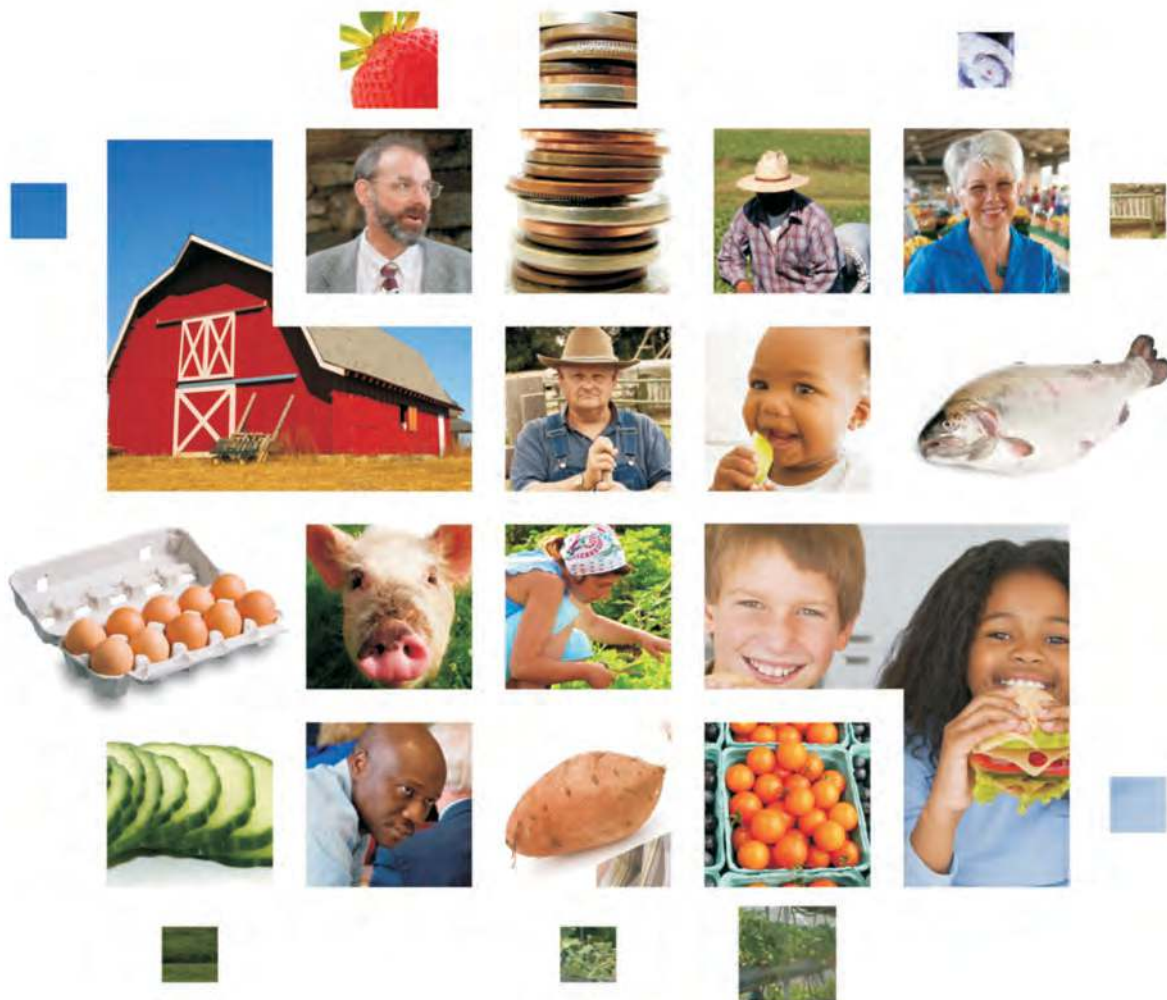


From Farm to Fork



A Guide
to Building
North Carolina's Sustainable
Local Food Economy

This guide reflects the work of many people, including the 1,000-plus individuals who participated in the Center for Environmental Farming Systems (CEFS) 2008-2009 Farm to Fork initiative and contributed their experiences, ideas and vision. Special thanks are due to members of the Working Issue Teams (WITs) who stepped up to provide needed expertise within a tight time-frame and to WIT facilitators whose leadership was crucial to the formation of this document. These are:

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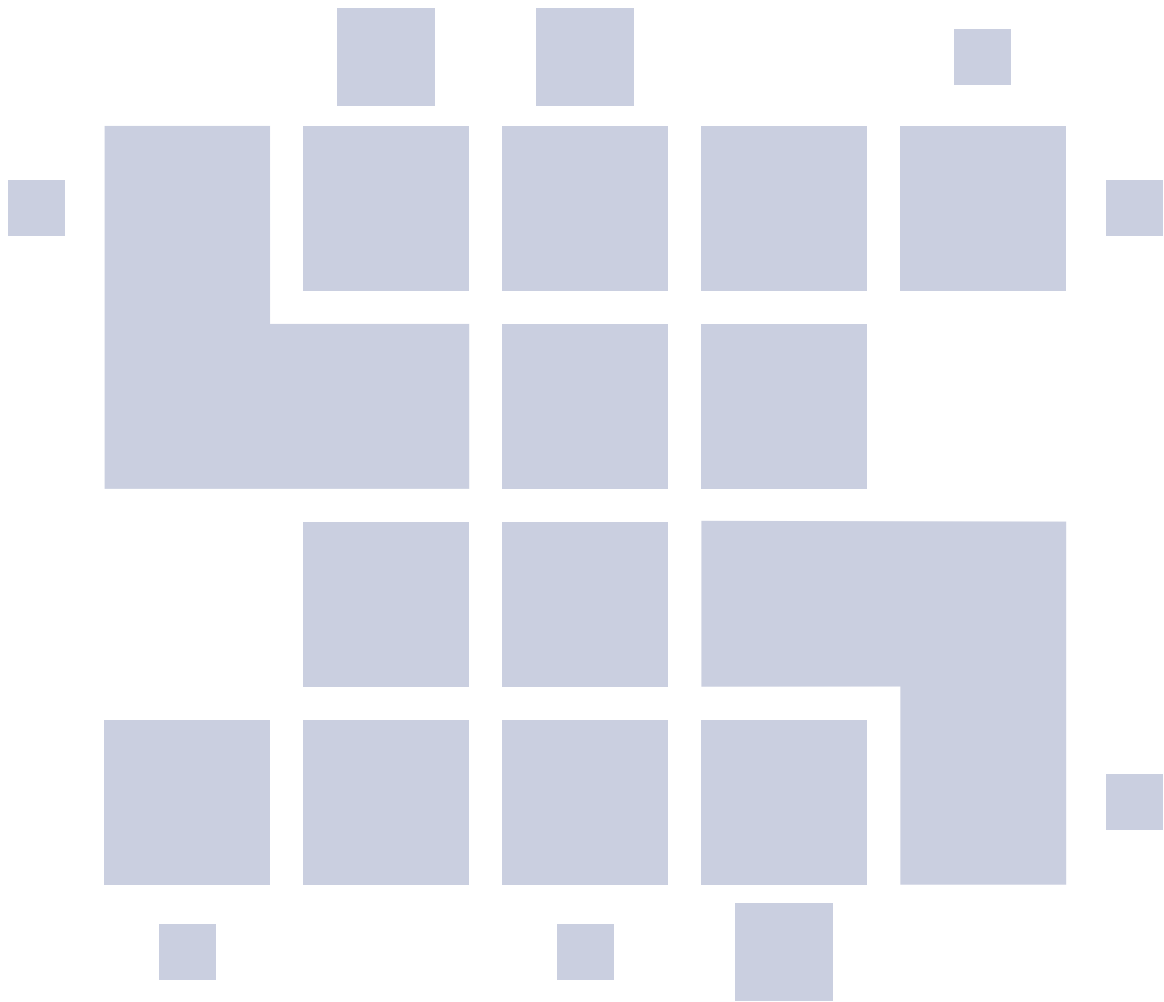
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From **Farm** *to* **Fork**

A Guide to Building North Carolina's Sustainable Local Food Economy



A Center for Environmental Farming Systems Report

prepared by

Jennifer Curtis

with

Dr. Nancy Creamer and Tessa Eliza Thraves

Welcome to *From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy*. This action guide is the product of a yearlong "Farm to Fork" initiative, involving well over 1,000 North Carolinians interested in becoming actively engaged in food and farming issues. Participants in this process included people and organizations working in the fields of agriculture, commercial fishing, community organizing, education, faith, finance, local government, nutrition, philanthropy, planning, public health, public policy and youth outreach. The intent of this guide is to provide key action ideas for building a sustainable food economy in North Carolina at the state and local levels. We hope that implementation of these action steps will lead to significant economic development, stewardship of natural and agricultural resources, and better health and nutrition for all North Carolina residents.

The Center for Environmental Farming Systems (CEFS) is a partnership between N.C. State University, N.C. Agricultural and Technical State University and the N.C. Department of Agriculture and Consumer Services (NCDA&CS). Its mission is to develop and promote food and farming systems that protect the environment, strengthen local communities and provide economic opportunities in North Carolina and beyond. As one of the nation's largest centers for the study of environmentally sustainable farming systems, CEFS has focused on advancing the scientific research base necessary to enable farmers to successfully adapt to emerging ecological issues and market trends. CEFS has also developed strong outreach and education programs designed to reach all North Carolina residents.

Agriculture and fisheries are the foundations of our food system in North Carolina. Developing viable and lasting production systems to meet the consumption demands of a growing population and to confront challenging natural resource realities requires a multi-disciplinary approach that understands and is responsive to social, political and economic trends. One such opportunity is the increasing public interest in food—how and where it is grown or raised, processed, distributed, cooked and consumed. In 2008, CEFS launched its Farm to Fork initiative, "Building a Sustainable Local Food Economy in North Carolina," to better understand how we can work collectively across a diversity of communities on food-systems issues.

With the release of this action guide, CEFS has accomplished its objectives for this initiative, including

- articulating shared values and components of sustainable local food systems,
- identifying and helping to network existing local and regional organizations,
- learning from existing initiatives and identifying best practices and potential models, and
- developing and prioritizing actions at the state and local levels, including needed policy recommendations and program initiatives.

The CEFS Farm to Fork initiative involved the establishment of a broad-based, 75-person advisory team (see Appendix A) including representatives of all sectors of the food system in North Carolina and reflecting the diversity of the state's food-system considerations, including geography, type and scale of operation, and demographics.

The initiative included a series of six regional meetings across the state in the fall of 2008, in Raleigh, Burgaw, Asheville, Greenville, Concord and Winston-Salem. At each meeting, participants were asked to identify and discuss values they considered important, challenges they saw, best practices and projects in which they were involved and proactive ideas for how to move forward in building a more sustainable food system.

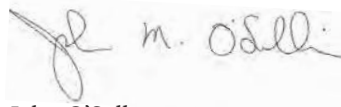
Based on the information shared at these regional meetings, plus input from the advisory team, CEFS developed Working Issue Teams (WITs) to explore priorities for action at the state level around specific food-system topics. These priority actions (also called "game changers") and multiple "local action ideas" have been incorporated into this document as recommended actions.

It is our hope that this guide will capture the enthusiasm, creativity and dedication of all those involved in this statewide effort during the past year. We hope everyone who reads it—including policy makers, agency heads, community leaders and consumers—will identify ways to get involved and take action.

Sincerely,



Dr. Nancy Creamer
Director, Center for Environmental Farming Systems, N.C. State University



Dr. John O'Sullivan
Director, Center for Environmental Farming Systems, N.C. A&T State University



Table of Contents

Executive Summary7

Section 1: The Opportunity15

Discussion of Terms 24

Section 2: Statewide and Local Recommendations for Action27

Recommendations at a Glance29

 1. Engage Decision Makers in Strategic Food-Systems Planning and Implementation30

 2. Coordinate Food-Systems Policies and Regulations33

 3. Grow New and Transitioning Farmers and Secure Prime Farmland.....35

 4. Expand Local Market Opportunities.....42

 5. Cultivate Community Gardens Statewide55

 6. Strengthen Local Government Initiatives.....57

 7. Address Public Health and Food Access Disparities.....62

 8. Increase Consumer Education and Outreach67

 9. Promote Farm-to-School Programming and Engage Youth.....70

Section 3: 10 Things You Can Do to Make a Difference in Your Community.....79

Appendices

 A. CEFS Farm to Fork Initiative Advisory Committee.....86

 B. Working Issue Teams (WITs).....90

 C. Acronyms96

Figures

 1. Logic Model for Building a Sustainable Local Food Economy in North Carolina 10

 2. Number of Farms and Land in Farms in North Carolina (1999-2009) 35

 3. North Carolina Percent Poverty Estimates by County (2007) 63

Spotlights

1. CEFS Farm to Fork Working Issue Teams (WITs).....	12
2. North Carolina’s Health Report Card	19
3. North Carolina Organic Food Facts.....	20
4. Illinois Takes Comprehensive Action to Build Local Farm Economy.....	30
5. Feast on the Southeast.....	31
6. Food Assessments.....	32
7. Pennsylvania’s Model Farmland Conservation Program	39
8. Scalable Models for “Middle” Businesses	45
9. Sustainable Business Models—Striving for a Triple Bottom Line in the Food Sector	46
10. N.C. Fresh Produce Safety Task Force	47
11. States with Preferences for Local-Food Procurement	48
12. How Other Regions are Helping Small-Scale Farmers Address Food-Safety Protocols	49
13. Food Safety: Taking a Broad View.....	50
14. Wayne County: A Public Library Gets Involved	55
15. Urban Ministries Community Gardens: Engaging the Homeless	56
16. Bountiful Cities: Creating Growing Opportunities	56
17. North Carolina Counties and Municipalities Taking Action to Support Local Food Economies.....	60
18. North Carolina Municipalities Allowing Backyard Chickens	61
19. Woodbury County, Iowa, Commits to Local, Organic Food Procurement.....	62
20. Gleaning in North Carolina with Society of St. Andrew.....	64
21. Inter-Faith Food Shuttle: Innovative Approaches to Hunger Relief	67
22. CFSA: Connecting Consumers to Sustainable Farms	69
23. NCDA&CS: Sourcing Local Produce for North Carolina Schools	70
24. Gardening-Based Education at Dillard Academy	72
25. SEEDS: Empowering Youth Through Urban Gardens	73
26. Fair, Local, Organic (FLO) Food at UNC-Chapel Hill.....	74
27. Cook for Good: Eating Local on a Budget	80
28. Walking Fish: A Community Supported Fishery	81
29. The Crop Mob: Innovative Community Engagement	82
30. Come to the Table: Engaging the Faith Community	83
31. Development-Supported Agriculture: How Neighborhoods Can Embrace Farms.....	84

Executive Summary

The people of North Carolina have launched a new initiative to support the development of local and regional food systems. A *food system* is all the processes involved in feeding people—growing, harvesting, processing, packaging, distributing, marketing, consuming, disposing and recycling. North Carolina is well positioned to lead the nation in this endeavor. Our assets include a diverse agricultural economy, a superior educational system, an adaptable workforce and an ever-expanding and diverse set of dedicated partners. Our challenge is to build a *sustainable* food system that strives to be economically viable, environmentally sound and socially just.

