, 79% of the students ate fruits and vegetables fewer than five times a day and 85% ate vegetables fewer than three times a day.\(^\text{22}\) Increasing fruit and vegetable consumption is one of the Centers for Disease Control’s (CDC) target behaviors for preventing and controlling obesity.\(^\text{23}\) It is especially important for children and adolescents to eat nutritious foods such as fruits and vegetables because they “are developing the habits they will likely maintain throughout their lives.”\(^\text{24}\)

In order to better understand the impact farm to school programs have on students and communities, researchers at Occidental College and the University of California, Davis recently reviewed fifteen farm to school studies that contained data on behavioral outcomes associated

\(^{20}\) Id.

\(^{21}\) Id.


\(^{24}\) Id.
with the introduction of farm to school programs. The review found that farm to school programs consistently increased the amount of fruits and vegetables consumed by students in the cafeteria, classroom, and at home, and increased their knowledge and attitudes about healthy eating. This may be particularly true when a salad bar is available to students. Among the fifteen farm to school programs studied, eight included the implementation of salad bars in the cafeteria. In those salad bar programs, increases in fruit and vegetable consumption ranged from 25% to 84%. Farm to school educational programming, excitement about local products, and greater exposure to fruits and vegetables all contribute to this increase. Farm to school curricula encourage students to eat more fruits and vegetables by emphasizing the health benefits of produce and by generating student excitement about local food products, whether through farm visits or in-class taste tests. Fruits and vegetables purchased from local farms are often tastier than produce sourced from greater distances. Farm to school programs often also increase student access to fruits and vegetables by increasing the amount offered at lunch.

It should be noted, however, that these studies rely almost exclusively on self-reported data and self-reported data on dietary consumption are notoriously unreliable. A 2006 study published in *Obesity Research*, for example, looked at dietary intake data reported by 176 eleven year-old girls and their parents and found that only 50% of the participants provided “plausible” self-reported data. The problems associated with self-reporting are compounded in nutrition intervention research due to social approval bias, which refers to the tendency of respondents to

26 Of the eleven studies reviewed assessing dietary changes, ten found an increase in fruit and vegetable consumption. Eight of these programs incorporated a farm to school salad bar in the cafeteria, one incorporated local foods without a salad bar, and two conducted classroom-based education using local foods. Joshi et al., *supra* note 3 at 236.
27 Id.
provide answers consistent with expected norms. In other words, tell someone that fruits and vegetables are awesome and they’re much more likely to tell you that they eat significantly more fruits and vegetables than they actually do.

A well-designed randomized controlled trial published in 2008 demonstrates the distorting effect social approval bias can have on self-reported data. One hundred and sixty-three middle-aged women in Colorado agreed to participate in what they were told was a health survey. Half of the women received a letter describing the survey as a study on fruit and vegetable intake along with materials about the benefits of eating five fruits and vegetables a day, while the control group only received a letter describing the survey as a more general nutrition study. In a follow-up telephone survey, the women who received materials promoting the health benefits of fruits and vegetables reported that they consumed 5.2 servings of fruits and vegetables a day, while the control group reported consuming 3.7 servings a day. The researchers concluded that self-reports of fruit and vegetable intake are susceptible to “substantial social approval bias.”

While fruits and vegetables, particularly vegetables, are healthy, but there is scant evidence that increasing their consumption alone leads to weight loss or prevents cancer, strokes, or chronic disease in an otherwise unhealthy diet. While controversial, there is emerging evidence that they do not. It appears that diet-related disease is primarily caused by exposure to unhealthy food.

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30 Id.
31 Id.
32 Id.
33 Id.
35 Id.
Fruits and vegetables barely, if at all, mitigate the damage caused by these foods.\textsuperscript{36} Nor does increasing fruit and vegetable consumption alone significantly displace unhealthy food consumption among most people. It is important for farm to school advocates to be aware of the limitations of the present scientific data about the benefits of fruits and vegetables to avoid making inaccurate or unsupported claims about the program’s benefits.

**Economic Benefits**

Farm to school programs directly benefit the local or regional economy by increasing the amount of goods purchased locally by schools. Research has shown that dollars spent on local agricultural products also generate additional spending on other local products or services.\textsuperscript{37} In 2007, The Kaiser Permanente Community Fund made a grant to Ecotrust, a Portland-based nonprofit, to invest seven cents per lunch served in two school districts in order to stimulate purchases of local food.\textsuperscript{38} A recent study on the economic effects of the pilot program found that an investment of $66,193 resulted in $225,869 in local purchases.\textsuperscript{39} Those seven additional cents per meal triggered a substantial increase in local purchasing by the school districts, which in turn had a ripple effect throughout the economy. For every dollar spent by the school districts on local food products, an additional 87 cents was spent in Oregon.\textsuperscript{40} The analysis revealed that this additional 87 cents benefited 401 of the state’s 409 economic sectors.\textsuperscript{41}

\textsuperscript{36} Id.
\textsuperscript{38} Deborah Kane et al., The Impact of Seven Cents: Examining the Effects of a $.07 per Meal Investment on Local Economic Development, Lunch Participation Rates, and Student Preferences for Fruits and Vegetables in Two Oregon School Districts, Ecotrust (2011) (publication pending at time of this paper).
\textsuperscript{39} Id.
\textsuperscript{40} Id.
\textsuperscript{41} Id.
An even larger amount of money is recycled through the local economy when agricultural products are purchased from small farms. Economists at the University of Wisconsin found that each dollar earned by a small farm in Minnesota and Wisconsin generates another $1.30 of local expenditures. Large farms, however, only produced an additional 90 cents of local spending.

In addition to benefiting the local economy, farm to school programs may increase the amount of revenue that schools receive through their food service program by increasing participation in school meals. As participation rates rise, labor and administration costs remain largely static, allowing schools to potentially lower their per meal costs dramatically. This is particularly true in states like Mississippi that have a high percentage of students receiving free or reduced-price meals. Schools with high percentages of students receiving free or reduced-price meals collect more money from the federal government for each meal served. As a result, these schools realize even greater savings from increased participation rates. A systematic review of farm to school programs found an average increase in student meal participation of 9.3%. The limited data on farm to school’s impact on school teacher and administrator dietary behavior suggest that introducing local produce into school meals may also increase teacher and staff participation in school meal programs. Meal participation rates generally peak after the program is initiated and taper off somewhat after the initial excitement, remaining higher than pre-farm to school levels.

43 Id.
44 JANET POPPENDECK, FREE FOR ALL: FIXING SCHOOL FOOD IN AMERICA 135 (2010).
46 Joshi et al., supra note 3 at 236.
47 Only three studies have assessed changes in dietary behavior among staff and teachers, however all three found a marked preference for farm to school meals. Id.
48 Id. at 237.
In a virtuous circle, increasing meal participation rates can increase revenue for food service programs, allowing them to further improve meal quality.

Schools may also reduce costs as farm to school programs expand and they are able make larger purchases from more producers. By expanding the market for local food, farm to school programs often encourage other institutions, such as restaurants and hospitals, to purchase food from local farms. This further increases the availability of healthy foods in the community and strengthens the local economy.

**Educational Benefits**

The CDC has identified farm to school as an effective way to enhance nutrition education and eco-literacy.\(^{49}\) The USDA also states that farm to school programs may support health and nutrition education and act as a source for agriculture-related lessons and curricula.\(^{50}\) Studies underpin these claims, showing that farm to school educational activities can increase knowledge on topics such as nutrition and health, local foods and agriculture, and the environment.\(^{51}\) Studies that have examined programs with a parental education component have also observed positive changes in parental behavior, knowledge, and attitudes with regard to healthy food.\(^{52}\)

There are hundreds of lesson plans and educational activities available online that can be used to integrate education into farm to school programs. Links to curricula and educational activities are readily available online. Lesson plans may focus on science and agriculture, for example teaching students the names and growing seasons of local products, but many also incorporate

\(^{49}\) Dietz, supra note 23.
\(^{51}\) Joshi et al., *supra* note 3 at 237.
\(^{52}\) Id. at 240.
other subject areas, such as economics or mathematics. Experiential learning activities, such as farm visits or cooking and gardening classes, are particularly effective ways to increase student knowledge.\textsuperscript{53}

II. Federal Laws and Regulations

\textit{Child Nutrition Reauthorization Act}

Congress must reauthorize the federal child nutrition programs every five years. Each of the eight federal school meal and child nutrition programs are authorized in this single piece of legislation, including the National School Lunch Program, the School Breakfast Program, and the Special Supplemental Nutrition Program for Woman, Infants, and Children (WIC), among others.\textsuperscript{54} The most recent iteration of the law, The Healthy, Hunger-Free Kids Act of 2010 (HHK Act), promises to significantly change the content of school meals in America.\textsuperscript{55} It encourages schools to increase the amounts of fresh fruits and vegetables served (by authorizing a higher reimbursement rate for such increase) and funds competitive grants dedicated to farm to school

\textsuperscript{53} A U.C. Berkeley study, for example, tracked nutrition knowledge and consumption of fruits and vegetables among students in schools participating in a comprehensive farm to school program and found that students in schools with regular cooking and gardening classes had significantly higher nutrition knowledge scores and a greater preference for and consumption of fruits and vegetables than students spending little to no time cooking and gardening at school. Suzanne Rauzon et al., \textit{An Evaluation of the School Lunch Initiative}, Ctr. for Weight & Health, U.C. Berkeley, 22, 26 (Sept. 2010), \textit{available at} http://cwh.berkeley.edu/sites/default/files/primary_pdfs/An_Evaluation_of_the_School_Lunch_Initiative_Final\%20Report_9.22.10.pdf (last visited Dec. 28, 2011).