Consumer interest in local, organic and sustainably produced foods continues to increase despite the recent downturn in the economy (see page 24 for a discussion of these terms). National sales of organic foods have almost reached the \$25 billion mark,¹ and local food sales are expected to reach \$7 billion by 2011.² Direct-market venues continue to increase in popularity as consumers seek healthy foods that allow them to support agriculture and fisheries in their local communities. Our state is home to 3,712 farmers selling directly to

consumers, for a total value in direct sales of over \$29 million.³ North Carolina has an estimated 200 farmers' markets⁴ and an estimated 100 Community-Supported Agriculture programs (CSAs).⁵

In 2009, North Carolinians spent approximately \$35 billion on food.⁶ If all North Carolina residents spent 10 percent of their food dollars on local foods (\$1.05 per day), approximately \$3.5 billion would be available in the local economy every year, and part of that would flow back to farmers and food businesses.⁷ Greater spending on local foods increases economic activity at the community level, which can translate into job opportunities. Our state's population is rapidly increasing. By supporting the development of local food and farming businesses, we can harness consumer spending to support North Carolina producers, including those in rural and urban-fringe communities. We can revitalize our agricultural heritage by strengthening consumers' connections to the land and to the farmers who grow our food.

"Y'all are red hot. You are beginning to change the tide, directing the links between local agriculture, jobs and the economy. Finally people across the state and the country are beginning to realize you are red hot."

N.C. Gov. Beverly Perdue, Farm to Fork Summit, May 2009



Becky Kirkland

N.C. Gov. Beverly Perdue, Farm to Fork Summit, May 2009

We also have the opportunity to build local and regional food systems that help improve health outcomes and reduce health care costs. In 2003, health care expenditures for chronic diseases in North Carolina were \$40 billion,⁸ the majority of which, according to the Centers for Disease Control and Prevention (CDC), was for the treatment of preventable chronic diseases.⁹ Diet plays a significant role in many of these diseases. Increasing access to and encouraging consumption of fresh, healthy foods are important ways to address disease incidence and health care expenditures, particularly in underserved communities throughout our state.

In 2008, the Center for Environmental Farming Systems (CEFS) launched its Farm to Fork initiative, "Building a Sustainable Local Food Economy in North Carolina." The intent was to

- articulate shared values and components of sustainable local food systems,

- identify and promote collaboration among existing local and regional organizations,
- learn from existing initiatives and identify best practices and potential models, and
- develop and prioritize actions at the state and local levels, including needed policy recommendations and program initiatives.

We can revitalize our agricultural heritage by strengthening consumers' connections to the land and to the farmers who grow our food.

More than 1,000 North Carolinians participated, including those working in the fields of agriculture, commercial fishing, community organizing, education, faith, finance, nutrition, philanthropy, planning, public health, public policy, state and local government, and youth outreach.

The Farm to Fork initiative identified nine major issue areas as challenges to be addressed. These are:

1) Engaging decision makers in strategic food-systems planning and implementation. Food is essential for life. Yet unlike other enduring necessities—water, air and shelter—food has not



Becky Kirkland

been considered a priority for planning by state and local officials and decision makers. Engaging state and local governments in food-systems issues can be accomplished through food policy councils. Such councils can establish goals and benchmarks for improving food-system sustainability and conducting food assessments to gather baseline data. A total of 17 states have or are developing food policy councils.

2) Coordinating food-systems policies and regulations. Our current regulatory environment for food is best described as a thicket: complex, sometimes irrational and often difficult to maneuver. Lack of coordination among federal, state and local agencies with authority over food-related issues can impede innovation in food and farming sectors. This confusion relates to the sheer number of agencies involved. It also stems from the fact that food production, processing and sales are regulated differently by different agencies depending on the type of commodity, the scale of production, the degree of processing and the market channel used for distribution.

3) Growing new and transitioning farmers and securing prime farmland. North Carolina is rapidly losing its agricultural base, as the average age of farmers reaches 56. Farms owned by black farmers and families are being lost at an even faster rate than farms owned by their white counterparts. Prime farmland is being replaced by real-estate development, threatening the disappearance of high-quality soils needed for food production. Those producers who remain face numerous risks when tackling new markets, including lack of access to affordable land, working capital and risk-management strategies.

4) Expanding local market opportunities. Retail, food-service and institutional markets typically source very little food specifically from North Carolina producers, particularly smaller-scale producers. This tendency is not necessarily because of a lack of commitment on the part of larger-scale buyers, but because the support systems and infrastructure for aggregating, storing, processing and distributing food to these markets have been established over multiple years to operate most efficiently at the national and often global level. Expanding access to these markets requires addressing a host of issues, including the need for food-systems infrastructure, businesses and public/private partnerships.

5) Cultivating community gardens statewide.

Community gardens include gardens in neighborhoods, housing facilities, faith communities, schools, businesses, public agencies and other places. Well-tended community gardens and urban farms can produce healthy food, build soil quality and protect public green space. Maintaining community gardens and urban farms can be challenging. They often fail, not because of plant loss, but a lack of organizational resources on the part of community residents.

6) Strengthening local government initiatives.

North Carolina has 100 counties and 548 municipal governments. State law provides local governments with broad authority to engage in activities related to economic development. Historically, agriculture has been perceived as antithetical to economic development, particularly in rural areas. Building a local food economy creates new opportunities for local leaders to help solve pressing economic challenges.

7) Addressing public health and food access disparities.

North Carolinians face a number of health challenges related to our food system. One is the incidence of diet-related chronic diseases, including obesity and diabetes, which are associated with consumption of nutrient-poor, high-calorie foods. At the same time, we are experiencing food insecurity, which exists when an individual or family lacks adequate or consistent access to the foods necessary to lead an active, healthy lifestyle. Increasing consumption of and access to fresh, healthy foods is a major challenge. In addition, a tremendous amount of food is wasted in the state, including fresh, perishable foods left unharvested.

8) Increasing consumer education and outreach.

While in some regions of North Carolina there is strong and growing consumer interest in fresh, local, sustainably produced and organic foods, there is not yet uniform demand or emphasis across the state. There are a few organizations and agencies operating effective public-education and marketing campaigns, but these efforts are moving forward separately and often with limited knowledge of each other.

9) Promoting farm-to-school programming and engaging youth.

Children's health and well-being are connected to diet, nutrition and food security. Access to an ample quantity and variety of fruits and vegetables at school, at home and in the community is critical. Access is especially

important for school-age children, given that poor dietary habits can linger or worsen into the high school years and adulthood. In addition, youth on the brink of adulthood will be our future leaders. They need in-depth knowledge of the food system, which can be gained through engagement in activities such as leadership development and mentorship.

Increasing access to and encouraging consumption of fresh, healthy foods are important ways to address disease incidence and health care expenditures, particularly in underserved communities throughout our state.

The Farm to Fork initiative was designed to engage a broad cross-section of interests and also to advance a collective sense of priority actions. Identifying priorities in this context can be challenging, primarily because what we are trying to influence is a *system*, in which the success of the whole depends on proper functioning of interrelated parts. Working toward a more sustainable food system in North Carolina requires that we scale up our supply of (and increase access to) fresh, local, sustainably produced and organic foods, which involves *simultaneously* addressing the needs for

- more producers, who in turn need access to affordable and productive land and risk-management strategies, as well as
- access to larger-scale markets that demand consistent, affordable, high-volume food supplies, which requires
- new “middle” businesses that can aggregate, process and distribute food, which depend on having
- a supportive regulatory environment and
- strong consumer demand, which requires
- outreach to the public and decision makers.

We include here a logic model (see Fig. 1) which identifies the numerous interrelated issues, strategies and outcomes inherent to building a sustainable food economy in North Carolina.

Building a Sustainable Local Food Economy in North Carolina

VISION: North Carolina has a strong local food economy where all North Carolinians regularly consume fresh, healthy foods that are grown, raised, caught, processed, distributed and marketed sustainably by local producers and businesses.

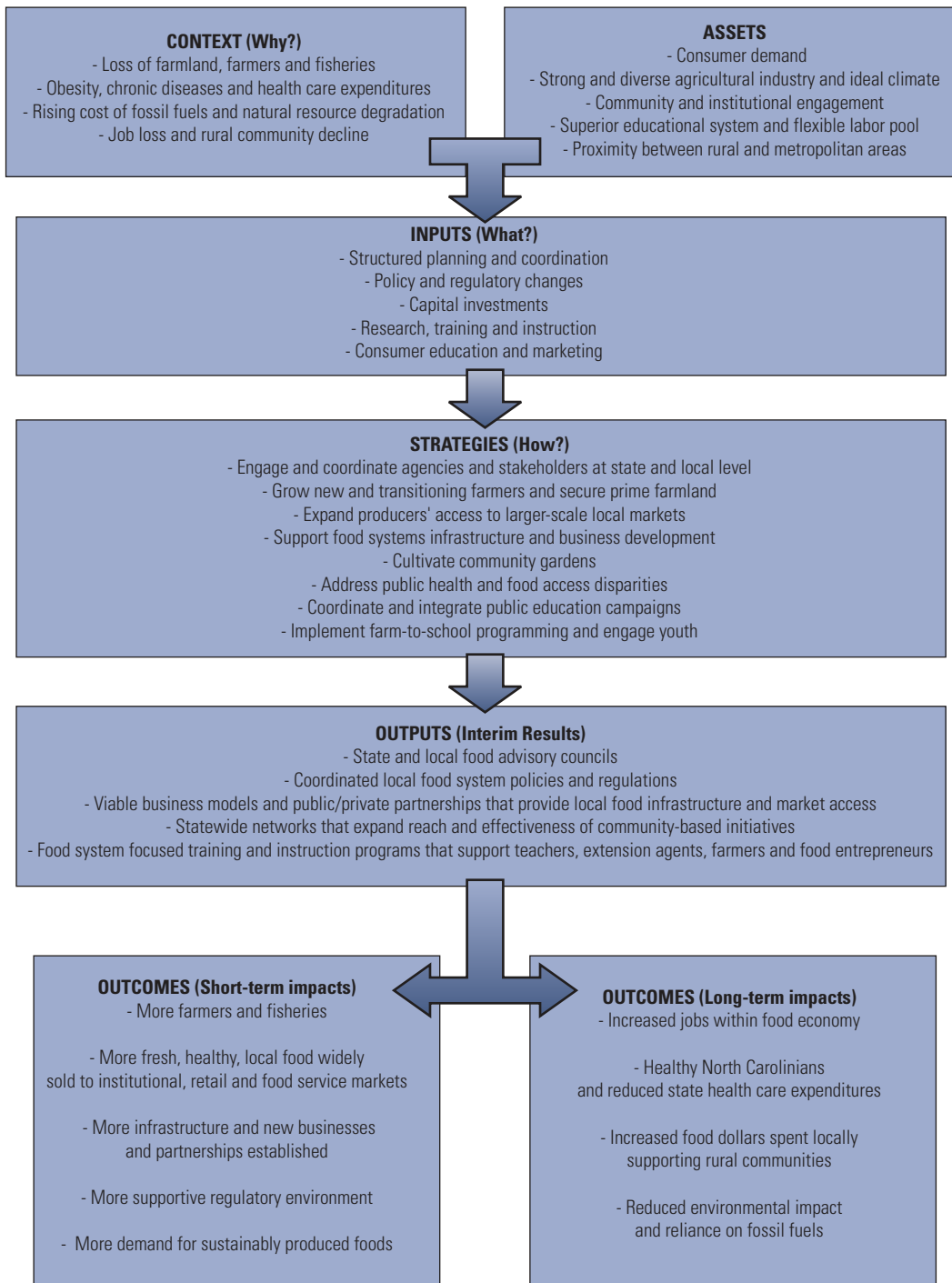


Fig. 1. Logic Model for Building a Sustainable Local Food Economy in North Carolina.

To prioritize action ideas, the Farm to Fork initiative focused on identifying recommendations that help us move forward at the state level, and in many cases, strengthen locally driven efforts. This process involved 11 different time-limited, topic-specific Working Issue Teams (WITs) (see Spotlight 1). Each WIT included a small group of experts with experience in the particular issue who were charged with identifying at least one “game changer.” Game changers are ideas considered to be *important* to implement at the *state level* and *doable* within a *short time frame* (one to two years). Each WIT also identified possible local action ideas.

On May 11-12, 2009, CEFS hosted “From Farm to Fork: Building a Sustainable Local Food Economy in North Carolina,” a statewide summit held at the McKimmon Center in Raleigh. The summit was an exciting and energizing event attended by more than 420 people. WIT leaders presented their game changers and local action ideas to the participants, and these ideas were further discussed and fine-tuned in breakout sessions. Speakers at the summit included notable politicians, academic leaders and industry representatives.

The following is a brief description of the 11 game-changer ideas for immediate action:

1. Establish and implement a statewide food policy council. Significant progress has been made toward this game changer. As an outgrowth of the Farm to Fork process, Senate Bill 1067 was passed in the state legislature in August 2009. It established the N.C. Sustainable Local Food Advisory Council, which began meeting in February 2010. It is CEFS’ intent that this guide, including the identified game changers, be considered a starting point for Council deliberations.

2. Appoint a state-level food-systems ombudsman. A new state-level position is needed to act as an intermediary between state agencies and stakeholders. This individual would work at a high level, across agencies and departments, to streamline food-system regulatory approaches and licensing requirements at the federal, state and county levels. An ombudsman would provide multiple services, especially in two critical areas: providing a centralized source of information for small-scale diversified farmers, food entrepreneurs and others, and harmonizing different rules governing food and farming sectors. At least three other states have created similar positions.



Becky Kirkland

3. Dedicate permanent and significant funding for the N.C. Agricultural Development and Farmland Preservation (ADFP) Trust Fund. In order to protect valuable farmland and support new agricultural enterprises, the North Carolina legislature should establish a permanent source of funding for the ADFP Trust Fund of at least \$30 million per year. The ADFP Trust Fund is administered by the N.C. Department of Agriculture and Consumer Services (NCDA&CS) to support agricultural development and farmland preservation, with a focus on funding the purchase of conservation easements and agricultural development projects, including enterprises to market farm products, develop agritourism and create value-added products.

U.S. Congressman Bob Etheridge, Farm to Fork Summit, May 2009

The Farm to Fork process was designed to engage a broad cross-section of interests and also to advance a collective sense of priority actions.

4. Help network direct-marketing initiatives statewide. Marketing food directly from farmers to consumers (e.g., through farmers’ markets, CSA programs, food-buying clubs) is fundamentally a local activity that does not require statewide oversight. However, there is increasing interest in strengthening local efforts by creating better mechanisms for networking across the state (e.g., formation of a statewide farmers’ market association). Benefits include shared learning, collaborative fund-raising, and enhanced training and education efforts.

Spotlight 1

CEFS Farm to Fork Working Issue Teams (WITs)

- Community Gardens and Farms
- Consumer Outreach and Marketing
- Direct Markets
- Expanding Institutional, Retail and Food Service Markets for Small and Medium-Scale Farmers
- Farm-to-School Programming
- Formalizing the Initiative: Foundations and Baselines
- Land Use and Local Government Initiatives
- Processing and Other Food Systems Infrastructure
- Public Health and Food Access Disparities
- Support for New and Transitioning Farmers
- Youth and Social Networking

(See Appendix B for a complete list of WIT participants.)

5. Establish goals for state procurement of local food. Establishing goals to encourage state agencies and local governments to purchase local foods gives these institutional food buyers the opportunity to support North Carolina's farmers and the local food economy. A number of other states have already adopted policies that give preference to the purchase of local foods. One approach that may work well in North Carolina is to use Executive Order 156, which directs state agencies to make "best value procurement"

decisions that take into consideration the need to protect natural resources, conserve energy, eliminate waste and emissions, and reduce environmental and human health impacts.

6. Develop a model farm-to-institution program that addresses barriers to procurement for institutional markets.

"Feed the Forces" is such an initiative. It seeks to utilize eastern North Carolina's

vast agricultural capacity to meet the food, fuel and fiber needs of nearby Fort Bragg. By 2015, Fort Bragg is expected to support as many as 40,000 residents. Project partners who seek to help local farmers overcome barriers to accessing institutional markets by developing systems and protocols regarding packaging, pricing, distribution logistics, food safety and product liability. Funds from the Golden LEAF Foundation were recently awarded to support this effort.

7. Fund a statewide coordinator and other activities of the N.C. Community Garden Partners (NCCGP). As of November 2009, at least 94 community gardens had been identified across the state. The NCCGP, a statewide network of more than 25 public and private organizations, seeks to expand this number to include every community in the state. Support needs include personnel to manage the network and to map existing gardens, and support for existing gardens to become models and "hubs" for outreach, education and peer support.

8. Expand and strengthen North Carolina's SNAP-Ed programming. Public/private partnerships are needed to address food insecurity in low-income communities. A priority is better coordination of and support for statewide marketing, distribution and gleaning efforts. This includes leveraging federal benefits programs as a way to reach limited-resource consumers with both nutrition education and increased healthy food access (e.g., SNAP and WIC) while contributing to small-farmer viability through the use of electronic benefits transfer (EBT).

9. Launch an "Eat 10% Local, Sustainable Food Campaign." Grant funding from the Golden LEAF Foundation was recently awarded to conduct an interactive statewide advocacy campaign to engage North Carolina residents, as well as institutional and retail outlets, in achieving the goal of purchasing 10 percent of their foods from local sources. An outgrowth of the Farm to Fork process is a commitment from the N.C. Cooperative Extension to host a Web portal that would serve as a hub for the campaign. This portal would serve to coordinate educational, promotional and data-collection activities. In addition, Cooperative Extension would designate local-food coordinators in every county to support the campaign.

10. Develop a model farm-to-school pre-service teacher instruction program. In order to reach students, teachers need to be trained in farm-to-



Becky Kirkland

school programming. Instruction needs to happen before teachers start teaching (i.e., pre-service) and incorporated into existing teacher-training programs. The focus is to integrate into the N.C. Standard Course of Study experiential nutrition education, school gardening and farm field-trip lessons. This pre-service program would prepare the next teacher vanguard to be equipped to address math, science, language arts, healthful living and other curricular subjects with exciting and experiential farm-to-school learning strategies.

11. Develop a teen-focused social network around food systems.

A statewide teen-focused network is needed to bring together organizations interested in and/or run by youth and young adults. Peer-to-peer connections, as well as social networking (e.g., Facebook and Twitter), would increase youth engagement and maximize opportunities for youth and young adults in our food system.

The Farm to Fork process proved that all of us can foster better connections with local farms and food in places of work, recreation, study, service and worship. The following list includes examples of actions that individuals can take to make a difference in their own communities:

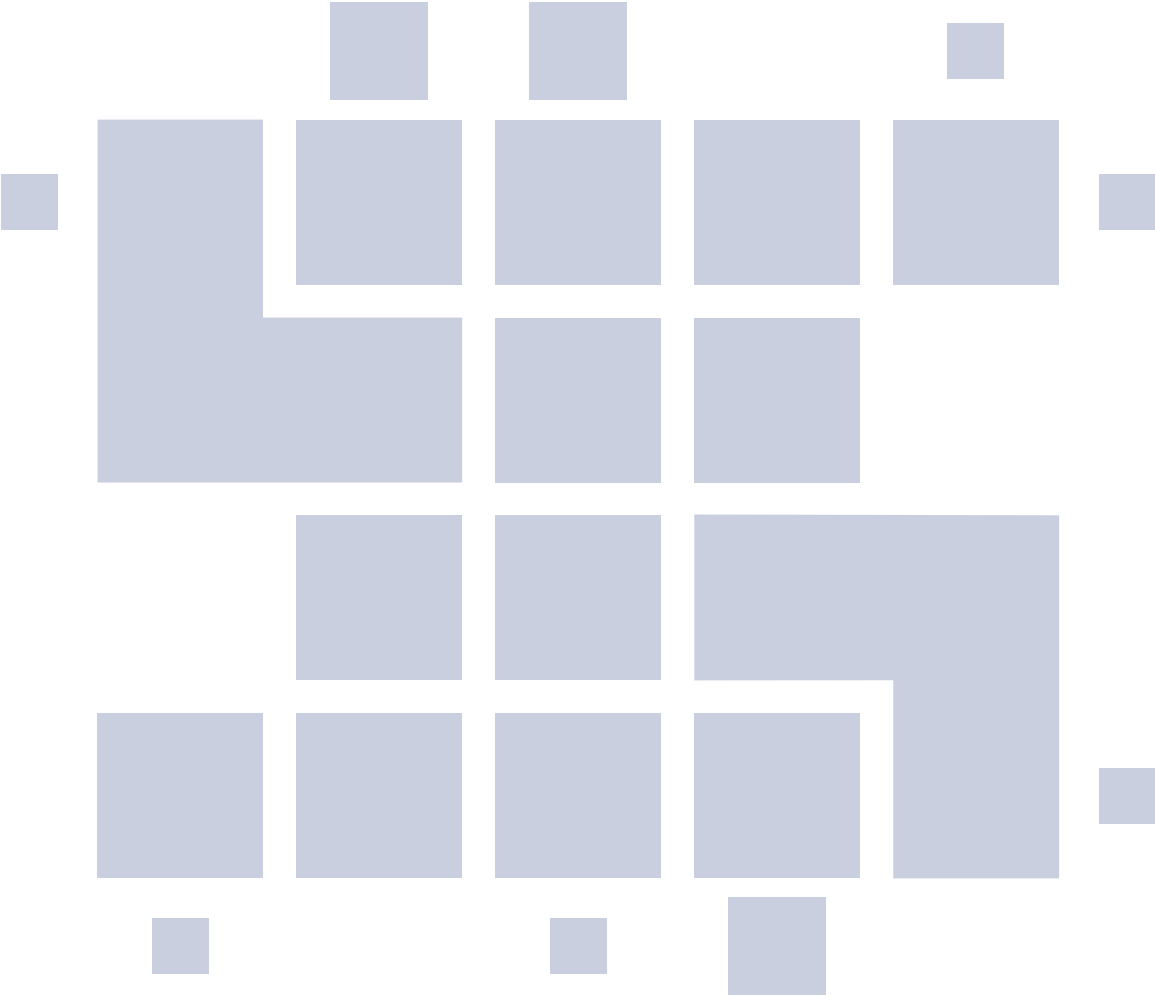
- Cook with fresh, local and seasonal ingredients.
- Buy from your local farmers and food businesses.
- Start or participate in a community garden.
- Advocate for healthy foods at your child's school or day care.
- Organize a farmers' market, CSA or food-buying club.
- Build food-system partnerships.
- Promote transparency in packaged foods.
- Support the development of community farm and garden trusts.
- Join local food and farming organizations.
- Monitor statewide food-system developments.

CEFS offers *From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy* as a framework for making progress now and in the future. Our intent is for this action guide to show the groundswell of grassroots engagement and creativity surrounding food-systems issues in North Carolina. Our next step is to leverage this activity in support of new partnerships and focused statewide action.

Endnotes

- ¹ Organic Trade Association, "The Organic Industry," 2008, <http://www.ota.com/pics/documents/Mini%20fact%201-08%20confirming.pdf> (accessed January 28, 2010).
- ² *Local and Fresh Foods in the U.S.* (Rockville, MD: Packaged Facts, May 1, 2007), <http://www.packagedfacts.com/Local-Fresh-Foods-1421831/> (accessed January 28, 2010).
- ³ "Table 2. Market Value of Agricultural Products Sold Including Landlord's Share and Direct Sales: 2007 and 2002," *2007 Census of Agriculture: North Carolina State and County Data* Volume 1, Geographic Area Series, Part 33 (Washington, DC: U.S. Department of Agriculture, National Agricultural Statistics Service, updated December 2009) http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/North_Carolina/st37_1_002_002.pdf (accessed January 28, 2010).
- ⁴ This estimate is based on a review of farmers' markets listed by the U.S. Department of Agriculture, <http://apps.ams.usda.gov/farmersmarkets/default.aspx> (accessed April 6, 2010), the N.C. Department of Agriculture and Consumer Services, <http://www.ncfarmfresh.com/farmmarkets.asp> (accessed April 6, 2010), Appalachian Sustainable Agriculture Project, <http://www.buyappalachian.org/filter/group/tailgate> (accessed April 6, 2010) and Local Harvest, <http://www.localharvest.org/search.jsp?st=35&ty=1&nm> (accessed April 6, 2010).
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- ⁶ U.S. Department of Agriculture, Agricultural Marketing Service, "North Carolina: Population Profile," Transportation and Marketing, 2004, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5058244&acct=stmktrfl> (accessed January 28, 2010).
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- ⁸ "Milken Institute Chronic Disease Index," Milken Institute's An Unhealthy America: The Economic Burden of Chronic Disease Web site, n.d., <http://www.chronicdiseaseimpact.com/ebcd.taf> (accessed January 28, 2010). Chronic diseases include cancer, diabetes, heart disease, hypertension, mental disorders, pulmonary disorders and stroke.
- ⁹ *The Power of Prevention: Chronic Disease... the Public Health Challenge of the 21st Century* (Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, 2009), <http://www.cdc.gov/chronicdisease/pdf/2009-Power-of-Prevention.pdf> (accessed February 4, 2010).

Section 1.
The Opportunity



The U.S. Department of Agriculture (USDA) recently announced a new national initiative titled, “Know Your Farmer, Know Your Food,” supporting the development of local and regional food systems. In the words of U.S. Secretary of Agriculture Tom Vilsack,

...by reconnecting consumers with local producers, we can create new income opportunities for farmers, promote sustainable agriculture practices, help generate wealth that will stay in rural communities, provide families and children with a healthier food supply and decrease the amount of energy used to ship all over the world...¹

The opportunity before us fundamentally revolves around harnessing consumer spending on food to bolster the sustainability of local farms and fisheries, to support economic development and job creation in rural areas, and to help address diet-related health problems.

The USDA is responding to a national dialogue now taking place about our current food system. Weekly editorials and articles in major media outlets as well as popular movies and television shows are prompting a more in-depth look at where and how our food is produced and processed. Who benefits, and who does not? What are the costs to our health and to the environment? How can consumers better understand where their food comes from?

North Carolina is a big part of this conversation. It is the 10th most populous state² and the eighth largest agricultural state,³ and it ranks 13th in the commercial fishing industry.⁴ On an annual basis, the state’s farm income exceeds \$8.6 billion,⁵ with agricultural exports of more than \$3 billion.⁶ North Carolina will help shape the extent to which the USDA’s initiative becomes a reality. The opportunity before us fundamentally revolves around harnessing consumer spending on food to bolster the sustainability of local farms and fisheries, to support economic development and job creation in rural areas, and to help address diet-related health problems. By focusing on increasing consumption of local foods, we have an important and unprecedented chance to connect our rapidly expanding metropolitan areas with our rural, largely agricultural communities—leveraging a core desire on the part of consumers for a greater connection to the land and the farmers who grow their food.

In a recent report prepared for the N.C. Rural Center–Agricultural Advancement Consortium, farmers and Cooperative Extension agents across the state were asked what they see as the greatest opportunities for the next 10 years. In a majority of the state, the primary opportunities identified were the growth in demand for local and organic foods, and direct-marketing strategies.⁷

Market Demand

Consumers are demanding fresh, local, organic and sustainably produced foods across all major market channels. Organic food sales have increased steadily for the past 25 years, even during the recent economic downturn. Sales of organic products grew over 17 percent in 2008 and are now close to \$25 billion.⁸ Interest in locally grown foods has been increasing rapidly. Seventy percent of consumers want to know where their food comes from and would pay more for local food if they could find it.⁹ Overall, local food in the United States is estimated to be a \$5 billion industry, with expected growth to



Becky Kirkland

reach \$7 billion in 2011.¹⁰ Demand for local foods in the Appalachian region of the state, including produce, dairy, eggs and meat, has been estimated to be over \$450 million, with 82 percent of survey respondents in western North Carolina willing to pay more for local food if it were labeled as local.¹¹

Across the country, there has been a virtual explosion of interest in fresh, local, organic and sustainably produced foods within direct farm-to-consumer sales. The number of farmers' markets increased 70 percent in the last decade—with close to 5,000 markets established in the United States. More than 12,000 farms now sell food through Community-Supported Agriculture programs (CSAs) nationwide.¹² Eighty-five percent of direct farm-to-consumer sales are in metropolitan regions.¹³ North Carolina now has an estimated 200 farmers' markets¹⁴ and at least 100 CSAs,¹⁵ with many farmers reporting waiting lists of consumers. And North Carolina is now home to several local food-buying clubs and the Southeast's first-ever community-supported fishery.



Debbie Fous

What are consumers looking for? Motivations vary, but include personal and private interests as well as civic and public concerns. Consumers shopping for local foods at direct-market venues have the following interests: economic support for agriculture in the community, perceived produce quality and safety, a relationship with the land, and the environmental benefits of local farms. While these consumers continue to be interested in attributes that benefit their personal health, they are increasingly valuing the *places* where they buy their food and believe that spending their food dollars locally will contribute to a market solution to perceived problems.¹⁶ In 2008, the National Restaurant Association reported that 62 percent of restaurant patrons chose restaurants based on their commitment to the environment, and 40 percent of fine-dining patrons indicated that they would like to see more local foods on menus.¹⁷ Similarly, 91 percent of respondents to a 2008 survey conducted in North Carolina reported a preference for purchasing local seafood over imports when given a choice, and 60 percent reported selecting restaurants that make an effort to serve local seafood.¹⁸

In 2009, North Carolinians spent over \$35 billion on food, about half of which was for foods consumed at home and the remainder for dining out.¹⁹ What percentage of those food dollars was spent on foods grown, raised or caught by North Carolina producers? What percentage was spent on foods processed, packaged, distributed and retailed by North Carolina companies? What percentage was spent on organically grown or sustainably produced foods? The answers to these and related questions is unknown and highlights an important priority for inquiry and analysis. Estimates do exist for Western North Carolina, where spending on local foods was estimated to be just over \$30 million in 2009.²⁰

Overall, local food in the United States is estimated to be a \$5 billion industry, with expected growth to reach \$7 billion in 2011.