\textsuperscript{54} The remaining child nutrition programs are the Child and Adult Care Food Program, the Summer Food Service Program, the Afterschool Snack and Meal Program, the Fresh Fruit and Vegetable Program, the Fresh Fruit and Vegetable Program, and the Special Milk Program. Food Research and Action Center, \textit{CNR FAQ}, \textit{available at} http://frac.org/leg-act-center/cnr-priorities/cnr-faq/ (last visited Dec. 28, 2011).

programs around the country. By incorporating farm to school into its school meal plans now, Mississippi would be well placed to benefit from the grants, regulations, and initiatives that are being set in motion by the HHK Act.

The HHK Act gives the USDA the authority to establish new national nutritional standards for foods sold at schools throughout the school day.56 As discussed below, these new nutritional standards are expected to require schools to include more fruits and vegetables in school meals. Schools that meet the new standards will receive a six-cent increase in the federal reimbursement rate for each school lunch.57 Six cents may not seem like a significant increase; however it is the first increase in federal reimbursement rates aside from inflation adjustments in thirty years.58

This increase in the reimbursement rate will be further augmented by section 205 of the statute, which requires schools to gradually increase the price charged for “paid” school lunches.59 Paid lunches are meals purchased by children who do not qualify for free or reduced meals. Many schools currently divert federal dollars intended to reimburse meals for low-income children to subsidize the price of paid meals.60 The HHK Act ensures that more money will be spent on school lunches by gradually ending this practice. Over the next decade, this provision is expected to raise about $2.6 billion for school lunches, or approximately five cents per lunch served.61

In the previous reauthorization, the Child Nutrition and WIC Reauthorization Act of 2004, Congress included a Wellness Policy Mandate, which required school districts that receive

57 Healthy, Hunger-Free Kids Act of 2010 § 201.
60 Healthy, Hunger-Free Kids Act of 2010 § 205.
61 Id.
61 Email from Jane Black, freelance food writer, to author (Mar. 23, 2011) (on file with author).
federal funds for school meals to create school wellness policies. The wellness policies were to establish general nutrition and physical activity goals. A 2009 Robert Wood Johnson Foundation brief on school wellness policies found that the quality of local school wellness policies varied greatly across school districts. School districts were not required to set specific goals and there were no penalties for districts that failed to implement their policies, allowing school districts to essentially ignore the mandate.

The HHK Act strengthens local school wellness policies by updating the requirements of the policies and requiring opportunities for public input, transparency, and an implementation plan. The HHK Act also requires the USDA to issue revised regulations to provide new guidelines for local school wellness policies. The growing emphasis on wellness policies at the federal level will likely act as an impetus for schools to further increase the amount of fresh fruits and vegetables they serve.

Finally, the HHK Act provides $40 million in mandatory funding for a new USDA farm to school grant program. The Farm to School Grant program will finance farm to school training, operations, planning, and equipment with individual grants up to $100,000. It will also support

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63 Id.
65 Id.
67 Id.
the creation of partnerships and efforts to develop school gardens. Among the criteria used to select grantees will be the number of students at participating schools that qualify for low or reduced price meals. Eligible grantees include schools, state and local agencies, Indian tribal organizations, agricultural producers or groups of agricultural producers, and nonprofit organizations that work to improve access to local foods in schools.

**Proposed USDA School Meal Standards**

In compliance with the HHK Act, in January 2011 the USDA published a proposed rule to update the nutrition standards for school meals. The new standards, which will be the first significant revision to school meal standards in fifteen years, were based on a 2009 Institute of Medicine report. The proposed fruit and vegetable serving requirements would greatly increase the amount of produce served by most schools. The amount of fruit required to be served with breakfast would be doubled. Lunch servings of fruits and vegetables would see a similar increase. Currently, only half a cup of fruits or vegetables are required to meet the minimum lunch requirement. The proposed new minimum requirement would provide students with at least three-fourths of a cup of vegetables and half a cup of fruit at lunch.

The proposed rule would also increase the variety of vegetables served at many schools. It would require schools to serve at least half a cup of the following vegetable subgroups each week: dark

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70 Id.
71 Id.
73 Institute of Medicine, School Meals: Building Blocks for Healthy Children (2009).
74 Id. at 2500. Schools will also be able to fulfill the breakfast requirement with non-starchy vegetables.
75 Id.
76 Id.
green, orange, legumes, and other. Starchy vegetables, such as white potatoes, corn, and green peas, would be limited to one cup per week. It should be noted, however, that the USDA’s appropriations bill was amended to block any restrictions on potatoes. The language in the appropriations bill also dictates that tomato paste used to make pizzas counts toward the weekly total of vegetable servings. Nonetheless, the other requirements of the proposed rule are expected to remain unchanged and to go into effect.

Recent reporting has shown that the proposed school lunch guidelines have already changed the meals the Philadelphia School District and other school districts around the country serve to their students. This indicates that proposed guidelines have already had far-reaching effects, despite congressional tinkering with the requirements. It also indicates that one of the main hurdles to healthier school lunches, cost, may not be as big a hurdle as many thought it would be.

The Philadelphia School District has been able to significantly increase the number of whole grains items and fruits and vegetables it serves without raising its food procurement budget. This is in part due to a program called the HealthierUS Schools Challenge (hereafter “HealthierUS Challenge”). HealthierUS Challenge is a voluntary initiative created in 2004 in

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77 Id. at 2500, 2554. The dark green subgroup contains bok choy, broccoli, collard greens, dark green leafy lettuce, kale, mustard greens, romaine lettuce, spinach, turnip greens, and watercress. The orange category includes acorn squash, butternut squash, carrots, pumpkins, and sweet potatoes. Legumes includes black beans, black-eyed peas, garbanzo beans, green peas, kidney beans, lentils, lima beans, soy beans, split peas, and white beans. Starchy vegetables include corn, green peas, lima beans, and white potatoes. The “other” category includes “all other . . . vegetables,” including tomatoes, tomato juice, iceberg lettuce, green beans, and onions.”
78 Id. at 2500.
82 Id.
order to recognize schools that serve nutritious food and encourage physical activity.\footnote{Id.} The program received a boost in 2010 when HealthierUS Challenge was incorporated into the Let’s Move! Campaign and monetary awards became available for qualifying schools.\footnote{Id. As school districts across the country try to qualify for the award, the demand for foods considered to be healthy has increased so that once expensive niche products, such as whole-grain pizza, can now be purchased at “reasonable” cost.\footnote{Id.}

Of the approximately 100,000 public schools in the United States, only about 2,000 are certified by HealthierUS Challenge.\footnote{Id.} If this program can create sufficient demand to lower the cost of healthier products, then the proposed guidelines may radically reshape the industry, making it easier for Mississippi schools to serve healthier options. Similarly, as demand for local products increases, national suppliers may begin to focus on supplying local options, allowing Mississippi schools to integrate farm to school programming into purchases from their distributors.

**USDA Geographic Preference Rule**

Like the periodic reauthorization of the federal child nutrition programs achieved through the HHK Act, the federal farm bill must be reauthorized every five years. The farm bill is the largest and most important law relating to agriculture and food policy at the federal level. While it does not directly affect the content or funding of school meals like the HHK Act, it plays a major role in agriculture in America and an increasingly important role in the growth of farm to school. The Food, Conservation and Energy Act of 2008 is the most recent iteration of the farm bill. This Act directed the USDA to pass regulations encouraging institutions participating in child nutrition
programs to purchase local agricultural products. Under this mandate, in April 2011 the USDA released a rule allowing these institutions to apply a geographic preference in the procurement of unprocessed locally grown and locally raised agricultural products. The rule clearly establishes that giving local bidders an advantage in the procurement process for unprocessed products is not only legal under federal law, but is actively encouraged by it.

The geographic preference rule’s impact in Mississippi may be limited due to the bidding process used by the Mississippi Department of Education’s statewide purchasing cooperative. As discussed below in Part III, “Food Purchasing Practices in Mississippi,” the majority of public schools in Mississippi purchase their produce through a statewide purchasing cooperative. When choosing suppliers, the cooperative issues an invitation for a bid (IFB), in which suppliers submit a price proposal for the product. A supplier’s product must satisfy the cooperative’s specifications in order to be considered. These specifications are designed to ensure that the cooperative’s products meet or exceed national quality standards. As is standard practice with IFBs, however, these specifications play no role in the bidding process outside of determining who may participate and the lowest qualifying bid is normally awarded the contract. This is in contrast to a request for proposal (RFP), in which other considerations, such as the geographic provenance of a product, can be considered when selecting the bid. Because IFBs do not take

88 Geographic Preference Option for the Procurement of Unprocessed Agricultural Products in Child Nutrition Programs, 76 Fed. Reg. 22,603 (Apr. 22, 2011). This new rule defines “unprocessed foods” as foods whose “inherent character” as agricultural products has not been altered. This definition still allows de minimis handling and preparation, such as “washing vegetables, bagging greens, butchering livestock and poultry, pasteurizing milk, and putting eggs in a carton.” Id. at 22,604. Purchasing institutions will be given the authority to define the geographic area considered local. Id. Ground beef will be considered unprocessed as long as no additives or preservatives are added to it. Id. at 22,605.
89 Email from Dorothy Smith, Projects Officer, Office of Child Nutrition, Mississippi Department of Education, to author (Feb. 8, 2011) (on file with author).
90 Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined..
91 Email from Priscilla Ammerman, Projects Officer, Director of Purchasing and Food Distribution, Mississippi Department of Education, to author (June 17, 2011) (on file with author).
92 Id.
factors other than price into account when determining the winning bid, it is more difficult for institutions that use IFBs to take advantage of the USDA’s new geographic preference rule. Nonetheless, the USDA has recommended a couple of methods for incorporating geographic preference into IFBs. First, an IFB issuer can write in specifications that advantage local suppliers. For example, an issuer seeking bids on apples could specify that the apple must be picked within one day of delivery or must have been harvested within a certain time period. Second, bidders who meet geographic preference guidelines could have a pre-determined amount of money deducted from their bidding price. An issuer, for example, could decide that it would be willing to pay an additional five dollars if at least 100 crates of apples are sourced locally. If a supplier specifies in her bid that over 100 crates of apples will be locally grown, five dollars would then be subtracted from her bidding price. These methods would allow all purchasers to apply a geographic preference, regardless of their bidding process.

III. Food Purchasing Practices in Mississippi

Overview

Public schools in Mississippi currently procure food from three different sources: (1) the Mississippi Department of Education’s (MDE) statewide purchasing cooperative, (2) the United

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94 Id.
95 Id.
96 The five dollars would only be deducted in order to determine the winning bidder and would not affect the actual price paid to a bidder. Id.
States Department of Agriculture’s (USDA) commodity programs, and (3) independent distributors.97 This section will also discuss another method of procurement previously used in Mississippi: “farm direct” purchasing. This type of purchasing, in which school buy agricultural products directly from farmers, has traditionally been the focus of local farm to school programs.98

Statewide Purchasing Cooperative

The Mississippi Department of Education (MDE) operates a statewide purchasing cooperative.99 School districts are not required to participate in the program, although all but three districts in the state do.100 School districts that take part in the program are able to order over 650 food items online, which are often available at low prices due to the large volume of food purchased through the cooperative.101 The purchasing program has a component that is mandatory for all participants, called “full-line,” and four optional components that participants can join on top of the “full-line” program: bread, ice cream, milk, and produce.102 Of the 192 schools that participate in the statewide purchasing program, 119 also elect to participate in the optional produce program.103 Schools that purchase their produce from the statewide cooperative are primarily located in rural areas and lack access to local produce wholesalers.104

97 Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined.
98 Betty Izumi et al., Farm to School Programs: Exploring the Role of Regionally-Based Food Distributors in Alternative Agrifood Networks, 27 AGRIC. HUM. VALUES 335, 336 (2010).
100 Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined.
101 Mississippi Office of Healthy Schools, How to Join the Purchasing Program, supra note 99.
102 Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined.
103 Email from Dorothy Smith, supra note 89.
104 Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined.
As noted above, the statewide purchasing cooperative’s current bidding process makes it difficult to give preference to in-state or local products. Instead of issuing requests for proposals (RFPs) when selecting distributors, MDE issues invitations for bids (IFBs).105 IFBs, unlike RFPs, focus solely on pricing when determining the winning bid and do not take into account other considerations, such as the amount of local food that will be used. As discussed above in Part III, the USDA has recommended two different methods for incorporating a geographic preference into IFBs. These methods will be further discussed in Part VII, “Recommendations.”

Even if MDE were to give preference to distributors using local products during the bidding process, its certification requirements would exclude most Mississippi farmers. MDE requires that produce purchased from distributors through its bid system must have proof of successful completion of a third party audit using nationally recognized certification standards, such as Good Agricultural Practices/Good Handling Practices, SQF 2000, or ISO 22000, among others.106

One of the most commonly used audit programs is Good Agricultural Practices (GAP) and Good Handling Practices (GHP), which is also required for produce purchases through the Department of Defense Fresh Program (discussed below).107 GAP and GHP are tools intended to ensure that farmers and food processors are using the best available methods to keep food products safe from foodborne illnesses. The USDA’s Agricultural Marketing Service (USDA/AMS) verifies that producers meet GAP and GHP standards based on adherence to the Food and Drug Administration (FDA) Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and

105 Id.
106 Email from Priscilla Ammerman, Projects Officer, Director of Purchasing and Food Distribution, Mississippi Department of Education, to author (May 25, 2011) (on file with author).
107 Id.
Vegetables. GAP appraises farm practices while GHP examines practices at packing facilities, storage facilities, and wholesale distribution centers. GAP/GHP certification is optional and individuals or companies applying for certification must pay all associated expenses (including getting the farm outfitted so that it can pass the certification process and paying for the certification itself). Due to the fiscal burden and the perception that the certification process is complex, few small or mid-sized farms are GAP/GHP certified. In Mississippi, only thirty-three farms are certified and twenty-three of these are only certified for blueberries.

**USDA Commodity Programs**

MDE also orders food through the USDA commodity programs, including the National School Lunch program, the Fresh Fruit and Vegetable Program, and the Department of Defense Fresh Fruit and Vegetable Program. The National School Lunch program is the USDA’s main school meal program, providing cash subsidies and donated commodities to participating schools. The Fresh Fruit and Vegetable Program provides schools with fruit and vegetable snacks to distribute to children without charge. The Fresh Fruit and Vegetable Program targets schools with a high proportion of students eligible to receive free or reduced-price school meals.

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109 Id.

110 See id.


112 Mississippi Office of Healthy Schools, *How to Join the Purchasing Program*, supra note 99.


meals. The Department of Defense (DoD) Fresh Fruit and Vegetable Program (Fresh Program) also offers schools fruits and vegetables, however its produce is generally used for school lunch programs. The National School Lunch Program is the only USDA commodity program that does not provide fresh produce.

DoD operates a national system run to purchase and distribute fresh produce to military installations, Federal prisons, and veterans hospitals. Since the mid-1990s, state agencies and local school districts have been able to procure fresh fruits and vegetables from DoD through the Fresh Program. School districts or state agencies place orders with regional vendors, who in turn deliver the fruits and vegetables directly to schools. According to the USDA, state education departments and local schools districts participate in the Fresh Program because it offers a wide selection of good quality produce and frequent deliveries at a reasonable cost.

The DoD Fresh Program houses Mississippi’s only statewide farm to school initiative. MDE and the Mississippi Department of Agriculture and Commerce (MDAC) have offered locally raised produce through the DoD Fresh Program since 2002. Of the $2.5 million spent by the DOD Fresh Program in Mississippi during the 2009 – 2010 school year, $294,470 was spent on in-state produce through their farm to school program. Every six months, MDE sends

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115 Id.
117 Mississippi Office of Healthy Schools, How to Join the Purchasing Program, supra note 112.
118 USDA Food and Nutrition Service, Department of Defense Fresh Fruit and Vegetable Program, supra note 116.
119 Id.
120 Id.; Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined..
121 Id.
122 Adams Produce, the prime vendor for DOD in Mississippi, purchased twelve different products from Mississippi growers in the 2009 – 2010 school year: blueberries, broccoli crowns, cabbage, sliced cucumbers, eggplant, southern peas, bell peppers, sweet potatoes, yellow squash, grape tomatoes, and seedless watermelons. Just three of those...
MDAC a list of produce that will be purchased by schools over a subsequent six-month period. MDAC then contacts Mississippi farmers that might be able to provide some of the produce. Like the produce purchased by the statewide cooperative, produce purchased through the DoD Fresh Program must be have proof of a third party auditing. In this case, produce through this program must be GAP/GHP certified. Participating growers must also bring their produce to Jackson to be inspected and then distributed by the state to the school districts, further adding to their costs. As a result, only large farms are involved with this program.

**Independent Distributors**

Mississippi schools can also purchase food from national or regional distributors. Distributors are businesses with warehouses and trucks that store and sell products to food service customers such as restaurants, hospitals, and of course, schools. Most schools nationwide receive the bulk of their food from one or two distributors. In Mississippi, however, all but three schools get their entrees from the statewide purchasing cooperative. Nonetheless, a significant number of public schools in Mississippi purchase some food from distributors. When it comes to produce, almost 40% of Mississippi public schools opt to buy from distributors.

**Farm Direct Purchasing**

crops, blueberries, sweet potatoes, and seedless watermelons, accounted for over 50% of Adams’ in-state purchases. Email from Priscilla Ammerman, *supra* note [Error! Bookmark not defined.].