Debbie Ploos

Economic Development

What would it mean to North Carolina's economy, particularly to rural communities, if we were able to direct a greater percentage of food spending toward local producers and food businesses? If all North Carolina residents spent 10 percent of their food dollars on local foods (\$1.05 per day), approximately \$3.5 billion would be available in the local economy every year, part of which would flow back to farmers and food businesses.²¹ Several economic studies in other areas of the United States demonstrate the potential benefits of shifting food dollars locally. One study in Iowa, for example, suggests that if Iowans purchased 25 percent of their fruits and vegetables from Iowa farmers—and if these farmers switched to growing produce instead of commodity crops and sold half of it themselves directly to consumers—it would

generate \$139.9 million in new economic output annually and create more than 2,000 new jobs for the state.²²

Some studies have evaluated the concept of the “local multiplier effect,” which suggests that small shifts in spending can have great impacts. Every time money changes hands within a community, it boosts overall income and community-level economic activity, which fuels job creation. Spending money at locally owned businesses, the concept suggests, has a greater multiplier effect because local businesses are more likely to spend those dollars locally. In a study conducted in the Central Puget Sound region of Washington, it is estimated that spending \$100 at a local restaurant results in \$79 in additional income to local businesses, while spending the same \$100 at a chain restaurant results in just \$31 being spent locally. Furthermore, when farmers in the region grow food for export, each dollar of sales generates \$1.70 of income for the region's economy, while every dollar spent at a farmers' market generates \$2.80 in income for the region's economy.²³

With support from the N.C. Tobacco Trust Fund Commission (NCTTFC), the Rural Advancement Foundation International–USA (RAFI–USA) is demonstrating that relatively modest investments in farm and community enterprises can create job opportunities in the agricultural sector. From 2003 to 2007, with less than a \$1 million investment, RAFI–USA's Tobacco Community Reinvestment program created 76 new jobs, preserved another 595 jobs and generated \$3.7 million in revenue for farmers.²⁴

North Carolina producers are responding to consumer interest in purchasing fresh, local, organic and sustainably produced foods. Compared to 3,054 farms in 2002, there are now 3,712 farms selling directly to consumers in the state, for a total value in direct sales of over \$29 million.²⁵ The number of farmers who have applied for and received their meat handlers' licenses, enabling them to sell meat and poultry direct to consumers, has increased tenfold in the past four years, for a total of 285 farmers in 2009.²⁶ In 2008, there were 246 certified organic farms in North Carolina with sales valued at close to \$53 million.²⁷

What would it mean to North Carolina's economy, particularly to rural communities, if we were able to direct a greater percentage of food spending toward local producers and food businesses?

Health Promotion

According to the Centers for Disease Control and Prevention (CDC), chronic diseases account for 75 percent of health care spending in the United States.²⁸ Diet plays a significant role in many (but not all) of these diseases, including diabetes, obesity, cardiovascular diseases and many cancers. North Carolina has the 12th highest rate of adult obesity in the nation, and today, more than a third of the state's 10- to 17-year-olds is overweight or obese.²⁹

What does this cost our state? In 2003, North Carolina's health care expenditures totaled \$40 billion for chronic diseases (specifically cancer, diabetes, heart disease, hypertension, mental disorders, pulmonary disorders and stroke). This includes direct costs for health care as well as the indirect costs of lost productivity.³⁰ In North Carolina, people with lower income levels have a higher risk for diet-related chronic diseases. For example, diabetes incidence is twice as likely for individuals with lower income and lower educational attainment as compared to college graduates and those with higher incomes.³¹

Increasing access to and encouraging consumption of fresh, healthy foods is an important way to address chronic disease incidence, particularly in underserved communities throughout our state. Improving the quality, freshness and diversity of available foods may also help prevent obesity and other diet-related diseases. The health of all North Carolinians can be improved by encouraging consumption of and increasing access to healthy foods—particularly those grown, raised and caught by North Carolina producers and processed and distributed by North Carolina businesses.

Moving Forward

North Carolina has numerous assets that make it possible to scale up our state's response to rising consumer demand and the need for greater access to fresh, local, organic and sustainably produced foods. Agriculture is the backbone of our state's economy, employing 16 percent of the workforce.³² North Carolina's climate, soils and coastal resources support production of a diversity of foods, including at least 80 different common commodities—fruits, vegetables, grains, dairy, meat, poultry, fish and seafood. Importantly, North Carolina is a major producer of fresh fruits and vegetables and has approximately 3,745 vegetable farmers.³³ Unlike many states, North Carolina has a large number of small, relatively diversified farms. Nearly half of the state's farmland (spanning more than 25,000 farms) is in farms that are 50 acres or less.³⁴ And, in terms of better connecting consumers and farmers, the state enjoys relatively close proximity between rural and metropolitan regions.

Spotlight 2

North Carolina's Health Report Card

In 2007, cardiovascular diseases (heart disease, stroke and atherosclerosis) accounted for almost a third (29 percent) of all deaths in North Carolina. Heart disease and stroke are the first and third leading causes of death in our state.

Almost a third (28.8 percent) of the adults in North Carolina reported in 2007 that they have been told they have high blood pressure.

Nine percent of North Carolina adults have been told by a doctor that they have diabetes.

Sixty-four percent of North Carolina adults have a body mass index greater than 25, indicating they are either overweight or obese.

More than a third of North Carolina children between the ages of 10 and 17 years old are overweight or obese.

An estimated 15 to 45 percent of all new diabetes cases in North Carolina children are Type 2—a disease previously found only in adults.

Sources: North Carolina Vital Statistics, Volume 2: Leading Causes of Death (Raleigh, NC: N.C. Department of Health and Human Services, Division of Public Health, State Center for Health Statistics, November 2008), <http://www.schs.state.nc.us/SCHS/deaths/lcd/2007> (accessed January 28, 2010); "2007 BRFSS Survey Results: North Carolina," N.C. State Center for Health Statistics Web site, May 29, 2008, <http://www.schs.state.nc.us/SCHS/brfss/2007/nc/all/BPHIGH4.html> (accessed January 28, 2010); "The Burden of Obesity in North Carolina (Adults, Children, and Youth)," Eat Smart, Move More North Carolina Web site, n.d., <http://www.eatsmartmovemorenc.com/ObesityInNC/ObesityInNC.html> (accessed January 28, 2010); Tipping the Scales: How Obesity and Unhealthy Lifestyles Have Become a Weighty Problem for the North Carolina Economy (Morrisville, NC: Be Active North Carolina, Inc., June 2008), http://209.200.69.140/threepersent/download/Tipping_the_Scales.pdf (accessed January 28, 2010).



North Carolina offers a superior educational system, with 59 community colleges, multiple universities and a comprehensive Cooperative Extension system supported by the state's two land-grant colleges, N.C. Agricultural and Technical State University and N.C. State University. Our adaptable workforce can transition into new jobs created in the food sector, including farming, food processing, marketing and distribution. Established educational and outreach organizations that have been dedicated to advancing sustainable agriculture and fishing for many years include pioneers like the Appalachian Sustainable Agriculture Project (ASAP), Carolina Farm Stewardship Association (CFSA), Carteret Catch, Central Carolina Community College (CCCC), the Center for Environmental Farming Systems (CEFS) and RAFI-USA. Funders in North Carolina dedicated to facilitating progress in sustainable agriculture and food systems include the Agricultural Advancement Consortium, the N.C. Department of Agriculture and Consumer Services (NCDA&CS), N.C. Agricultural Development and Farmland Preservation (ADFP) Trust Fund, the Golden LEAF Foundation, the N.C. Tobacco Trust Fund Commission and the Z. Smith Reynolds Foundation. Most importantly, a diverse set of partnerships continues to

expand across the disciplines of education, health and nutrition, sociology, economic development, public policy, sustainable agriculture, business management and finance, community organizing and youth engagement.

The USDA has stated its support for the development of local and regional food systems. North Carolina is well positioned to become a model for the nation. Moving from intent to action requires us to tackle complex issues and numerous challenges, not the least of which is the rapid loss of farmers in our state. The time to act is now.

Spotlight 3

North Carolina Organic Food Facts

In 2008, there were 7,386 acres of organic cropland and 2,230 acres of organic pastureland in production in North Carolina.

North Carolina is the largest producer of organic laying hens in the country and now has six organic dairy producers, all of whom participate in the Organic Valley cooperative of growers.

Organic grain production has expanded rapidly in the state during the past four years. Average acreage in 2005 was 500, and by 2009, it was up to 8,000 acres.

As evidence of the potential for North Carolina to be a major source of organic foods, Albert's Organics, the nation's largest organic foods distributor, recently opened its Southeast headquarters in Charlotte. This move is expected to create 62 jobs and an important new market channel for North Carolina producers of organic fruits and vegetables.

Sources: "Table 1. Farms, Land Use, and Sales of Organically Produced Commodities on Certified and Exempt Organic Farms: 2008," 2007 Census of Agriculture: Organic Production Survey (2008) Volume 3, Special Studies, Part 2 (Washington, DC: U.S. Department of Agriculture, National Agricultural Statistics Service, February 2010) http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Organics/organics_1_01.pdf (accessed February 5, 2010); Chris Reberg-Horton, Assistant Professor and Organic Cropping Specialist, N.C. State University, personal communication with author, December 12, 2009; Susan Stabley, "Albert's Organics to open food distribution facility in Charlotte," Charlotte Business Journal, May 29, 2009, <http://charlotte.bizjournals.com/charlotte/stories/2009/06/01/story3.html> (accessed January 28, 2010).

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Discussion of Terms

The Farm to Fork initiative used a number of key terms, including “food system,” “food economy,” “sustainable” and “local.” The process did not try to build a consensus on the definition of these terms. Instead, it focused on identifying the values that participants considered to be embodied by these terms—words and phrases that reflect what *local* and *sustainable* food systems and economies could or should be. Examples of these values, in participants’ own words, include

- good for farmers, consumers and the environment,
- promotes health and well-being,
- involves collaboration (working together),
- inclusive (all walks of life),
- accessible by location,
- affordable,
- celebrates heritage and tradition,
- reduces fossil fuel dependence,
- promotes self-sufficiency,
- builds the local economy,
- educates children,
- requires community investment,
- takes care of future generations,
- ecologically sound,
- resilient to natural disasters,
- delicious,
- consumers understand the true cost of food,
- ponders a living wage and sustainable livelihood, and
- transparent.

A complete list is archived on the Center for Environmental Farming (CEFS) Farm to Fork project Web site (www.cefsfarmtofork.com).

For the purposes of this action guide, we offer definitions of key terms that reflect the perspective of Farm to Fork participants. We hope these definitions add clarity and foster fruitful discussion and action.

Terms

A **food system** includes all processes involved in feeding people: growing, harvesting, processing, packaging, distributing, marketing, consuming, disposing and recycling. Food systems require inputs (e.g., soil, seeds, water, nutrients, labor, education and research), generate outputs (e.g., food and waste) and are influenced by numerous external environmental, economic, political and social factors.¹

A **food economy** can be similarly described. In its most basic form, an economy is the way in which people within a region or area use their environment to meet their material needs. A food economy involves the ways we produce, exchange, distribute and consume food-related goods and services to meet our needs; food economies are influenced by numerous historical, social, geographic, ecological and natural-resource factors.

The term **sustainable** is regarded as immensely important, but challenging to define. **Sustainable agriculture** is typically described as a system of production that has the capacity to be economically viable, environmentally sound and socially responsible. According to the U.S. Department of Agriculture (USDA), the term *sustainable agriculture* describes an integrated system of plant- and animal-production practices having a site-specific application that will, over the long term, meet several objectives. (Here, we have borrowed the 1990 Farm Bill definition, modifying it slightly to include fishing.)

Sustainable farming and fishing

- satisfy human food and fiber needs,
- enhance environmental quality and the natural-resource base upon which the agricultural and commercial fishing economy depends,
- make the most efficient use of nonrenewable, on-farm and coastal resources, and integrate, where appropriate, natural biological cycles and controls,
- sustain the economic viability of farm and commercial-fishing operations, and
- enhance the quality of life for farmers, fishermen and society as a whole.²

In this document, we pair “sustainable” with “food system” and “food economy” to describe a goal to work toward. In striving for a **sustainable food system or economy**, we seek to fully integrate and implement food production, processing, distribution, consumption and recycling so as to achieve the three objectives of economic viability, environmental stewardship and social equity for a given area or population. Core principles that guide the development of sustainable food systems include diversity, equity, resiliency, self-sufficiency and innovation. Progress toward sustainability is necessarily ongoing and inclusive of a variety of strategies and outcomes.

We also use the term “sustainable” to reference foods that are grown or raised within production systems that strive toward one or more aspects of sustainability (such as pasture-based livestock production). In the marketplace, there are an increasing number of terms and claims used to describe products with attributes related to sustainability (e.g., the Food Alliance, Protected Harvest, Animal Welfare Approved, Fair Trade).³ The most successful and well-known is the **organic** label, which distinguishes foods that are produced, processed and certified utilizing federally specified guidelines and practices.⁴ The USDA’s guidelines for organic production focus on achieving the environmental stewardship goals of sustainability, including prohibiting the use of synthetic pesticides and fertilizers, and promoting crop health, animal health and soil quality through crop rotation and other practices that promote diversity within the production system. While organic products often command a premium price over conventional products, organic practices do not by definition ensure the economic viability of the production system, nor do they necessarily incorporate social-equity standards.

The term **local**, most narrowly, refers to the production *and* consumption of products in the same immediate geographic region. (In reference to food, it is also sometimes used to describe indigenous plant varieties, animal species and food specialties within an area.) “Local” is currently a popular term that holds much social capital. While many local-food advocates identify finite ranges—the 100-mile diet has been popular—we do not assign mileage limitations. When it comes to food, local is a relative concept. The goal is to optimize, to the extent practical, sourcing of food within the immediate area. The ability to do this sustainably will depend on numerous factors, including climate, the population base, infrastructure, etc. In North Carolina, for example, collards could be considered local when grown in the immediate or adjacent county, whereas local apples might come from farther away, but still from within the state. Products such as oranges and avocados will obviously be sourced from outside North Carolina; on a relative basis, though, they are more local if they come from Florida than if they are shipped from California. To facilitate planning, policy development, implementation and economic development in the state, “local” is discussed in terms of being grown, raised or caught in North Carolina. It is understood that local sourcing can still be optimized within and outside of state boundaries, including at the community, regional and national levels.

Focusing on the development of **local food systems** gives us the ability to make significant progress toward the goal of growth of our local economy. It should not be assumed to achieve sustainability *de facto*, however. For example, sourcing more foods locally can, in theory, reduce “food miles” traveled and minimize the use of fossil fuels used to transport food long distances—but in relative terms, it may not be more sustainable if the production and/or processing system used to generate local food is more input- or fossil-fuel-intensive or results in increased waste that contaminates water supplies or fails to support a living wage for producers and workers as compared to producing these products elsewhere.

In summary, sustainability is the goal for food systems and economies. There are different paths to pursue in support of this goal, including many strategies discussed in this action guide. The Farm to Fork initiative emphasized opportunities to work collectively at the state level to support local food systems that strive to achieve sustainability.