124 Telephone interview with Andy Prosser, *supra* note [Error! Bookmark not defined.].
125 *Id.*
126 *Id.*
127 *Id.*
128 A concise and informative introduction to the distribution business can be found in Janet Poppendieck’s *Free For All: Fixing School Food in America*. JANET POPPENIECK, *FREE FOR ALL: FIXING SCHOOL FOOD IN AMERICA*, *supra* note 44, at 108-110.
129 *Id.* at 108.
130 Telephone interview with Priscilla Ammerman, *supra* note [Error! Bookmark not defined.].
131 *Id.*
132 Email from Dorothy Smith, *supra* note 89.
Farm to school efforts around the nation generally focus on farm direct purchases, in which schools buy directly from farmers without any intermediaries. Both independent distributors and the statewide purchasing program give school districts the flexibility to purchase products directly from local farmers, yet state school officials and local farm to school network representatives are unaware of any primary, middle or high schools in Mississippi currently doing so. A preschool in Starkville, Mississippi, however has recently begun to purchase vegetables from a local farmer. A local farmer has been able to provide the preschool with produce three times a week, receiving as much compensation as he would through normal marketing opportunities without raising the preschool’s costs.

Farm direct purchases benefit small and midsized farmers by giving them access to a large, stable market in which they can get a higher dollar value per item than they would receive from distributors. They also give schools an opportunity to educate children about local agriculture, since the school district would be partnered with local farmers. Thus, farm direct purchasing is one of the strongest ways to implement farm to school programs in schools. Nonetheless, it is important to consider other ways to integrate farm to school into a school’s purchasing practices. As will be discussed in Part V, “Implementing Farm to School,” increasing the amount of local food purchased by food distributors can also be an effective way for schools to initiate or expand farm to school programs.

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133 Farm to school programs can use local food purchased from distributors or, as discussed below, statewide purchasing cooperatives; Betty Izumi et al., supra note 98, at 336.
134 Id.; Telephone interview with Glyen Holmes, Executive Director, New North Florida Cooperative Association (Jan. 31, 2011); Interview with Daniel Teague, Agribusiness Management Specialist, Mississippi Association of Cooperatives, in Jackson, Miss. (Mar. 11, 2011).
135 http://www.starkvilledailynews.com/node/7318
136 Id.
138 Betty Izumi et al., supra note 98, at 336.
How Do Normal Schools in Mississippi Purchase Food?

The purchasing patterns of three hypothetical school districts are described below in order to further illustrate the purchasing system in Mississippi and to explore the types of issues Mississippi school districts face when deciding how to purchase food.

School District A

School District A is located in an isolated rural county without any local produce vendors. It participates in the “full-line” statewide purchasing cooperative as well the four optional programs to save on administrative expenses and because independent vendors cannot service the area without charging prohibitively high rates. In addition, more than 20% of its food (more than the national average) is supplied through federal commodity programs (including DoD Fresh Program). The commodity programs allow the school district to stretch its scarce funds. Despite a lack of local produce vendors, School District A is surrounded by farmland, making it ideal for “farm direct” farm to school programs.

School District B

School District B’s boundaries encompass parts of a mixed-income area with a combined population of over 50,000 residents and a local university. The district participates in the full-line purchasing program as well as the bread, milk, and ice cream optional purchasing programs because it benefits from the cooperatives’ low prices and convenient ordering system. It purchases most of its produce from a local distributor, with whom it has had a long relationship. It also receives about 15% of its food from the national commodity programs, although its school food service director is sometimes unsatisfied with the quality of produce they receive through
the programs. The school food service director knows a few farmers in the area interested in selling produce to his district, but a busy work schedule and concerns about food safety keep him from experimenting.

**School District C**

School District C serves tens of thousands of students in a large urban area. An overwhelming majority of its student population qualifies for free or reduced-price lunches, and as a result it receives a higher cash reimbursement per meal from the federal government than many other districts. Nonetheless, its school food service director faces severe budgetary constraints. It takes part in the statewide full-line, milk and dairy purchasing programs and purchases its bread and produce from an independent distributor who is able to supply its large student population quickly and cheaply. It utilizes the national commodity programs as well, which supplies its students with fruit and vegetable snacks, as well as meat, dairy, oil, and grain products. About 20% of its food is sourced from the national commodity programs. Community members and local nonprofits have recently begun to express interest in improving the nutritional value of the district’s food. Its food service director would like to serve healthy, local food, however all of the food for the district is prepared in one large central kitchen, which makes this challenging, and the district has little money to spare on pilot programs.

**IV. Barriers to Farm to School**
This section provides a brief overview of the barriers facing farm to school efforts in Mississippi. Part V contains case studies detailing how farm to school has been implemented in other regions facing similar hurdles, and gives recommendations on how state government and nonprofit organizations can address these barriers and thereby encourage the growth of farm to school in Mississippi.

Small and mid-sized farmers do not have the equipment to process and deliver their products

Farm to school programs rely on having local food delivered to schools in a cost-efficient manner. Individual farmers, however, generally do not have the resources to deliver their product to local schools in a cost-effective way. Further, schools are more likely to purchase local products if they are processed. This creates additional expenses for the farmer, particularly if there are no local processing facilities.

Farmers and food service directors find it difficult to communicate with each other

There are currently no programs connecting farmers and school food service directors in Mississippi. This makes it difficult for farmers and food service directors interested in farm to school to find each other, impeding the development of new farm to school programs. As discussed below, successful farm to school efforts go to great lengths to build relationships between farmers and schools.

Most school food service directors in Mississippi do not have any experience purchasing products directly from growers

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139 See JoAnnee Berkenkamp, Making the Farm/School Connection: Opportunities and Barriers to Greater Use of Locally-grown Produce in Public Schools, Leopold Center for Sustainable Agriculture, 20, available at www.leopold.iastate.edu/research/marketing_files/Minnesota.pdf (last visited Dec. 28, 2011).
Private distributors and the statewide purchasing cooperative work to make food purchasing easy and predictable for school food service directors.\(^{140}\) Purchasing from farmers, however, generally requires additional administrative and procurement work.\(^{141}\) Further, food service directors may not be familiar with risk management strategies used to ensure the safety of local produce and may be hesitant to purchase local products due to food safety concerns.

_Schools are often not equipped to buy local products_

A large number of school kitchens in Mississippi are only equipped to assemble and if necessary, heat, pre-packaged meal items. To prepare locally purchased products, schools require equipment for storing, prepping, and cooking raw ingredients that many currently do not have. Upgrading equipment requires considerable time and expense and may require additional support from outside sources.

_Small school districts may not have enough demand to attract farmers_

Even though rural school districts may seem ideal for farm to school programs, their limited size can be a hindrance. Farmers may not earn enough income from sales to a single small school district to make such transactions beneficial for them. Small school districts are also less likely to have sufficient staff and resources to handle fresh produce, further reducing the amount they can purchase.

_Most farmers in Mississippi do not have the required certification to participate in statewide purchasing programs_

\(^{140}\) JoAnnne Berkenkamp, \textit{Making the Farm/School Connection: Opportunities and Barriers to Greater Use of Locally-grown Produce in Public Schools}, supra note 139, at 2; Telephone interview with Priscilla Ammerman, supra note \href{[Error! Bookmark not defined.]}{[Error! Bookmark not defined.]}.
\(^{141}\) Betty Izumi et al., supra note 98, at 336.
The Mississippi Department of Education requires produce purchased for the statewide purchasing cooperative to be certified using a third party auditing system and requires produce purchased through the DoD Fresh Program to be sourced from suppliers who are certified according to Good Agricultural Practices (GAP) and Good Handling Practices (GHP). Due in part to the cost associated with the certification process and the perception that the certification process is complex, only thirty-three farms in Mississippi are certified.

V. Implementing Farm to School: Case Studies

Overview

Experienced farm to school organizers stress that there is no single farm to school model that works everywhere. Both state and locally driven efforts must take into account the state school food purchasing system, local infrastructure, local distribution networks, available assets, and the goods produced by local farmers, among other factors. Nonetheless, successful initiatives share certain characteristics. Using the following case studies, the recommendations found in Part VII will attempt to highlight these characteristics while explaining how they might be adapted to Mississippi’s circumstances.

At the Local Level: Green Mountain Farm to School

142 Telephone interview with Priscilla Ammerman, supra note 4.
143 USDA Agricultural Marketing Service, GAP/GHP Audit Verification Program Mississippi, supra note 111.
144 Telephone interview with Marion Kalb, Program Director, National Farm to School Network (Jan. 13, 2011); Telephone interview with Glyen Holmes, supra note 134; Telephone interview with Colleen Matts, Outreach Specialist, The C.S. Mott Group for Sustainable Food Systems at Michigan State University (Feb. 11, 2011).
145 Id.
Green Mountain Farm to School’s innovative farm to school program was developed in response to the needs of its local community, Vermont’s Northeast Kingdom. While Green Mountain remains focused on the Northeast Kingdom, its geographic scope has quickly expanded since the program’s founding in 2008. Its multi-pronged approach to farm to school, which focuses on education, relationships, and distribution, is now being introduced throughout the state. Its growth in the Northeast Kingdom and its expansion into a statewide organization offer a valuable study on how a local program can quickly expand without sacrificing financial sustainability or quality.

The rural Northeast Kingdom region in northeast Vermont encompasses three counties and nine school districts. Approximately 15,770 school-age children live in the Kingdom out of a total population of 64,519. The largest town in the region, St. Johnsbury, has an estimated population of 7,421. Like many of Mississippi’s rural areas, it has high rates of poverty and childhood obesity and many of its residents have limited access to fresh food. Despite an abundance of farmland, Katherine Sims, the founder of Green Mountain Farm to School, calls it “a classic food desert.”


147 Data compiled from Vermont Indicators Online, a joint project between the University of Vermont Center for Rural Studies and the Vermont Center for Geographic Information. Vermont Indicators, Profiles, available at http://maps.vcgi.org/indicators/profiles.cfm (last visited Dec. 28, 2011).


150 Id.
Green Mountain Farm to School grew out of a single school garden program created in 2005.\textsuperscript{151} In 2007, this initiative was expanded into a farm to school pilot program involving five schools and more than twenty-five farms in the Northeast Kingdom.\textsuperscript{152} The pilot proved successful and Green Mountain Farm to School was established to expand the program.\textsuperscript{153} Green Mountain currently works with twenty-four schools throughout northern Vermont, ranging in size from 35 to 300, with most having between 100 and 150 students.\textsuperscript{154} Green Mountain runs three different programs: an after-school education program called Sprouts; the Farm to School Network, which coordinates farm to school activities and develops relationships with educators, school staff and farmers; and Green Mountain Farm Direct, which serves as a regional food distribution system, connecting local farmers to restaurants, schools, and other institutions. These programs are discussed in greater detail below.

\textit{Building and Maintaining Excitement}

Generating excitement about local food among stakeholders has played an important role in the growth of Green Mountain. While developing the institutional resources necessary to coordinate and run farm to school activities, Green Mountain has worked to keep local businesses and community members involved. They discovered that restaurants, which are an important source of revenue for Green Mountain Farm Direct, are more likely to participate if they can demonstrate their involvement to their customers.\textsuperscript{155} As a result, Green Mountain provides restaurants with marketing materials, including a series of posters promoting the use of local

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\textsuperscript{151} Green Mountain Farm to School, \textit{History}, available at \url{http://www.greenmountainfarmtoschool.org/history.php} (last visited Dec. 28, 2011).
\textsuperscript{152} \textit{Id.}
\textsuperscript{153} \textit{Id.}
\textsuperscript{154} Telephone Interview with Katherine Sims, Executive Director, Green Mountain Farm to School (Apr. 18, 2011).
\textsuperscript{155} Telephone Interview with Katherine Sims, \textit{supra} note 154.
\end{flushleft}
food and highlighting individual farmers.\textsuperscript{156} Green Mountain has also worked to integrate community volunteers into its programs. It initially focused on finding volunteers able to lead activities during the day.\textsuperscript{157} After that proved difficult, they created the Grow a Row project, a program in which community members grow an extra row of produce for their local school.\textsuperscript{158} The program has been popular, and allows Green Mountain to engage the local community while providing schools with a free source of produce.\textsuperscript{159}

To maintain excitement about the program within schools, Green Mountain’s Farm to School Network coordinators work with different stakeholders to organize farm to school activities. These activities include taste tests, field trips to farms, school composting, in-class educational workshops, school garden activities, farm to school committees, and harvest festivals.\textsuperscript{160} Principals, teachers and food service directors may not have time to organize these activities alone, but are often eager to get involved if Green Mountain can facilitate them.\textsuperscript{161} Each coordinator works with between five and seven schools and spends about five hours per week with each school.\textsuperscript{162} The coordinators have helped Green Mountain respond to the needs of schools by developing close relationships with educators, school staff and farmers.\textsuperscript{163}

\textit{Focusing on Institutional Sustainability}

\textsuperscript{156} Id.
\textsuperscript{157} Id.
\textsuperscript{158} Id.
\textsuperscript{159} Id.
\textsuperscript{160} Green Mountain Farm to School, \textit{Farm to School Network, available at} \url{http://www.greenmountainfarmtoschool.org/ftsnetwork.php} (last visited Dec. 28, 2011).
\textsuperscript{161} Telephone Interview with Katherine Sims, \textit{supra} note 154.
\textsuperscript{162} Id.
\textsuperscript{163} Id.
The Northeast Kingdom has the highest poverty rates in Vermont and is widely considered Vermont’s most economically depressed area. Nonetheless, Green Mountain has been able to use community resources to make the program financially sustainable. It aims to receive a third of its budget from grants and foundational support, a third through corporate and individual donors, and a third through program service fees and school funds. In order to increase the profitability of their regional food distribution system, Green Mountain has started to approach other institutions such as restaurants, hospitals and prisons to see if they would be interested in purchasing food. These entities are able to pay more for delivery, allowing Green Mountain to use funds gained from these transactions to support Green Mountain’s farm to school programs.

*Integrating Education*

Sprouts, Green Mountain’s after-school educational program, teaches students about nutrition and agriculture through gardening and cooking. Green Mountain school gardens, which are designed entirely by students, allow students to participate in growing, harvesting and preparing

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165 Telephone Interview with Katherine Sims, supra note 154.

166 Id.

167 Id.

foods.\(^{169}\) During the 2010 growing season, twenty school gardens produced over 2,600 pounds of fresh fruits and vegetables for school cafeterias.\(^{170}\)

Taste testing, in which local food products are brought for students to sample, is extremely popular among the students participating in Green Mountain’s farm to school program.\(^{171}\) Green Mountain also involves students in the preparation of food. The program works with a class to develop a recipe made from local ingredients and then surveys children on whether they like it.\(^{172}\) The recipe is added to the school’s menu if it is popular among the students.\(^{173}\)

**Developing a Sophisticated Distribution System**

Green Mountain Farm Direct (GMFD) addresses a serious barrier to farm to school efforts around the country: transportation. Small farms generally do not have the resources to deliver their product to customers. Green Mountain originally addressed this problem by having one truck deliver to all of the participating schools.\(^{174}\) As the number of participating farms and schools grew, however, it became more cost-efficient for Green Mountain to pay a local distributor a small fee to deliver food in refrigerated trucks.\(^{175}\) Through this program, small farmers are able to sell their products to local food service operations, improving farmers’ profit margins and strengthening the local food system.

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\(^{170}\) Green Mountain Farm to School, *Sprouts*, supra note 168.

\(^{171}\) Telephone Interview with Katherine Sims, supra note 154.

\(^{172}\) Id.

\(^{173}\) Id.

\(^{174}\) Id.

\(^{175}\) Id.
GMFD also makes it easier for food service directors to order local food. As large-scale operations with primarily industrial suppliers, private distributors are able to make the food ordering and delivery process incredibly painless and predictable.\textsuperscript{176} Similarly, Mississippi’s statewide purchasing cooperative’s website offers a simple, easy-to-use way for food service directors to purchase food.\textsuperscript{177} Purchasing from farmers, however, generally requires much more time and effort.\textsuperscript{178} GMFD’s goal is to make ordering local food as easy as ordering from normal distributors.\textsuperscript{179} Each week the program catalogs locally available products and then distributes that information to its customers. Food service directors and other customers, such as chefs, may then place an order and GMFD will coordinate the delivery.\textsuperscript{180} The program is funded through two sources: service fees paid by the purchasing institutions and grants.\textsuperscript{181} Green Mountain eventually would like to charge farmers service fees as well.\textsuperscript{182}

\textit{At the State Level: The Mott Group}

Through the collaboration of state agencies, non-profits, and university involvement, Michigan has created a thriving farm to school program during a time of immense economic difficulty in the state. Like Mississippi, Michigan must contend with high poverty rates among families in rural counties. Indeed, children in rural counties in both states are more likely to be eligible for

\textsuperscript{176} As one 2006 study of farm to school in Minnesota put it, “Such [broadline] distributors offer a very standardized, streamlined procurement environment that is suited to the risk-averse and cost-conscious environment of most school districts.” JoAnne Berkenkamp, \textit{Making the Farm/School Connection: Opportunities and Barriers to Great Use of Locally-grown Produce in Public Schools}, supra note 139.


\textsuperscript{178} A recent article on regional food distributors and farm to school explained, “[T]he logistical procedures for getting the food from farms to schools has emerged as one of the key challenges of developing and maintaining these efforts. . . . Developing and maintaining direct face-to-face relationships with individual farmers often creates additional administrative and procurement (e.g., ordering, receiving, storing) work.” Betty Izumi et al., \textit{supra} note 98, at 336.

\textsuperscript{179} Telephone Interview with Katherine Sims, \textit{supra} note 154.

\textsuperscript{180} \textit{Id.}

\textsuperscript{181} \textit{Id.}

\textsuperscript{182} \textit{Id.}
free or reduced school lunch programs than children living in urban areas in those states.\textsuperscript{183} Farm to school programs in Michigan’s rural counties face many of the same difficulties that previous farm to school efforts in Mississippi have encountered. Michigan’s rural school districts are often too small to create enough demand to interest farmers.\textsuperscript{184} These school systems also often lack the resources to invest time and money into farm to school pilot programs.\textsuperscript{185} Some even lack a full-time food service director.\textsuperscript{186} Meanwhile, local farmers often have little to no experience in marketing their products or supplying local retail customers.\textsuperscript{187}

The C.S. Mott Group for Sustainable Agriculture (Mott Group) at Michigan State University, which coordinates and assists farm to school programs throughout the state, has addressed these challenges in a variety of ways as detailed below. As a result, a growing number of Michigan schools are getting involved with farm to school. In 2004, a statewide survey of school food service providers found that 11\% of respondents had purchased foods from a local farmer or producer in the past year.\textsuperscript{188} By 2009, the number of food service directors reporting having

\begin{flushright}
\textsuperscript{184} Telephone interview with Colleen Matts, supra note 144.
\textsuperscript{185} Id.
\textsuperscript{186} Id.
\textsuperscript{187} Id.
\textsuperscript{188} Betty Izumi et al., Results from the 2004 Michigan Farm-to-School Survey, 76 J. SCH. HEALTH 169, 171 (2006).}
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made such purchases in the last year had risen to 41%. The Mott Group estimates that there are now more than sixty established farm to school programs in Michigan.