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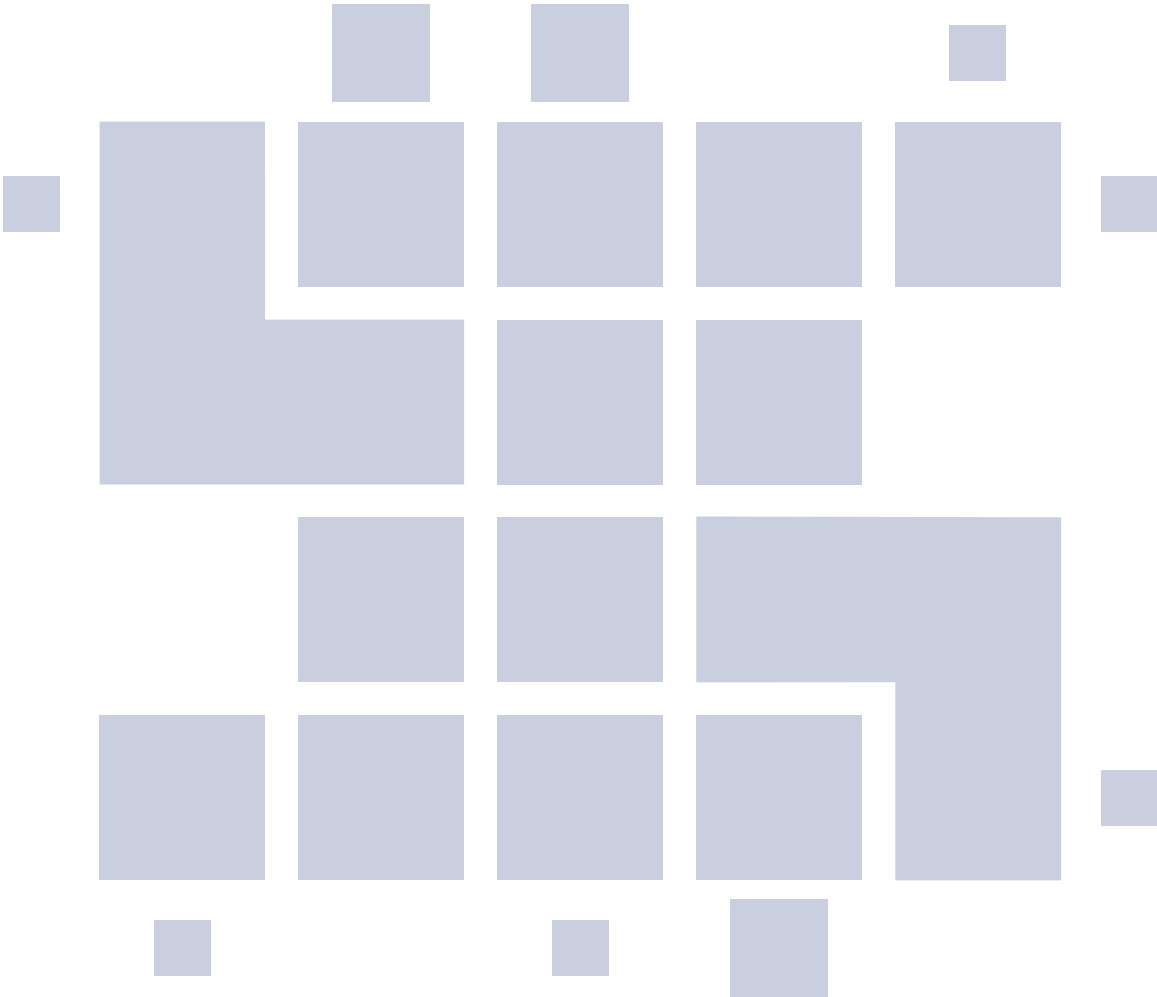
² *Food, Agriculture, Conservation, and Trade Act of 1990* (1990 Farm Bill), Public Law 101-624, Title XVI, Subtitle A, Section 1603 (Washington, DC: Government Printing Office, 1990) National Agricultural Library Call No. KF1692.A31 1990, available online via The National Agricultural Law Center at <http://www.nationalaglawcenter.org/assets/farmbills/1990-6.pdf> (accessed February 11, 2010).

³ For more information, see <http://www.thefoodalliance.org>, <http://www.protectedharvest.org>, <http://www.animalwelfareapproved.org> and <http://www.fairtradefederation.org>.

⁴ “National Organic Program,” U.S. Department of Agriculture Agricultural Marketing Service Web site, www.ams.usda.gov/AMSV1.0/nop (accessed February 11, 2010).

Section 2.

Statewide and Local Recommendations for Action



The Farm to Fork initiative helped identify specific challenges to building a more sustainable local food economy in North Carolina. It suggested a variety of actions that can be implemented at the state and local levels, with a particular focus on programs and policies that are worthy of pursuit. These challenges and recommended actions are discussed within nine major issue areas:

1. Engaging Decision Makers in Strategic Food Systems Planning and Implementation
2. Coordinating Food Systems Policies and Regulations
3. Growing New and Transitioning Farmers and Protecting Prime Farmland
4. Expanding Local Market Opportunities
5. Cultivating Community Gardens
6. Strengthening Local Government Initiatives
7. Addressing Public Health and Food Access Disparities
8. Increasing Consumer Education and Outreach
9. Implementing Farm to School Programming and Engaging Youth

These issue areas are interrelated and are not discussed in order of priority. However, within the Recommended Actions for each issue area, state level “game changers” are listed first. Game changers are ideas developed by the Working Issue Teams (WITs) and discussed at the May 2009 statewide summit as having the greatest potential for statewide impact in the short term (one to two years). Game-changer ideas are highlighted with a yellow arrow (▶). Spotlights—descriptions of projects, businesses and other food-systems initiatives underway throughout North Carolina—are included to help illustrate positive examples, issues for discussion, and best practices. A complete list of recommended statewide and local actions follows.



Debbie Flores

Recommendations at a Glance

ENGAGE Decision Makers in Strategic Food-Systems Planning and Implementation

- 1.1. ► Establish and implement a statewide food policy advisory council.
- 1.2. Establish local and/or regional food policy councils.
- 1.3. Develop statewide food-systems procurement goals and baseline assessments.

COORDINATE Food-Systems Policies and Regulations

- 2.1. ► Appoint a state-level food-systems ombudsman.

GROW New and Transitioning Farmers and Secure Prime Farmland

- 3.1. ► Dedicate permanent and significant funding for the N.C. Agricultural Development and Farmland Preservation Trust Fund.
- 3.2. Amend tax policies to create incentives for farmers and revenue for local governments.
- 3.3. Provide risk-management and disaster-assistance programs for farmers to close gaps in coverage.
- 3.4. Fund programs to conduct farmer health care education and outreach.
- 3.5. Expand and provide greater support for farmer training and mentorship programs through N.C. Cooperative Extension.

EXPAND Local Market Opportunities

- 4.1. ► Help network direct-marketing initiatives statewide.
- 4.2. ► Establish goals for state procurement of local food.
- 4.3. ► Develop a model farm-to-institution program that addresses barriers to procurement for institutional markets.
- 4.4. Conduct an assessment of local food-system infrastructure needs.
- 4.5. Invest in business planning and management support for local food and farming enterprises.
- 4.6. Provide “patient capital” to food and farming enterprises.
- 4.7. Expand local-food job-training opportunities.
- 4.8. Adopt legislation to support contract fairness for producers.
- 4.9. Advocate at the federal level to support small-scale, diversified farmers in the adoption of food-safety protocols.

CULTIVATE Community Gardens Statewide

- 5.1. ► Fund a statewide coordinator and other activities of the N.C. Community Garden Partners (NCCGP).

STRENGTHEN Local Government Initiatives

- 6.1. Formalize policies that dedicate vacant land to promote farm, garden, market and infrastructure development.
- 6.2. Develop a county agricultural economic development and farmland protection plan.
- 6.3. Employ agricultural economic and food-systems development staff.
- 6.4. Invest in needed processing and other food-systems infrastructure.
- 6.5. Address land-use and zoning ordinances.
- 6.6. Purchase conservation easements to protect farmland.
- 6.7. Promote local food system businesses and special events.
- 6.8. Buy locally produced and locally processed food.

ADDRESS Public Health and Food Access Disparities

- 7.1. ► Expand and strengthen North Carolina’s SNAP-Ed Programming.
- 7.2. Support and expand EBT use at direct-market venues.
- 7.3. Coordinate and enhance statewide emergency food distribution opportunities.
- 7.4. Coordinate existing nutrition education programs.

INCREASE Consumer Education and Outreach

- 8.1. ► Launch an “Eat 10% Local, Sustainable Food” Campaign.

PROMOTE Farm-to-School Programming and Engage Youth

- 9.1. ► Develop a model farm-to-school pre-service teacher instruction program.
- 9.2. ► Develop a teen-focused social network around food systems.
- 9.3. Expand 4-H curriculum to include a focus on sustainable food systems.
- 9.4. Support youth leadership development.



Becky Kirkland

Former U.S. Congresswoman Eva Clayton, Farm to Fork Summit May 2009

1. Engage Decision Makers in Strategic Food-Systems Planning and Implementation

Background

Food is essential for life. Yet unlike other enduring necessities—water, air and shelter—food has not been considered a priority for planning by state and local officials and decision makers. Food has been perceived as largely the purview of the private sector. As interest in building a local food economy has expanded, so has awareness about how our food system is influenced and shaped by a wide array of federal, state and local policies and regulations. Increasingly, planners and policy makers are recognizing the importance of developing food policies and plans that reflect the interconnectedness of food-systems issues.

Engaging state and local governments in food-systems issues can be accomplished through the establishment of food policy councils. A food policy council is an officially sanctioned body of representatives from various segments of a state or local food system and selected public officials. A food policy council is asked to examine the operation of a local or state food system and to provide ideas or recommendations for how it can be improved. A council initiative tries to engage representatives from all components of the food system, including consumers, farmers, grocers, chefs, food processors, distributors, food security advocates, educators, economic developers, planners, health professionals, government, researchers and waste stream managers.

Food policy councils can have a variety of functions, including

- establishing goals for improving food-system sustainability,
- identifying benchmarks and criteria for measuring achievements,
- conducting food assessments to gather baseline data (see Action 1.3),
- evaluating progress,
- identifying and developing solutions to regulatory and policy barriers,
- identifying priorities for programs and funding,
- strengthening networks among diverse organizations and public agencies,
- improving access to fresh and nutritious foods for all residents, and
- assisting farmers and food entrepreneurs with increased access to information, markets and support.

A total of 17 states have had, currently have or are in the process of developing food policy councils

Spotlight 4

Illinois Takes Comprehensive Action to Build Local Farm Economy

Earlier this year, Illinois Gov. Patrick Quinn signed into law landmark legislation establishing local-food procurement goals for state agencies that provide food service. Much like in North Carolina, the largest industry in Illinois is agriculture, and yet a vast majority of the food consumed by Illinois residents is grown out-of-state. Leaders and decision makers in the state see the potential for economic development and job creation through building a local food economy. The goal for prisons, for example, is that they purchase 20 percent of their food locally by 2020. State-funded institutions such as schools and mental health centers have a goal of 10 percent by 2020. The legislation creates mechanisms to support achievement of these goals, including (1) establishing an Illinois Local Food, Farms and Jobs Council, which will work with state agencies, Illinois businesses, organizations and citizens to build a fully functioning local farm and food system in the state, (2) creating a local-food purchase preference for state-owned food buyers in which they would have the authority to override the “lowest bid” rule and pay a premium of up to 10 percent above the lowest bid in order to purchase locally grown goods, (3) implementing a system for gathering baseline data about local-food purchases that would be updated annually, and (4) developing a new Illinois label and certification program to support farmers and businesses who want to be part of an Illinois-based farm and food economy.

Sources: Local Food, Farms, and Jobs Act, *Illinois HB3990 §20(f)*, 96th General Assembly (August 18, 2009), <http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=096-0579> (accessed February 1, 2010); *Local Food, Farms & Jobs: Growing the Illinois Economy Web site*, <http://www.foodfarmsjobs.org> (accessed February 1, 2010).

at the state level. Nine of these are considered particularly active: Arizona, Connecticut, Kansas, Maine, Michigan, New Mexico, New York, Ohio and Oklahoma.¹ In 2001, Drake University Agriculture Law Center in Iowa was awarded a U.S. Department of Agriculture (USDA) grant to assist with establishing statewide food policy councils in some key states, including North Carolina. North Carolina's council was housed in the N.C. Department of Agriculture and Consumer Services (NCDA&CS). It was active through the grant cycle, but due to a variety of factors, including lack of staff, was disbanded.

Recommended Actions

The following recommendations address a wide array of needs identified by Farm to Fork participants in the area of food-systems planning and implementation.

► Action 1.1. Establish and implement a statewide food-systems advisory council.

As an outgrowth of the Farm to Fork initiative, SB 1067, "Sustainable Local Food Policy Council/Goal," was passed in the state legislature in August 2009, formalizing the creation of a N.C. Sustainable Local Food Advisory Council. The authorizing legislation articulates the purpose of the Council:

to contribute to building a local food economy, thereby benefiting North Carolina by creating jobs, stimulating statewide economic development, circulating money from local food sales within local communities, preserving open space, decreasing the use of fossil fuel and thus reducing carbon emissions, preserving and protecting the natural environment, increasing consumer access to fresh and nutritious foods, and providing greater food security for all North Carolinians.²

The council is guided to consider a variety of programmatic and policy issues, including, for example, opportunities to

- increase access to fresh, local, organic and sustainably grown or raised food within public school lunch and public assistance programs,
- promote urban and backyard gardens to help address public health and food access concerns,
- assess economic development impacts from encouraging production and sales of local, organic and sustainably-grown or raised food, and
- identify and address regulatory and policy barriers to a strong local sustainable food economy.

Action 1.2. Establish local and/or regional food policy councils.

There is some evidence of an increase in the number of local and regional food policy councils

Spotlight 5

Feast on the Southeast

Southeastern North Carolina Food Systems (SENCFS or "Feast on the Southeast") was co-founded in 2006 by the Center for Community Action in Lumberton and the Public Sociology Program at the University of North Carolina Wilmington as an economic and community development initiative in response to massive job losses and high poverty in Southeastern North Carolina. SENCFS has developed into a partnership of public and private institutions and agencies among seven counties along and adjoining the I-74 corridor east of I-95. Southeastern North Carolina is the most ethnically diverse region in North Carolina and in rural America; it is also one of the three major regions of persistent poverty in North Carolina. SENCFS includes both rural and urban counties in order to maximize market opportunities and profits from the sales of local farm products for both local and regional markets.

www.feastsoutheastnc.org

Spotlight 6

Food Assessments

An important tool for strategic food-systems planning is a food assessment, which can be conducted informally by community organizations or volunteers or more formally by local governments, or at the statewide level through food policy councils or other government agencies. The major benefit of a food assessment, in addition to the data gathered, is the process itself, which is highly educational for those involved. Assessments should consider the entire food system within a defined geographic area, including such issues as (1) available farmland, and numbers and types of farmers (young, old, new, transitioning), (2) the amount and types of food produced, (3) the amount and types of foods consumed by residents, (4) consumer demand for local and other value-added foods, including within retail, food service and direct-market venues, (5) existing and possible market opportunities for local products, (6) existing processing and distribution capacity, (7) existing emergency food-distribution services and food access needs, particularly within low-income communities, (8) the job creation potential of new food enterprises, and (9) identification of public health issues such as the extent of nutritional deficits and diet-related diseases and conditions.

For many practical reasons, food assessments are typically conducted within defined political boundaries, such as within a county or state. An important consideration, however, is that some food-system issues are best assessed at a regional level. For example, processing infrastructure is capital-intensive and is only profitable when utilized at full capacity, thus making sense as an investment at a regional level.

in North Carolina. A council has been established at the regional level as part of the Southeastern North Carolina Food Systems Project (see Spotlight, previous page), and there are plans underway to establish food policy councils in Cabarrus and Mecklenburg counties. As local and regional food policy councils are established across the state, it is important to promote a formal linkage of these councils with the statewide council to help integrate efforts, encourage shared learning and inform the statewide advisory council of critical local and regional food policy issues and concerns.

Action 1.3. Develop statewide food-systems procurement goals and baseline assessments.

To build on the action ideas identified during the Farm to Fork initiative, the state should identify an implementation strategy for achieving a sustainable local food system. Such a strategy would incorporate many of the ideas put forth through the Farm to Fork planning process and take into account the state's assets and needs. Such an implementation plan should include a vision statement and a set of goals, including for example, procurement of foods grown and/or raised in North Carolina.

Illinois has taken this approach. Its state food policy task force took the initiative to create a state action plan that recommends several goals,

including that 20 percent of state institutions' food purchases are procured from local food sources by 2020 and that training be offered to 20,000 Illinois residents to produce, process and distribute local food and farm products.³

An implementation plan would need to be created in tandem with conducting a baseline food-system assessment. Typically, food assessments review existing production capacity and market demand. Equally important is an assessment of the state's and surrounding regions' capacities to aggregate, process, distribute and market foods locally. Consideration should be given to regional opportunities and constraints with bordering counties and states (see Spotlight 6).