Connecting Farmers and Food Service Directors

The Mott Group’s expertise in facilitating relationships between schools and farmers has been a significant factor in the growth of farm to school in Michigan. They initially connected farmers and food service directors by identifying which ones were interested in participating in farm to school and then making this information available to both parties through online databases. Cooperative Extension offices are used to inform farmers about farm to school opportunities and the Mott Group runs training sessions for school food directors on how to find farmers. They have also recently started offering training sessions for farmers interested in marketing their products to schools.

Teaching Stakeholders How to “Speak the Language”

It is crucial for food service directors and farmers to understand how the purchasing process works and to have a sense of what the other party’s expectations will be before participating in farm to school. In other words, stakeholders need to learn how to “speak the language” of farm to school. In 2008, the Mott Group published “Purchasing Michigan Products: A Step-by-Step

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189 Email from Colleen Matts, Outreach Specialist, The C.S. Mott Group for Sustainable Food Systems at Michigan State University (Feb. 11, 2011) (on file with the author).
191 Telephone interview with Colleen Matts, supra note 144.
192 Id.
193 Id.
194 Id.
195 Id.
Guide.” This guide, aimed at food service directors, contains practical information on initiating and running farm to school programs, provides sample documents for the bidding process, and explains the Michigan farm to school regulatory environment. Encouraged by the success of the initial guide, the Mott Group published a similar guide for farmers in 2010 entitled “Marketing Michigan Products to Schools: A Step-by-Step Guide.”

Setting Up Multi-District Programs

A small school system may not have sufficient demand to interest farmers. As a result, some rural school districts in Michigan have banded together to create multi-district farm to school programs. These multi-district programs have worked well for both farmers and school districts and continue to grow in size. It is important to increase outreach efforts to small farmers when setting up multi-district programs, however, as organizers found that some small farmers erroneously believed such programs would require large suppliers.

Addressing Food Safety Concerns

Food safety is an important consideration for food service directors considering purchasing local products. According to the Mott Group, the most effective way for food service directors to ensure that their food comes from a safe source is to visit the farm from which they are considering purchasing food. Many food service directors lack experience inspecting food

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197 Id.
199 Telephone interview with Colleen Matts, supra note 144.
200 Id.
201 Id.
202 Id.
203 Id.
safety on farms. The Mott Group recommends that inexperienced food service directors use a checklist for retail purchases of local produce, such as the one published by Iowa State University Extension.

An increasing amount of school systems are requiring their suppliers to have Good Agricultural Practices (GAP) and Good Handling Practices (GHP) certification. Alternatively, some school districts require their suppliers to have food safety plans. While not as restrictive as requiring GAP/GHP certification, this does exclude some farmers. The Mott Group encourages farmers to have a food safety plan in place because it is an important step toward GAP certification.

Working with Distributors

Food service distributors provide both food and non-food products, such as napkins and utensils, to school districts. While some distributors might specialize in one product, such as produce, or focus on one type of food service facility, broadline distributors offer a wide range of products to different types of food service facilities. Contracts with broadline distributors normally require schools to purchase at least 85% of their produce from them. As a result, it is important to get broadline distributors to focus on purchasing more local products. The Mott Group started by asking broadline and specialized distributors to list their Michigan products. They then asked food service directors to ask for more Michigan products in order to convey demand.

At the Regional Level: The New North Florida Cooperative
In 1997, the New North Florida Cooperative (NNFC), a group of limited-resource growers, began selling produce to a small school district in the Florida panhandle.211 The NNFC faced numerous barriers, including insufficient credit, government regulations, and a lack of appropriate equipment.212 The program proved popular and the NNFC quickly expanded its operations to other school districts. By 2003, sales had expanded to fifteen school districts in four different states.213 Around this time, the NNFC broadened its mission due to widespread interest in its methods and success.214 In addition to directly distributing produce, it began to function as a “coalition serving networking functions . . . between farmers and schools” throughout the South.215

Glyen Holmes, founder of the NNFC, has facilitated the development of farm to school programs in eight different southern states. His model focuses on relationship building and farm direct purchasing, where school districts procure food directly from local farmers.216 When establishing a program he tries to develop a relationship with all the relevant stakeholders; ideally, this includes the state food service director, the state department of agriculture, local food service directors, a local organizing group, and local farmers.217 Holmes meets with cafeteria workers to learn about their needs and to make sure that they understand how farm to school works.218

213 Id.
214 Id.
215 Id.
216 Telephone interview with Glyen Holmes, supra note 134.
217 Id.
218 Id.
Because farmers often have little to no experience with direct sales, Holmes trains them on how to interact with schools.219

While developing relationships with the key stakeholders, Holmes tries to address barriers inhibiting farm direct sales.220 Local farmers often do not have the resources, equipment, or organizational structure to supply schools with a cost-effective amount of produce. In addition to monitoring the situation personally during the initial pilot period of the program, Holmes trains a local liaison on how to address these issues.221 The liaison also maintains a close relationship with local stakeholders, recruits new farmers, seeks out new schools to work with, and ensures that the local farmers have suitable equipment for processing and distributing their crops.222

*Developing Regional Expertise*

The NNFC’s experiences throughout the South have enabled it to learn more about the region’s needs and opportunities. School districts across the region share a similar culinary heritage, face similar challenges and have access to many of the same local agricultural products. While distribution and processing are issues for farm to school programs throughout the United States, the NNFC’s knowledge of regional weather patterns and crops, as well as its extensive experience with rural school districts and limited-resource farmers, has allowed it to develop approaches to these issues that are well-suited to the region. It has learned, for example, to bring refrigeration trucks in the field when harvesting leafy greens in high temperatures, which significantly improves their quality and shelf life.223 As farm to school programs develop in

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219 *Id.*
220 *Id.*
221 *Id.*
222 *Id.*
223 *Id.*
Mississippi, they should also work to improve their operations by communicating with, and learning from, other programs in the region.

Meeting Demand for Processed Products

The NNFC has worked with many schools that are not equipped to process raw produce. Even when schools are able to process fruits and vegetables, they often prefer processed and packaged products. As a result, the NNFC focuses on delivering processed products, such as chopped greens and sliced sweet potatoes. By obtaining the equipment necessary to process and package fruits and vegetables at the onset of a new farm to school program, the NNFC helps create a number of local products that schools can easily and quickly integrate into their school meal plans.

Engaging Food Service Directors

Glyen Holmes develops relationships with a variety of stakeholders when organizing a new farm to school program. While he considers all of these stakeholders important, he places a particular emphasis on building close relationships with school food service directors. A school food service director’s enthusiasm and feedback can help a small, struggling pilot program develop into a large-scale, fast-growing program. Alternatively, a farm to school program in a district without a supportive food service director can quickly wither even when everything else is in place.

Building a Reputation for Reliability

\[224\) Id.
\[225\) Id.
\[226\) Id.
\[227\) Id.
Some small farmers are not accustomed to strict production schedules, particularly if their primary customers are neighbors or friends. From the beginning, the NNFC has stressed the importance of meeting customer demands to participating farmers in order to prevent late deliveries and to create a reputation for reliability. School food service directors are often much more enthusiastic about purchasing food from local farmers once they learn that their products will be reliably delivered.

*Providing Services to Farmers*

The NNFC works with farmers that do not have the equipment or financial resources to consistently supply schools with processed fruits or vegetables. Many of its efforts are concentrated on providing services to farmers in order to facilitate their participation in a farm to school program. These services often include picking up, processing, and delivering the product. Coordinating these activities not only ensures that schools receive processed fruits and vegetables in a timely manner, but allows more farmers to participate in farm to school than would otherwise be able to.

**VI. Legislative Action: Samples from Other States**

*Farm to School Legislation in Other States*

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229 *Id.*

230 Telephone interview with Glyen Holmes, *supra* note 134.

231 *Id.*
Thirty-three states have passed legislation designed to support farm to school programs. The state statutes do this primarily in one or more of three ways: (1) by organizing a statewide farm to school initiative or hiring a statewide farm to school coordinator, (2) by providing farm to school programs with direct financial support, and (3) by encouraging the growth of the farm to school programs through the passage of favorable state procurement laws.

**Statewide farm to school initiatives**

Twenty-three states have created statewide farm to school programs or set up task forces, intra-agency councils, or working groups to implement and appraise farm to school programs. The most common approach is to establish a statewide farm to school program with the support of state agencies. In 2006, Oklahoma’s legislature passed a law establishing the Oklahoma Farm to School Program within the Oklahoma Department of Agriculture, Food and Forestry. The law requires the Department to employ a director to administer and monitor the statewide program with the guidance of the Oklahoma Food Policy Council. Similarly, Michigan established a statewide farm to school program in 2008 supported by the Departments of Agriculture and Education. It called for the program to facilitate procurement of local products and to provide education and training to food service staff on how to accommodate fresh and local foods. It also required the Department of Agriculture to establish a farm to school point person to coordinate efforts and to act as an information resource for stakeholders. Other states

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233 *Id.*

234 *Id.*


236 *Id.*


238 *Id.*

239 *Id.*
that have created statewide farm to school programs include Alaska, Florida, North Carolina, Oregon, Pennsylvania, Virginia, and Washington, among others.