The Appalachian Sustainable Agriculture Project (ASAP) completed a baseline regional food assessment in 2007 to determine (1) the food and farm products that are produced in the Appalachian region, (2) how much of what is produced is consumed in the region, (3) the potential for increasing local consumption of locally produced food and farm products as a way to strengthen the regional farm economy, and (4) elimination of barriers currently impeding the purchase of local foods. ASAP's research found \$450 million worth of demand for local foods from consumers and businesses in the region—a significant market opportunity for the area's 12,000 farmers.⁴

2. Coordinate Food-Systems Policies and Regulations

Background

Our current regulatory environment for food is best described as a thicket: complex, sometimes irrational and often difficult to maneuver. The situation is particularly challenging for diversified operations; for those engaged in producing, processing and/or selling protein products (e.g., meat, poultry, eggs and dairy); and for those interested in scaling up to access larger commercial markets.

Part of the challenge is the sheer number of agencies involved in regulating food-system activities. Most agencies have oversight for specialized aspects of the food system and do not routinely coordinate with one another. Food production, processing, distribution, marketing, preparation and waste management are all overseen by different agencies spanning the federal, state and local levels. Within these agencies, departments have evolved to oversee specialized components of the food system with little coordination across disciplines. As a consequence, production activities are often addressed separately from processing and food-safety issues, which are managed distinctly from marketing and separately from food waste and environmental requirements. In turn, many of these issues are managed in a manner that is largely removed from public health and nutrition arenas.

For example, to receive the appropriate permits and licenses, farmers and food entrepreneurs—depending on the size and scope of their operations—often must comply with regulations issued by four federal agencies, including the U.S. Department of Labor, the U.S. Environmental Protection Agency (EPA), the USDA and the U.S. Food and Drug Administration (FDA); three state agencies, including the N.C. Department of Labor (NCDOL), the N.C. Department of Environment and Natural Resources (DENR) and NCDA&CS; and county health departments.

Another aspect of the challenge is that food production, processing and sales are regulated differently by different agencies depending on the type of commodity, the scale of production, the degree of processing and the market channel used for distribution. A simple example is the difference between food-safety regulations pertaining to red meat processing and those pertaining to poultry processing. Beef and pork cannot be slaughtered and sold off the farm; they must be processed under either USDA or NCDA&CS inspection. Poultry, on the other hand, can be slaughtered and sold directly off the farm at numbers up to 1,000 chickens or turkeys per year; numbers greater than 1,000 must be slaughtered under USDA inspection. Similarly, a farmer can sell up to 30 dozen eggs per week off the farm without being regulated by the NCDA&CS Marketing Division's Grading Services. If a farmer wants to sell more than this amount off the farm each week, he or she must sell them to another producer who has an egg plant with a grader, or set up a plant that employs a full-time grader.

Dairy production, processing and marketing present a particularly complex environment. Selling raw milk is illegal, unless it is intended for consumption by animals or is made into cheese that is aged at least 60 days. To be in the fluid milk business, a farmer needs to sell to a Grade A dairy operation (or build and/or operate his or her



Debbie Fous

Our current regulatory environment for food is best described as a thicket: complex, sometimes irrational and often difficult to maneuver. Part of the challenge is the sheer number of agencies involved in regulating food-system activities.



own), which is licensed and regulated by DENR's Dairy and Food Protection Branch. However, to make and sell cheese, a farmer needs to build and/or operate a Grade B dairy, licensed by NCDA&CS, rather than DENR. Separate licenses are required to make and sell ice cream—one type of license to sell it wholesale and another to sell it retail. In addition to the state permitting requirements, dairies are subject to the USDA's regulations, and water supply and wastewater may be subject to county health department regulations.

These examples highlight the complex regulatory framework that farmers and food entrepreneurs face. They point to an opportunity to develop centralized sources of information regarding food-system regulations that support farmers and food entrepreneurs in navigating the system. They also illustrate the importance of fostering cross-agency communications in food-systems planning.

Recommended Actions

► Action 2.1. Appoint a state-level food-systems ombudsman.

A new state-level position—a food-systems ombudsman—is needed to work at a high level, across agencies and departments, to streamline regulatory approaches and license requirements at the county and state levels. An ombudsman position acts as an intermediary between state agencies and stakeholders and can provide multiple services, including (1) assessing the impact of current policies and regulations on small- and medium-scale farmers and food entrepreneurs, (2) establishing a clearinghouse to provide a centralized source of information for small- and medium-scale farmers, food entrepreneurs and others, (3) streamlining and harmonizing different rules governing food and farming sectors, and (4) providing outreach in cooperation with N.C. Cooperative Extension and NCDA&CS.

A model for such a position exists in Pennsylvania, which has created an Agricultural Ombudsman Program to act as an intermediary between agriculture and the whole governmental process as it relates to municipal requirements, various permit needs and the state regulatory environment. It also functions as a resource and liaison when agricultural issues cause conflicts within communities. The Ombudsman is available to provide assistance to farmers, conservation districts, township supervisors and all members of a community to work through any agricultural issues that are causing conflict. The Ombudsman conducts trainings and meetings on topics such as agricultural odor management, the Pennsylvania Municipalities Planning Code, the law and agriculture, and environmental laws.⁵ Certain other states have created ombudsman positions, but use them differently, to assist state agencies in interpreting regulations (in the case

As interest in building a local food economy has expanded, so has awareness about how our food system is influenced and shaped by a wide array of federal, state and local policies and regulations.

of Ohio) or to serve essentially as an agricultural economic development officer (as in California).⁶

The newly created N.C. Sustainable Local Food Policy Council is well suited to lead the discussion and action on the opportunity to appoint a food systems ombudsman. The state of Illinois, in creating its Local Food, Farms and Jobs Council, was tasked in part with the mission

*to facilitate the elimination of legal barriers hindering the development of a local farm and food economy by working with federal, State, and local public health agencies, other agencies and applicable entities, and the Illinois Attorney General to create consistent and compatible regulations for the production, storage, distribution, and marketing of local farm or food products.*⁷

The challenge of supporting new and transitioning farmers and securing farmland for future food production is potentially the most vital issue to address quickly and strategically.

3. Grow New and Transitioning Farmers and Secure Prime Farmland

Background

The challenge of supporting new and transitioning farmers and securing farmland for future food production is potentially the most vital issue to address quickly and strategically. The following discussion outlines the situation with loss of farms and farmland in North Carolina. It provides important background information about selected challenges, including the need to support farmers with mentorship and training, risk-management programs, access to capital, and health care and disability insurance.

Loss of Farms and Farmland

North Carolina is the eighth-largest agricultural state in the nation, based on sales receipts, but is rapidly losing its agricultural base. The average age of farmers is increasing nationwide. In North Carolina, the average age is now 56, indicating that a large percentage of farmland will change hands in the next 10 to 15 years, leaving it vulnerable to real estate development.⁸ During the eight-year period between 1999 and 2006, North Carolina lost 10,000 farms and close to 500,000 acres of farmland (see Fig. 2).⁹ North Carolina's population is now over 9.2 million and is expected to exceed 12 million by 2030, which would make it the seventh-most populous state.¹⁰ New residential growth, particularly in rural areas, will continue to put farmland at high risk.

Farms owned by black farmers and families are being lost at an even faster rate than farms owned by their white counterparts. According to the Land Loss Prevention Project, U.S. Census of Agriculture data indicate there were 5,280 African-American-owned farms in North Carolina in 1978, representing 400,312 acres of farmland. Less than 30 years later, in 2007, there were 1,563 African-American-owned farms, representing 133,124 acres. This amounts to a 70 percent decline in African-American-owned farms in North Carolina and a 67 percent decline in farm acreage. Furthermore, from 1993 to 2003, approximately 94 percent of African-American farmers lost all or part of their land; this represents a rate three times that of white farmers for the same period.¹¹

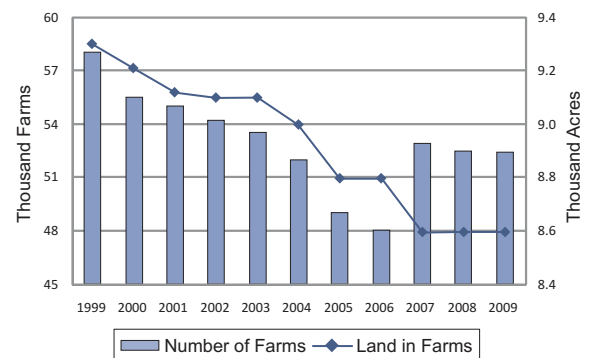


Fig. 2. Number of Farms and Land in Farms in North Carolina (1999-2009). Source: 2007 Census of Agriculture. (The number of farms increased between 2007 and 2009 due to methodological changes that allowed a more accurate count of small farms. North Carolina now has an estimated 53,000 farmers.)

Farms owned by black farmers and families are being lost at an even faster rate than farms owned by their white counterparts.

Loss of farmland also leads to the disappearance of high-quality soils needed for food production. Farmland is often selected first for development because it is flat and well drained. This leads to destruction of topsoil—a finite resource. Loss of topsoil is also the result of certain agricultural practices that lead to soil erosion. The United States is currently losing 1.8 billion tons of topsoil per year.¹²

The challenge of reversing farm loss requires a long-term, strategic approach that includes reaching out to existing farmers and landowners to preserve farmland for future generations and creating incentives and opportunities for new farmers to enter agriculture as a career. These efforts need to be combined with outreach to existing farmers interested in transitioning to production of foods in demand by local markets. The focus needs to be on increasing the comparative advantage that farming holds over development; this advantage is accomplished by increasing farm income per acre, or creating state- and county-based incentives that encourage and support farming. The more money a farm makes, the more likely it is to stay in business and survive the transition between generations. With the loss of tobacco income for producers in North Carolina, new markets must be cultivated. These need to achieve tobacco-level income rather than commodity-level income. Current high-value market opportunities include fresh, local, organic and sustainable products. Lastly, there is a particular need to cultivate mid-scale operations that can meet the volume and price demands of larger institutional and retail markets.

Mentorship and Training

As the opportunity for local agriculture grows, so will the need to train and mentor new and transitioning farmers. Already, demand for producers who can sell directly to consumers and meet the demands of retail and institutional markets in the state exceeds the supply of those prepared and equipped to sell into those markets. Specialized training, mentorship and support services will be required for both mid- and large-scale commodity farmers transitioning to meet this demand and for new small farmers who need educational resources and mentorship, but also access to land and equipment.

North Carolina is fortunate to have a robust Cooperative Extension system that supports farmers in every county in the state. Extension agents will have an important role in supporting new and existing producers making this transition. Cooperative Extension currently hosts a variety of relevant training programs for farmers statewide, though along with the growing demand for sustainable local agriculture, more emphasis targeted to this area will be required. Statewide, there are a host of other educational programs that help serve this growing need. Examples include

- a sustainable agriculture degree program at **Central Carolina Community College** (CCCC) (www.cccc.edu/curriculum/majors/sustainableagriculture) and other community colleges beginning to offer similar programs and coursework,
- a sustainable agriculture internship and apprenticeship program at the **Center for Environmental Farming Systems** (CEFS) (www.cefs.ncsu.edu), along with an ongoing workshop series,



Debbie Rios

- an agroecology minor at **N.C. State University** (www.cropsci.ncsu.edu/agroecology) that will soon expand to an agroecology undergraduate major program,
- an **Organic Growers School** based in the western part of the state (www.organicgrowersschool.org),
- an annual educational conference focused on both production systems and market development hosted by **Carolina Farm Stewardship Association** (www.carolinafarmstewards.org),
- an annual “Marketing Opportunities for Farmers” Conference hosted by the **Appalachian Sustainable Agriculture Project** (www.asapconnections.org),
- a growing number of public farm-incubator programs, including in Cabarrus (www.facebook.com/group.php?gid=77644749961) and Orange (www.orangecountyfarms.org/plantatbreeze.asp) counties and a private incubator, Raft Swamp Farm, in Hoke County (www.raftswampfarms.org), all designed to cultivate new farmers by providing land for production in tandem with training in a wide range of issues, including marketing and financial management.



Debbie Floris

Risk Management

North Carolina experienced 28 agricultural disaster or emergency declarations between 1980 and 2004, but federal disaster-relief programs protect less farm income today than in 1980, particularly for producers of organic, heirloom, specialty, grass-fed, value-added or other noncommodity products.¹³ There are few disaster relief programs available to such producers, and available programs cover a small percentage of lost income from such products. These higher-value products differ from traditional commodity crops, which have long-standing federal production records and established pricing benchmarks. Existing disaster and risk-management programs do not compensate beyond conventional prices, leaving a significant insurance gap for producers. This gap may not affect the smallest-scale farms, because they are usually more diversified; typically, their investments in any given crops are small, so that any losses are easily mitigated by prompt replanting of the specific few crops affected by an event. However, producers seeking to serve retail and institutional clients necessarily operate on a scale at which the risk of loss can only be covered through effective and complete insurance programs. This risk gap can serve as a disincentive for producers to transition or scale up to meet larger retail and food-service markets interested in local, seasonal and organic products.

Access to Operating Capital

The risk gap is doubly problematic because crop insurance and disaster programs form the basis for access to farm operating credit. These programs provide an assured income against which banks will lend. Lenders commonly extend credit only to the extent and value of crop insurance and disaster program coverage. When a farmer cannot use his crop as collateral or when banks will not lend based on the true market value of that crop, it becomes



difficult if not impossible to expand operations. Adding equipment or other needed infrastructure becomes cost-prohibitive, unless a farmer mortgages the farm or his or her home—which leaves the farmer at much greater risk in the event of a disaster and, on a larger scale, contributes to the risk of farm and farmland loss across the state. If farmers with diversified and/or high-value specialty crops are unable to access credit for operations, it will be difficult for local producers to expand to provide a significant percentage of the food consumed in North Carolina.

Disability and Health Insurance

Disability and health insurance, common topics of current discussion, pose special challenges for the farming community. Farming is ranked nationally as one of the most dangerous occupations. Risks

include injury and illness from use of equipment such as tractors and posthole drivers, the potential for skin cancer due to extensive sun exposure, and back strain and repetitive stress.¹⁴ The need for access to affordable health insurance and health care from providers familiar with the particular hazards of farm life is widespread. Health providers are commonly not familiar with the unique health risks faced by farmers and therefore may fail to properly diagnose a disease or injury related to an occupational exposure. Moreover, farmers without health insurance do not know where to go for health care services.

A survey of 2002 census data shows that approximately 27 percent of North Carolina farmers are uninsured. However, work by the N.C. Agromedicine Institute's AgriSafe program at East Carolina University (ECU) indicates that this number may be as high as 60 percent.¹⁵ Farmers who do have health insurance are paying as much as \$18,000 annually for a family of two with no previous medical concerns. Other farmers opt for deductibles as high as \$5,000 and simply do not see doctors unless they experience catastrophic events, meaning they usually fail to receive preventative care.¹⁶ Farmers need help learning how to reduce their risks, not only to avoid injuries and illnesses, but also to lower their insurance premiums. Many farmers, forced to choose between health insurance, farm operations, equipment and sending their children to college, cut out health insurance—seeing it as not contributing to the bottom line. A catastrophic illness can mean the loss of the farm for an uninsured farmer.

Recommended Actions

The following recommendations focus on important actions the state can take to help protect farmland and support new and transitioning farmers. Some of these state-level actions would make it easier for municipal governments to support local food systems.

► Action 3.1. Dedicate permanent and significant funding for the N.C. Agricultural Development and Farmland Preservation Trust Fund.

In order to protect valuable farmland and support new agricultural enterprises, the North Carolina legislature should establish a permanent source of funding, including at least \$30 million per year, for the N.C. Agricultural Development and Farmland Preservation (ADFP) Trust Fund. Created by HB 607 in 2005, the ADFP Trust Fund is an excellent program administered by NCDA&CS to support agricultural development and farmland preservation and to “authorize counties and cities to undertake a series of programs to encourage the preservation of qualifying farmland, as defined herein, and to foster the growth, development, and sustainability of family farms.” The program focuses on funding: (1) private and county-led purchase of conservation easements, and (2) private and public agricultural development projects, including agriculturally related business activities such as enterprises that market farm products, develop agritourism and create value-added products.¹⁷ The most the fund has ever been allocated is \$8 million. Due to the recession, only \$2 million was appropriated for 2010.

Action 3.2. Amend tax policies to create incentives for farmers and revenue for local governments.

Property tax policies are controlled by the state legislature, and the North Carolina constitution requires uniform property taxation in all 100 counties. Thus, local governments cannot supersede state tax codes without statewide legislative changes. One opportunity to support small-scale farming enterprises is to amend North Carolina’s present-use-value taxation law. This statute (N.C. Gen. Stat. §§ 105-277.2 to .7 (2008)) directs county governments to assess agricultural, horticultural and forest land at its present-use value as farmland rather than at its market value for potential development. The statute defines agricultural land as “land that is part of a farm unit that is actively engaged in the commercial production or growing of crops, plants or animals under a sound management program,” and horticultural land as “land that is...engaged in the commercial production or growing of fruits or vegetables or nursery or floral production.” To qualify as agricultural land, the operation must generate gross revenue of at least \$1,000 per year and must include 10 or more acres with at least five acres in production.

Spotlight 7

Pennsylvania’s Model Farmland Conservation Program

Pennsylvania’s Agricultural Conservation Easement (ACE) Purchase Program is widely acknowledged as the most successful in the country. By its 20th year (2008), the ACE program had a total of 3,579 participating farms and had protected 382,845 acres of farmland in conservation easements for a cost of \$940 million. The program focuses on working in areas of high development pressure and securing working lands not simply for open space, but for agricultural viability. The program engaged and leveraged funds within 57 counties.

Source: Pennsylvania Legislative Budget and Finance Committee, Review of the Agricultural Conservation Easement Purchase Program, pursuant to SR2007-195, September 2008, lbfcr.legis.state.pa.us/reports/2008/20.PDF (accessed October 11, 2009)



Debbie Fross

The challenge of reversing farm loss requires a long-term, strategic approach that includes reaching out to existing farmers and landowners to preserve farmland for future generations and creating incentives and opportunities for new farmers to enter agriculture as a career.

The acreage limitations present a challenge to very small (smaller than 10-acre) agricultural operations, particularly on the fringes of urban areas, where land prices are high (sometimes with correspondingly high tax rates) and in the western part of the state, where farm sizes are typically quite small due to topography. The Farm to Fork initiative identified considerable interest in adjusting the present-use-value criteria, particularly by lowering the agricultural acreage threshold. Legislation to decrease this threshold to five acres was introduced in 2007 in both the

houses of the state General Assembly, attracting numerous co-sponsors. Although the legislation did not pass, the legislature did authorize a study committee to examine the present-use-value system. The study committee ultimately did not recommend the decrease, reflecting budget concerns expressed by the counties. Policy makers also expressed a desire to see examples of economically viable farms operating on small parcels, indicating they needed more evidence to support the proposed change.

The concern that this approach would result in the loss of tax revenue for local governments can be addressed in ways that were not part of the 2007 legislation. The present-use-value program already imposes a penalty when land in the program is taken out of farming. It does this by treating the difference between the present-use (below-market) tax rate and the normal (market-value) tax rate as deferred taxes. For example, if a farmer sells his or her present-use-value land to a developer, the farmer has to pay three years of those deferred taxes. However, some states, such as Georgia, have a bigger penalty for taking land out of farming—as much as 10 years' deferred taxes have to be paid. The bigger penalty increases revenue to local governments, and it acts as a further deterrent to development of farmland. Another avenue to explore would be the incorporation of a new “alternative agricultural” qualification standard for individual owners of farms smaller than 10 acres. This standard would permit participation by farmers on very small parcels who earn a certain percentage of their annual incomes from farming or are earning a higher per-acre income than the current standard.

Another opportunity for state action on tax policy is to authorize counties to levy a targeted impact fee. Impact fees are used by local governments on new or proposed development to help assist or pay for a portion of the costs of public services to new development. The idea is to allow a targeted impact fee on new development planned for land that used to be in farming, thereby creating an additional revenue source to support local agricultural development and purchase of conservation easements. It should be noted that local governments can currently utilize general revenues, such as those from property and sales taxes, for this purpose, but they may not levy impact fees.

Local governments have another tool available to them, the “transfer of development rights” from rural areas, which become subject to permanent protection, to designated urban areas within the county. This approach, currently being pioneered in North Carolina by Orange County in connection with a four-year study process, can offer an additional source of funding for farmland preservation in more-urbanized or urbanizing areas.¹⁸

Another tool available at the state and local levels is the use of general obligation bonds to finance farmland and open-space preservation efforts.



Debbie Pinos

General obligation bonds are a form of government debt financing that requires voter approval. Bills at the state level to support this approach to financing have not yet gained traction. However, citizens have approved such bond referenda in various communities across the state. For instance, Mecklenburg County citizens approved a \$220 million bond in 2000 in support of open-space preservation.

Action 3.3. Provide risk-management and disaster-assistance programs for farmers to close gaps in coverage.

To address the challenges farmers face in managing risks (and, as a consequence, in accessing credit), producers need state-supported programs that build on federal programs to close gaps in coverage. There are models for such an approach. In North Carolina, following the drought in 2007, the N.C. Tobacco Trust Fund Commission (NCTTFC) provided funding for the N.C. Agriculture Drought Recovery Program, administered by the N.C. Division of Soil and Water Conservation (DSWC) district offices. This program covered 75 percent of the cost of restoring drought-damaged pastureland and providing additional water for livestock and crops produced by farmers below a set income threshold. In Fresno, California, following a catastrophic freeze, the USDA offered low-interest emergency loans through its Farm Service Agency (FSA). The state added funding to buy down the interest rate to 1 percent, and the City of Fresno offered additional support to its farmers' market producers, essentially offering a no-interest loan to local, small-scale producers.¹⁹



Action 3.4. Fund programs to conduct farmer health care education and outreach.

In terms of addressing farmers' health care and insurance needs, the state has an opportunity to play an important role. North Carolina can support programs such as the AgriSafe Network of North Carolina at ECU. Initiated in Iowa along with a complementary program known as Certified Safe Farm, AgriSafe has been successful in lowering farmers' health insurance claims and out-of-pocket health care costs. Last year ECU received funding from the Kate B. Reynolds Charitable Trust to pilot the AgriSafe program in North Carolina. Two additional years of funding came from the Tobacco Trust Fund to continue the program and add an on-farm safety-audit component, enabling farmers to have their operations designated as Certified Safe Farms. AgriSafe leaders, along with representatives from N.C. State and Cooperative Extension, are providing education and technical assistance for farmers on ways to reduce on-farm health and safety risks. AgriSafe leaders have identified a need for work at the state and local levels in a variety of areas, including (1) working with insurers to create wellness incentives for farmers, (2) increasing outreach to farmers about existing health care services, (3) incorporating health and safety issues into Cooperative Extension and other farmer-focused programming, and (4) providing training to health care

providers in order to encourage provision of preventive agricultural health care and prevent misdiagnosis of agriculturally related illness and injuries.²⁰

Action 3.5. Expand and provide greater support for farmer training and mentorship programs through N.C. Cooperative Extension.

Located in every county in the state, Cooperative Extension agents can play an important role in mentoring and training new and transitioning farmers, and enlisting the support of Cooperative Extension agents in this role can be extremely cost-efficient in meeting the growing market demand. Extension agents receive their training from campus-based Cooperative Extension specialists, who are often commodity- or discipline-oriented and not focused on training and mentorship of farmers seeking access to local markets. New statewide Extension specialists are needed to develop appropriate educational materials and to train the state's agricultural Extension agents to support incubator farm development and train farmers for growing and marketing in developing local markets.

4. Expand Local Market Opportunities

Background

There are at least four major channels to pursue in building market opportunities for North Carolina farmers: direct farmer-to-consumer sales (farmers' markets), retail (grocery stores), food service (restaurants) and institutional (dining services in hospitals, schools and prisons).

Growth in direct markets in North Carolina has been phenomenal. There are many advantages for both farmers and consumers. Farmers enjoy the full retail price. And consumers, because of their direct connections to the

farmers, understand and appreciate exactly where their food comes from and can often get fresher products. Farmers' markets, Community-Supported Agriculture programs (CSAs) and other direct-market venues are locally led activities that do not require statewide oversight. However, participants in the Farm to Fork initiative recognized the need to create better networks of direct-market projects, organizations and businesses. Networking has the potential to expedite and bolster local initiatives through shared learning, fund-raising, advocacy and training.

Retail, food service and institutional markets typically source very little food specifically from North Carolina producers, particularly smaller-scale producers. This tendency is not necessarily because of a lack of commitment on the part of larger-scale buyers. But the fact is that the support systems and infrastructure for aggregating, storing, processing and distributing food to these



Robyn Stout

N.C. State students provide samples of local food.

markets have been established over multiple years to operate most efficiently at the national, often global, level rather than within a local, more distributed system.

The Farm to Fork initiative identified broad support for facilitating sales of local products to local institutional markets. This is particularly evident on college campuses across the state, where student organizations are actively engaged in efforts to improve local food offerings within campus dining services. North Carolina is well positioned to make significant inroads in this arena. For example, it is one of three states in the nation to have a state-run farm-to-school program, which delivers local, North Carolina produce to public schools across the state (see Spotlight 23).



Jennifer Curtis

Developing cost-effective business connections between local producers and larger-scale markets requires addressing a host of challenges, only some of which are covered in this document. The following discussion highlights the need to

- understand our state's existing processing and other food-systems infrastructure capacity,
- support food-systems infrastructure businesses to aggregate, process, distribute and market local foods,
- access institutional markets, including through public/private partnerships,
- harness the purchasing power of the state as an institutional buyer, and
- address food-safety procurement protocols and liability insurance issues that impose disproportionate barriers for small-scale diversified farmers.

Processing and Other Food-Systems Infrastructure

Food-systems infrastructure, most narrowly defined, is the physical capacity to get food from the farm to the market. This includes the physical buildings, equipment, technology and vehicles required to store, transport, further process and package food once it has been harvested and before it is received at different market outlets. Examples include, but are not limited to, cold storage and transportation, value-added processing centers, agricultural facilities (e.g., for grading, storage and packaging), community kitchens, dairy processing facilities (e.g., milk bottling, cheese making and egg grading), grain milling, and meat and poultry slaughter and butchering facilities.

Most of the food-systems infrastructure in the state is not accessible to independent farmers, particularly those operating on a smaller scale.

Local processing and related infrastructure is critical to building a local sustainable food economy because it enables the creation of a wide array of products of interest to consumers and institutions, extends the marketing window and shelf life of seasonally produced foods, allows for full utilization of raw commodities and livestock and adds value to farmers' raw products. Ensuring that this type of infrastructure exists locally can minimize waste, can help create jobs and can lead to an overall

Expanding market access for North Carolina farmers requires new businesses and public/private partnerships that can help address issues of scale, including the need to aggregate, process, distribute and market local food.

improvement in food security by reducing transportation costs, fossil fuel use and reliance on infrastructure outside the region.

The extent of food-systems infrastructure in North Carolina is not well characterized. It is generally understood that independent farmers lack sufficient access to certain types of infrastructure, including

- value-added processing of fruits and vegetables to extend shelf life beyond the growing season (e.g., freezing and canning),
- light processing of fresh fruits and vegetables (e.g., washing, grading, cutting and bagging),
- butchering and creation of value-added products for meat and poultry (e.g., brining, curing and smoking), and
- cold storage for meat and produce.

Most of the food-systems infrastructure in the state is not accessible to independent farmers, particularly those operating on a smaller scale. For example, there is only one USDA-inspected poultry processing facility in North Carolina that is accessible to independent farmers. To make value-added meat products, North Carolina farmers must travel long distances and often outside of the state.

Food-Systems Infrastructure Businesses and Partnerships

Food-systems infrastructure is more than physical capacity. It includes the people and businesses who own, manage and execute operations. A building or set of equipment in and of itself is not particularly valuable without a sound business plan, trained staff and management capacity to go along with it.

Expanding market access for North Carolina farmers requires new businesses and public/private partnerships that can help address issues of scale, including the need to aggregate, process, distribute and market local food. Entrepreneurs are needed who are interested in working with smaller-scale independent farmers to help get their products to market while meeting the higher-volume, more-exacting requirements of larger-scale markets. A number of innovative models are emerging around the state, including Blue Ridge Food Ventures (BRFV), Eastern Carolina Organics (ECO), Foothills Connect, Know Your Farms and NC Choices (see Spotlight 8). These initiatives demonstrate the importance of business planning, management training and marketing support when it comes to optimizing the use of equipment and space. Specialized training and mentoring are necessary to support the development of food-system workforces with appropriate skills.

Public support is needed in many cases to help support the start-up of these businesses. While traditional sources of capital are demonstrating increased interest in local food businesses, the returns on investment for small-scale, local efforts may not be comparable to national models.