Financial Support

Ten states have passed legislation setting aside funds for farm to school programs and seven states have passed laws authorizing farm to school grant programs. Small appropriations or grant programs can have a large impact on statewide farm to school efforts. In 2007, for example, New Mexico’s legislature appropriated $85,000 for a farm to school program in the Albuquerque Public School District. These funds brought local fruits and vegetables to 6,000 students in twelve schools and helped create a large, award-winning farm to school program.

A 2007 bill in Vermont established a permanent mini-grant program to support farm to school. In 2008, $85,000 was appropriated for farm to school programs and $25,000 for training and technical assistance for schools to develop farm to school programs. The law stipulates that no individual grant can exceed $15,000. The Vermont mini-grant program has helped dozens of schools implement or expand farm to school programs, making Vermont a national leader in the movement. The grant program also helped Green Mountain Farm to School, profiled in Part V,

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240 National Farm to School Network, State Farm to School Legislation, supra note 232.
241 Act of Mar. 13, 2007, ch. 21, 2007 N. M. LAWS 258, 318
243 VT. STAT. ANN. tit. 6, § 4721 (2011).
244 National Farm to School Network, State Farm to School Legislation, supra note 232.
245 VT. STAT. ANN. tit. 6, § 4721 (2011).
expand its operations.\textsuperscript{246} Over 40\% of Vermont’s 305 public schools now participate in farm to school.\textsuperscript{247}

\textit{Favorable Procurement Laws}

Fourteen states have passed laws encouraging state organizations, agencies, and schools to purchase local products by allowing preferences for in-state agricultural products. Often these laws will place some sort of limit on the preference, whether it is a percentage that cannot be exceeded, a dollar amount, or a requirement that the preference be reasonable.\textsuperscript{248} These laws often (1) exclude local products from normal procurement procedural requirements and (2) allow purchasing institutions to treat local products preferentially when following normal procedural requirements.

In 2007, Montana passed Senate Bill 28 (S.B. 328), creating an optional exemption for public institutions from the Montana Procurement Act’s procedural requirements.\textsuperscript{249} The exemption allows public institutions to give local products a preference when using standard procurement procedures.\textsuperscript{250} It also allows them to directly purchase products from local farmers, foregoing procurement procedures altogether.\textsuperscript{251} The law’s legal effect was minimal because fresh produce had previously been exempted from the Montana Procurement Act.\textsuperscript{252} This exemption allowed

\begin{footnotesize}
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\item[246] Telephone Interview with Katherine Sims, supra note 154.
\item[248] Georgia, for example, only allows schools to give local products a preference when making purchases under \$100,000. \textit{GA. CODE ANN.} § 20-2-500 (2011).
\item[249] \textit{Id.}
\item[250] \textit{Id.}
\item[251] \textit{Id.}
\end{itemize}
\end{footnotesize}
public institutions to give local produce a preference when seeking bids or to purchase produce directly from farmers prior to the passage of S.B. 328. Nonetheless, local food organizers found that school officials were much more receptive to purchasing local food after the law’s passage. One reason for this may be that some procurement officials mistakenly believed that they could not make direct purchases from farmers prior to S.B. 328’s passage. By clarifying that direct purchases from local farmers were not only allowed, but encouraged, the legislation positively affected how school officials viewed local food initiatives.

A Massachusetts law passed in 2010 goes a step further and requires procurement officials to purchase local products under certain circumstances. Building on a 2006 law that allows state agencies to pay up to 10% above the lowest bid to purchase Massachusetts agricultural products, the new law requires state purchasing agents to purchase state-grown products unless the price of the good exceeds the price of out-of-state products by more than 10%. While this requirement does not extend to individual schools, as they do not purchase produce on behalf of the state, it does include public colleges and universities.

VII. Recommendations

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253 Id.
254 Id.
255 Id.
256 Id.
258 Id.
259 Id.
This section contains recommendations on how the state government and nonprofit organizations can encourage the growth of farm to school in Mississippi. The first segment, “Recommendations for the State Government,” details how the legislature and state agencies can take action to support farm to school throughout the state. The second segment, “Recommendations for Nonprofit Organizations,” contains advice for nonprofits, particularly ones interested in locally driven farm to school programs. The third segment, “General Recommendations,” is relevant to both state and local nonprofit efforts.

**Recommendations for the State Government**

*Organize a statewide initiative or hire a statewide coordinator*

A statewide farm to school program in Mississippi could energize farm to school efforts and act as a much needed information clearinghouse. Providing a webpage and a point person for farm to school issues could have an impact that far outweighs the expenditures required for such a commitment. It could serve as a farm to school matchmaker, connecting schools with farmers eager to work with them. This role is vital in order to develop successful farm to school programs around the state, as the case studies in Part V show, and there is no organization currently serving this function in Mississippi.

*Authorize and fund mini-grants for farm to school programs*

Small state grants could have a large impact on farm to school efforts in Mississippi. Vermont’s mini-grant program, which distributes a little over $100,000 each year, has helped make
Vermont a national leader in the movement. A similar program in Mississippi would encourage school districts, nonprofit organizations, and agricultural cooperatives to design and implement farm to school programs throughout the state by providing a small amount of seed money for these programs.

*Allocate funds for GAP/GHP training and certification*

The Mississippi Department of Education requires all produce purchased for statewide programs to be sourced from producers who are certified by a third party auditor (including Good Agricultural Practices (GAP) and Good Handling Practices (GHP)), making participation cost-prohibitive for most small and medium sized farmers. This includes the produce distributed by the national commodity programs, such as the Department of Defense Fresh Program (must be GAP/GHP certified), and the statewide purchasing cooperative (GAP/GHP or other auditing process will suffice). While this requirement does not affect local schools, which do not have to purchase GAP/GHP certified produce, it nonetheless drastically reduces farm to school’s potential in Mississippi. The state could create a fund of money to help small and medium sized farmers receive GAP/GHP training and pay for certification. This would allow more Mississippi farmers to participate in the statewide purchasing cooperative without altering the program’s food safety requirements.

*Develop GAP/GHP certification outreach efforts*

A webpage could be created to explain the process for receiving GAP/GHP certification and address the audit process concerns of small farmers. State agencies and the extension service

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261 Telephone interview with Priscilla Ammerman, supra note Error! Bookmark not defined..
262 Id.
could build on this effort by offering GAP/GHP training aimed at small and mid-sized farmers and growers’ cooperatives. Other states have taken steps to increase the number of farmers with GAP/GHP certification. In Washington, for example, the Washington State Department of Agriculture’s Farm to School Program educates small and mid-sized farmers about GAP certification through mock GAP audits, sample documents, and an educational DVD. Washington State University Extension also offers food safety workshops that introduce farmers to food safety and risk management practices and give farmers an opportunity develop GAP programs with trainers.

Incorporate geographic preference into the statewide purchasing system

Incorporating a geographic preference into the statewide purchasing system would increase the number of Mississippi products purchased through the program and would encourage more farmers to receive the certification necessary to participate. When choosing suppliers, the statewide purchasing cooperative issues an invitation for a bid (IFB), in which suppliers submit a price proposal for the product and the lowest price wins the bid. While not common, geographic preference can be incorporated into IFBs. This can be done in two ways: (1) an IFB issuer can write in specifications that advantage local suppliers or (2) an issuer can deduct a pre-determined amount of money from bids that meet their geographic preference guidelines.

Create additional inspection locations for food that is purchased through statewide programs

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263 Telephone Interview with Tricia Kovacs, Program Manager, Washington State Department of Agriculture Farm-to-School Program (Feb. 7, 2011); Email from Rebecca Elias, Project Coordinator, Washington State Department of Agriculture Farm-to-School Program, to author (Mar. 8, 2011) (on file with author).
265 Telephone interview with Priscilla Ammerman, supra note 92.
266 Long, supra note 93.
267 Id.
Requiring all produced purchased through statewide programs to be inspected in Jackson is inefficient and burdens farmers in other areas of the state who want to participate in the statewide program. Organizing inspection locations in other regions of the state would allow schools to receive fresher produce and would make it easier for in-state farmers to sell products to statewide purchasing programs. There are several USDA grants that could potentially facilitate such an effort. Grants designed to expand marketing opportunities for local farmers can be found online and will be further discussed in Part VII, “Recommendations.”

Publicize current in-state purchasing opportunities

There is currently no public information available for farmers interested in selling to the statewide purchasing cooperative or the DoD Fresh Program. In order to increase awareness among farmers about marketing opportunities in these programs, state officials should list the products needed by schools that can be grown in-state. This will help some growers to make crop decisions based on the crops they know they can sell to the statewide purchasing programs. The programs’ requirements for growers should also be clearly advertised to encourage involvement from more farmers.

Reduce access to unhealthy foods

In order for students to adopt healthy eating habits, their exposure to unhealthy foods must be reduced. One of the CDC’s three strategies to reduce childhood obesity is to increase exposure and access to healthy food, while reducing exposure and access to unhealthy items.268 Farm to school programs, as discussed above, have been shown to increase access to healthy food and to

increase awareness among students as to which foods are healthy. It does little to reduce exposure to unhealthy foods alone, however, and students may be loathe to try healthy, local foods when highly palatable unhealthy foods are available. The CDC lists removing unhealthy food from schools as a promising intervention, noting that “all food and beverages, including those available outside school meal programs,” should meet national nutrition standards. Sugar-sweetened beverages are singled out as a “prime contributor to weight gain and obesity.” Mississippi could take a substantial step forward in reducing exposure and access to unhealthy foods by banning the sale of sugar-sweetened beverages in public schools and otherwise reduce access to unhealthy foods in its schools. Doing so would also increase farm to school’s effectiveness and reach.

**Recommendations for Nonprofit Organizations**

*Survey interest*

Surveying farmers and food service directors about their interest in farm to school has two main benefits. If done well, it will help farm to school organizers identify why some food service directors and farmers may be reluctant to try farm to school. Organizers can then focus on addressing these concerns. It also is a simple way to start building relationships between farmers and school food service directors.

*Engage the Community*

Effective farm to school programs involve parents, community members, businesses, and regional institutions. Parents and community members can provide financial support and help

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269 Id.
270 Id.
organize and publicize local efforts, as well as motivating their children’s schools to pursue farm to school. Local businesses and nonprofits are also often willing to contribute to farm to school programs. In addition to financial contributions, businesses may be willing to donate supplies at reduced cost. Green Mountain Farm to School’s “Supporters” page lists seven supporters that provided in-kind donations, including a compost company and a local vacation resort. As discussed below, farm to school programs can also raise additional funds by charging service fees to deliver food to restaurants and other food service operations.

**Develop Alternative Distribution Systems**

Studies of farm to school programs consistently show that “getting the food from farms to schools . . . [is] one of the key challenges facing these efforts.” Various intermediaries have evolved in response to this challenge. The New North Florida Cooperative is one example. It picks up produce from its members, processes it, and then delivers it directly to schools. Green Mountain Farm Direct (GMFD), which charges purchasing institutions a minimal fee, serves a similar function. GFMD catalogs locally available products and then distributes that information to its customers. Customers then place an order and GMFD will coordinate the delivery.

While developing alternative distribution systems can be expensive, they allow farm to school programs to increase in size and become more cost-efficient. Distribution costs can be offset by

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272 Betty Izumi et al., *supra* note 98, at 336.
273 Id.
274 Telephone interview with Glyen Holmes, *supra* note 144.
275 Green Mountain Farm Direct eventually plans to charge farmers a service fee as well. Id.
276 Id.
277 Id.
delivering to restaurants and other food service operations that can afford to pay higher service fees. Large institutions such as universities and hospitals are particularly attractive customers because of their potentially large demand.\(^{278}\)

*Focus on Financial Sustainability*

Many successful farm to school programs receive considerable funding from state or national grants. To remain financially sustainable, however, it is important to find local sources of funding. Green Mountain Farm to School’s model has three streams of income, two of which are primarily local. The program receives a third of its budget from grants and foundational support, a third through corporate and individual donors, and a third through program service fees and school funds.\(^{279}\) Local sources of income take time to develop and should be fostered from the very beginning.

*General Recommendations*

*Link farms to schools*

A statewide database of schools and farmers interested in farm to school should be created to enable locally driven efforts. As in Michigan, organizers should consider using state extension offices to reach out to farmers that might be interested. A statewide or regional effort could also host mixers between food service directors and farmers.

*Make participating easy*

\(^{278}\) Telephone interview with Colleen Matts, *supra* note 144.

\(^{279}\) Telephone Interview with Katherine Sims, *supra* note 154.
Green Mountain Farm to School, the Mott Group and the NNFC strive to make farm to school as easy as possible for farmers and school officials. Both farmers and school food service directors are generally used to working with large distributors. Farm to school programs may initially require more effort on their part than normal purchasing and selling options. The Mott Group provides sample contractual documents as well as checklists and handouts designed to demystify the process. NNFC uses training sessions and one-on-one guidance to the same effect. If a participating school food service director or farmers needs assistance, they can contact someone they have worked with personally, whether it is an NNFC representative or the local liaison, to help them.

State agencies or non-profit organizations should consider creating a centralized farm to school webpage for Mississippi with information and documents pertaining to farm to school. Relevant Mississippi and federal regulations should be clearly explained and basic “how to” guides should be made available for farmers and food service directors. As discussed above, legislators should consider funding a statewide coordinator to facilitate programs and relationships throughout the state.

*Invest in equipment*

Small and mid-sized farmers often do not have the resources to transport, package, and process products. Non-governmental organizations and state agencies in Mississippi should invest in cooperative efforts to provide small and mid-sized farms with the equipment necessary to sell their products to local institutions. Investments in transportation vehicles, packaging equipment, and processing facilities can be quickly recovered through increased sales. There are also several

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competitive grants available to state agencies and non-profit organizations to fund such capacity building efforts.

Schools often do not have the appropriate kitchen equipment to integrate fresh products into their meals. Many school kitchens are only equipped to heat frozen foods and assemble pre-packaged meal items. To prepare products purchased from local farmers, schools require equipment for storing, prepping, and cooking raw ingredients. They require dry and refrigerated space, an operational stove and oven, and facilities with sinks and tables. They may also need additional equipment such as salad bar units, slow cookers, utensils, salad spinners, cutting boards, knives, and icemakers. School food service staff should be provided with information on how to adapt their kitchens and lunchrooms to integrate more local products. Some national grants are available to schools to adapt their kitchens; however, a statewide competitive grant might further increase interest and participation.

Connect with National and Regional Nonprofit Initiatives and Foundations

An increasing number of national and regional nonprofits and foundations have taken an interest in food access and nutrition, resulting in a variety of sources of support available to local organizations with farm to school programs. FoodCorps, for example, is a yearlong public service program that commenced activities in the fall of 2011. The program has three main components: (1) building schools gardens, (2) nutrition education, and (3) local food

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282 *Id.*
283 *Id.*
procurement. Local host sites supervise the day-to-day work of service members. When choosing organizations to serve as official host sites, FoodCorps prioritizes organizations working in communities with high obesity rates and where over 50% of students receive free or reduced lunches. Initially, fifty members are serving ten different host sites, however FoodCorps hopes to have over 1,000 members working in all fifty states within a decade.

The Chefs Move to Schools program is another program designed to assist local schools and nonprofits with farm to school programs. It connects chefs to local schools interested in creating healthy meals that meet the schools’ dietary guidelines and budgets, while teaching students about nutrition. The Partnership for a Healthier America provides a recipe book and over $2,000 in cookware for participating schools. In addition to providing educational lessons, Chefs can contribute to farm to school programs by working with school food service staff to incorporate local products into their recipes. As of December 26, 2011, eight chefs in Mississippi had signed up for the program without finding a matching school.

**Apply for Federal Grants**

Federal agencies, particularly the USDA, offer a wide range of grants that have been used to fund and support farm to school initiatives. While some are only available to state agencies or schools, many are also available to nonprofit institutions and farmer cooperatives as well. Each year the USDA National Institute of Food and Agriculture (NIFA) disburses approximately 5

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285 Id.
286 Id.
million dollars to nonprofit organizations through the Community Food Projects program.\textsuperscript{288} Community Food Projects grants enhance food security by tying local food processing and production to efforts to improve economic, social, and environmental conditions.\textsuperscript{289} The size of the award can be up to $300,000 over the lifetime of the project and $125,000 in any single year. NIFA’s website states, “Community Food Projects should be designed to (1): meet the food needs of low-income people; increase the self-reliance of communities in providing for their own food needs; and promote comprehensive responses to local food, farm and nutrition issues; and/or (2) meet specific state, local, or neighborhood food and agriculture needs for infrastructure improvement and development; planning for long-term solutions; or the creation of innovative marketing activities mutually benefit agricultural producers and low-income consumers.”\textsuperscript{290}

USDA Team Nutrition grants are another way to support local farm to school initiatives. Team Nutrition grants are used to fund training and educational programs that incorporate the Dietary Guidelines for Americans and USDA foods in meals served under the National School Lunch Program (NSLP) or the Child and Adult Care Food Program (CACFP).\textsuperscript{291} Some states, such as Georgia, Florida, and Idaho, have used Team Nutrition grants to develop and distribute training materials on farm to school for school officials and food service workers.\textsuperscript{292} Team Nutrition grants can also be used to support farm to school programs by assisting schools incorporate more

\textsuperscript{288} NIFA was established on October 1, 2009, replacing the Cooperative State Research, Education, and Extension Services (CSREES) within the USDA. CSREES administered the Community Food Projects program prior to the formation of NIFA. National Institute of Food and Agriculture, \textit{About Us}, available at http://www.csrees.usda.gov/about/about.html (last visited Dec. 28, 2011).


\textsuperscript{290} Id.


\textsuperscript{292} Id.
produce into their meal plans and curricula.\textsuperscript{293} The size of these grants can be as high as $400,000.\textsuperscript{294} State agencies that commit to specific strategies to increase the number of HealthierUS School Challenge applications are eligible for a non-competitive grant of no more than $50,000.\textsuperscript{295} An additional amount of up to $350,000 may be requested through a competitive grants process.\textsuperscript{296}