In developing a local, sustainable food system, it is important that in addition to production systems, the farms, food-systems businesses and partnerships be sustainable. Sustainability within a



Trace Ramsey

Spotlight 8

Scalable Models for “Middle” Businesses

A number of businesses and partnerships have emerged in recent years in North Carolina to help “middle” businesses aggregate the supplies, distribute and market local foods. Some goals and examples of these organizations:

Distribution to food-buying clubs: Know Your Farms, LLC is a relatively new distribution and food-buying club management company based in Davidson. The company sources produce, meat, eggs and other food products from local farmers and distributes them once a month to four local food-buying clubs. This allows farmers to focus on production and provides consumers with a convenient access point for fresh, local foods. Know Your Farms manages the food-buying clubs, including the relationships with the farmers, online ordering and membership policies and practices. www.knowyourfarms.com

Organic produce marketing and distribution: Eastern Carolina Organics, LLC (ECO) markets and distributes organic produce to local retailers and restaurants across North Carolina. A farmer and staff own the business, which returns 80 percent of the sales to farmers. By pooling products from farmers in different regions, ECO creates a year-round, consistent supply of fresh, seasonal produce. Its business helps farmers transition to certified organic practices and works during the winter months to identify buyer needs and interests, guiding profitable planting decisions for the coming season. ECO now works with more than 40 farmers and sells to 100 different customers. www.easterncarolinaorganics.com

Shared use kitchens: Blue Ridge Food Ventures, LLC (BRFV) operates an 11,000-square-foot shared-use kitchen in Asheville. The facility includes three distinct processing areas complete with extensive processing equipment as well as separate dry-storage areas and walk-in coolers and freezers. BRFV seeks to provide small-scale entrepreneurs with the physical infrastructure and business management mentoring needed to profitably produce value-added food products. Products include baked goods, cereals, chocolates, dried herbs, catered fresh foods, frozen fruits and vegetables, pasta, and specialty jams, salsas and pickles. BRFV currently supports three catering companies and 15 packaged specialty food producers, many of which are carried in nearby retail grocery stores. www.blueridgefoodventures.com

Virtual farmers’ market: Foothills Fresh Connect was established in 2005 to support the development and growth of small businesses and entrepreneurship in Rutherford County. Its FarmersFreshMarket.org initiative was developed to connect local farmers to chefs, restaurants and residences in Charlotte and Mecklenburg County via a unique internet Web site. The site acts as a virtual farmers’ market for Southern Foothills growers of Rutherford, Polk, Cleveland, McDowell and Burke counties. Registered buyers access the site and place all of their orders online, and the growers and local distribution partners process and deliver the orders. The program now involves 90 farmers, all averaging fewer than 50 acres, and grosses between \$3,000 and \$4,000 per week in sales to the Charlotte region—80 percent of which flows directly back to participating farmers. www.farmersfreshmarket.org

Scaling up local pasture-based meat: NC Choices, a Center for Environmental Farming Systems (CEFS) initiative works with local pasture-based livestock producers to identify and expand marketing opportunities. In 2008, it launched a pilot program with Weaver Street Market, the Southeast’s largest natural-foods cooperative, to support the grocer in sourcing local, pasture-based pork and grass-fed beef. Now in its second year, the pilot includes eight North Carolina farmers and two rural small-scale meat processors. Weekly retail sales of local red meat have gone from zero to \$9,000, and local supply has replaced a significant portion of out-of-state imports. NC Choices is now in the process of incubating a business enterprise that will aggregate, further process and distribute local, pasture-based meat on behalf of independent North Carolina farmers. www.ncchoices.com, www.weaverstreetmarket.coop

Spotlight 9

Sustainable Business Models—Striving for a Triple Bottom Line in the Food Sector

The “triple bottom line” for businesses can be thought of as “people, planet and profit.” The “people” element relates to the impacts and/or benefits a business generates within its workforce and surrounding communities. The “planet” element addresses the impacts and/or benefits a business generates related to the environment and stewardship of natural resources. The “profit” element looks at the internal profit generated for the company, but also the financial impacts to the surrounding community as a whole.

At the national level, a number of well-recognized companies and brand names have made inroads in the food and farming sector to incorporate selected triple-bottom-line practices. These include (but are not limited to) Amy’s Kitchen, Bon Appétit, Chipotle, Gerber, Kashi, Newman’s Own, Organic Valley, Stonyfield and Whole Foods Market. Many of these initiatives are notable for their focus on addressing environmental issues, such as global warming.

A challenging area for many food and farming businesses is the “people” aspect of sustainability. Fair trade is one of the most widely recognized efforts to address fair labor and community practices in the food sector. The fair trade movement seeks to create equity and partnership in international trade, including a focus on alleviating poverty and improving working conditions for marginalized producers and laborers. In the past 10 years, fair trade sales and consumer awareness have increased considerably, to include not only major commodities such as coffee, sugar, chocolate and bananas, but toys and clothing. According to the Fairtrade Foundation, the value of fair trade sales worldwide now exceeds \$1.2 billion.

Source: Fairtrade Foundation, “Global Fairtrade Sales Increase by 47%” (press release), May 22, 2008, http://www.fairtrade.org.uk/press_office/press_releases_and_statements/may_2008/press_office/press_releases_and_statements/april_2008/press_office/press_releases_and_statements/april_2008/global_fairtrade_sales_increase_by_47.aspx (accessed February 1, 2010).

business context is often referred to as the “triple bottom line,” referring to the social, environmental and economic impacts of business practices (see Spotlight 9). The challenge for everyone involved in building a sustainable food economy in North Carolina is to work toward implementation of business practices, models and partnerships that incorporate all three measures of sustainability.

A particular challenge for food-related businesses is to address the need for social and community benefits. Social equity issues pervade our food system, both at the national level and in North Carolina. A key issue in North Carolina is the growing imbalance between farmers and companies in the livestock and poultry sectors. This is represented in part by the use of production and/or marketing contracts between farmers and buyers. In 2003, 40 percent of all United States agricultural products were produced with either a production and/or marketing contract.²¹ This includes poultry, hogs, tobacco, some specialty crops and grains. The concern often expressed by farmers who are bound by these contracts is that they involve considerable financial risk with limited or no legal protection. Contracts are often arranged so that farmers invest capital up front or incur significant debt for equipment (e.g., buildings) and have no control when the contracting agribusiness decides to reduce or eliminate purchases or change production standards, which require new or altered equipment and further financial investment. This is compounded by the trend toward consolidation and concentration within agricultural markets, particularly in the livestock sector, which leaves farmers at the local level with very few, if any, marketing options except to work under contract.²² Beginning in 2010, the USDA in collaboration with the U.S. Department of Justice (DOJ) will be holding hearings to discuss competition in agricultural markets, beginning with the livestock industry.²³

Progress toward addressing social equity issues is becoming more visible in the United States. In 2001, the Coalition of Immokalee Workers (CIW) started a boycott of fast-food restaurant chain Taco Bell.

The coalition represents 4,000 farmworkers in the tomato-growing region of Florida. Eight years later,

CIW’s Campaign for Fair Food resulted in landmark agreements with restaurant chains Taco Bell, McDonald’s, Burger King and Subway, the natural-foods retailer Whole Foods and Compass Group, the nation’s leading food-service and support-services company. Based in Charlotte, Compass Group has more than 10,000 food-service accounts and over \$9 billion in annual revenues. The agreement establishes safeguards to improve working conditions, supports Florida farmworkers to voice their concerns without fear of retribution and provides farmworkers who harvest fresh tomatoes an immediate raise—one penny per pound picked. This translates into a significant pay increase, and the ultimate goal is a guaranteed minimum fair wage.²⁴

Accessing Institutional Markets

There are a variety of challenges to supplying institutional markets with local food, many of which relate to the lack of adequate food-systems infrastructure and the “middle” businesses discussed above. Other challenges include

- a lack of competitive pricing for local products,
- insufficient volume and consistency of local products,
- substandard packaging,
- a lack of affordable commercial liability insurance for small-scale producers, and
- the idea that Good Agricultural Practices (GAPs) certification requirements and audit procedures are untenable for small-scale producers.

The state has demonstrated support for increasing farmers’ access to institutional markets by hosting marketing programs to facilitate the sale of products grown in North Carolina to schools and retail markets. In addition, the state is participating in the N.C. Fresh Produce Safety Task Force (see Spotlight 10) that creates a forum for discussing and advancing the needs of small-scale, diversified farmers in penetrating institutional markets. Greater progress requires the development of public/private partnerships that can address these challenges and serve as models.

State Food Procurement Policies

The state is itself a major institutional buyer of food. When it comes to identifying opportunities for increasing market access for local farmers, it is important to consider the purchasing power of state institutions, including the University of North Carolina system, state-run health care providers, school systems, the penal system, the N.C. General Assembly, the executive branch and other state agencies. Directing even a small percentage of food procurement expenditures to the purchase of local foods would create a sizable market for local farmers and stimulate economic development across the state. A secondary benefit would be the creation of templates for local purchasing by private institutional buyers.

One idea discussed by Farm to Fork participants and adopted by several other states is to change state procurement laws to give preference for locally produced food. Other states have done this by imposing a preference for in-state goods and, in some cases, specifically for locally produced foods (see Spotlight 11). These may appear as absolute preferences (i.e., barring any purchase from an out-of-state bidder) or, more often, percentage preferences (i.e., if a bid from a local business is within a specific percentage of the lowest non-local bid, the contract goes to the local business). A study in Arizona found that use of local independent suppliers for state contracts results in three times the economic benefit of bids fulfilled through national chains. Courts have generally upheld local preferences in the face of legal challenges.²⁵

Spotlight 10

N.C. Fresh Produce Safety Task Force

The N.C. Fresh Produce Safety Task Force includes representatives of N.C. State University and N.C. Agricultural and Technical State University (including N.C. Cooperative Extension, based at both universities), the N.C. Department of Agriculture and Consumer Services (NCDA&CS), the U.S. Food and Drug Administration (FDA), the N.C. Farm Bureau, commodity groups and fresh produce brokers, distributors and growers. The Task Force has developed a consensus around a tiered approach to addressing food-safety issues on the farm. Under that approach, a basic food-safety certification program would be modeled on the pesticide applicator program, requiring all sellers to attend a one- to two-day certification course and receive regular update trainings. Businesses or farms that seek or need a higher level of certification, such as intensive trainings or farm audits, could obtain a higher-tier certification. The task force sponsors producer training programs and has developed a “train-the-trainer” manual. North Carolina has also implemented a Good Agricultural Practices (GAPs) Certification Assistance Program, which provides fruit and vegetable farmers with up to \$600 in cost-share funds to help pay for a government or private audit, and a Water Analysis Cost Share Program, which offers farmers up to \$200 per year to help pay for laboratory analysis for irrigation or packing house wash water. This year, NCDA&CS also offered assistance to farmers in obtaining GLOBALGAP certification, funded by a grant from the Golden LEAF Foundation.

Source: www.ncmarketready.org/ncfreshproducesafety/members/working3.html, www.ncmarketready.org/ncfreshproducesafety/cost-share--programs-available-for-growers.html

Spotlight 11

States with Preferences for Local-Food Procurement

Colorado affords a 5 percent preference to agricultural products produced by a resident bidder when the product is suitable and available in sufficient quantity.

Hawaii has a preference for local goods, including those produced, raised or grown in the state where the input is at least 25 of the finished product cost. HRS §103D-1001.

Louisiana has a similarly structured preference of up to 10 percent. RS 38 §2251.

New York offers a preference for food products grown, produced or harvested in the state, in an amount determined by designated state officers for each class of goods. NYS Finance Law, Article XI, §165.

Tennessee imposes an absolute preference for public education institutions to purchase meat and meat products from producers within the state. TCA §23-4-810.

Texas expresses a preference for in-state foods, but only if the cost and quality are equal. Tex. Code Ann. Title 2, §44.042.

In 2007, **Montana** adopted a provision directing that food purchases be made from a local bidder when quality is equal, even if it is not the lowest bid, so long as the price to be paid is “reasonable” and within the agency’s budget. MCA §18-4-132.

Most recently, **Illinois** passed a new Local Food, Farms and Jobs Act that encourages state agencies to spend at least 10 percent of their food dollars on local foods.

North Carolina’s procurement law currently mandates purchase from the lowest-price “responsive and responsible bidder,” or bidder who demonstrates “the capacity to comply with the institution’s buying specifications and requirements” (N.C. Gen. Stat. § 143-129). While interviews with agency procurement managers indicate a willingness—indeed, even an eagerness—to procure locally, the lowest-price requirement is a significant barrier.²⁶ Utilizing the same approach as other states may not be viable in North Carolina.

One reason this approach might not be possible is that North Carolina exports food for purchase by agencies in other states, and many of these states (35 at present) have enacted what are called reciprocal preference laws. These laws require state and public agencies, in determining the lowest-price responsible bidder, to add a percentage increase to each out-of-state bidder’s price equal to the percent of preference given in their home state to local bidders. In other words, if we instituted a preference for local bidders in North Carolina, our out-of-state exports to other states would be compromised.

Fortunately, there are other avenues for establishing local-food preferences by North Carolina’s state agencies (see Recommended Actions, p. 50).

Emerging Issues in Fresh Produce Safety

Outbreaks of foodborne illnesses are highly publicized by local and national news media. Recent examples include Topps’ recall of 21.7 million pounds of hamburger in 2007 due to *Escherichia coli* O157:H7, bagged spinach

contaminated by *E. coli* O157:H7 in 2006 and fresh peppers contaminated with *Salmonella Saintpaul* in 2008. As a result, produce brokers and institutional and retail buyers now require suppliers to have third-party certification of their food-safety procedures. These procedures focus on the GAPs that are being followed on the farm.

Everyone agrees that a safe food supply is critical. There are concerns that the current debate has framed food-safety issues, and possible solutions, too narrowly (see Spotlight 13). This narrow focus is of particular concern given the speed with which the food-safety discussion has progressed. A number of legislative proposals are being considered at the federal level to address food-safety issues and improve traceability from retailers to the farm.²⁷ In late summer 2009, the U.S. House of Representatives passed H.R. 2749, the Food Safety Enhancement Act of 2009. The Senate has authored a similar bill and is expected to pass either that bill or the House version. Both bills would grant the FDA mandatory recall authority. Both bills also mandate that the FDA create risk-based, on-farm food-safety regulations. At the core for farmers would be an on-farm food-safety plan that would form the basis of that farmer’s approach to food safety. These new regulations may impose disproportionate burdens on small, sustainable, organic and/or limited-resource farms.

Currently, increased food-safety certification protocols focus on land and water use, worker hygiene, manure management, wildlife management and extensive record-keeping.²⁸ A major concern for small-scale, diversified farms is that these protocols have, to date, taken a one-size-fits-all approach. They fail to consider the certification standards already in place that many growers already pay for and adhere to, including organic certification; the scale of producers' operations and the high costs of compliance for small-scale producers relative to large-scale producers; the length of the supply chain to which a given farm contributes; and the risks that are specific to individual crops and production methods. In addition, some of the regulations could run counter to adoption of on-farm conservation measures or make the sustainable integration of crops and livestock systems difficult. On the positive side, organic certification standards have rigorous manure-management handling protocols already in place that will now be required by all producers who will be food-safety certified.

Product Liability Insurance

As small- and mid-scale growers seek to access larger institutional and retail markets (and even, increasingly, farmers' markets), they need affordable product liability insurance, in addition to their general farm insurance. Product liability insurance covers risks associated with the sale of products away from the farm. These risks are not covered by general farm liability insurance policies, which normally cover only on-farm activities and the sale of raw, unprocessed produce. Currently, none of the companies backed by the N.C. Department of Insurance (DOI) offers product liability insurance policies. Out-of-state insurers are not governed by North Carolina's insurance laws, and policyholders dissatisfied with insurers' claims handling are not entitled to assistance from the DOI, nor to payment from the state's insurance risk pool if their insurers become insolvent and cannot pay their claims.

Moreover, the cost of such a policy can be quite significant for a small-scale farmer. Retailers commonly require their producers to carry product liability insurance of \$1 million or more. The cost of such a policy can be difficult to predict, since it is usually based on a detailed description of the farmer's product and business operations (production, distribution and marketing methods). One industry survey indicates that annual premiums for food product liability insurance ranged from \$500 to \$20,000 for a \$1 million policy, with an average premium of \$3,000. In general, the rate per \$1,000 of sales tends to decrease as gross sales increase.²⁹

Spotlight 12

How Other Regions are Helping Small-Scale Farmers Address Food-Safety Protocols

A few other states and regions have taken leadership positions in the produce food-safety debate, issuing their own alternative strategies focused on the needs of small-scale, diversified producers. Appalachian Harvest, a network of certified organic family farmers in southwest Virginia and northeast Tennessee, requires its farmers to complete free federal farm-safety training based on Good Agricultural Practices (GAPs) and to develop food-safety plans that complement their organic system plans. Appalachian Harvest conducts random spot audits at no charge and provides sample forms and logs for farmers to use. It has also arranged a group rate for water sampling. The California-based Community Alliance with Family Farmers has created a voluntary federal GAPs-based program for small to mid-sized organic and conventional family farms. Participants adopt standard operating procedures (SOP) issued by the Alliance, which serve as the farms' food-safety plans. Participants are provided with sample forms and monitoring logs and conduct semi-annual self audits. The SOP encourages vegetated buffers, provides science-based animal-specific methods for addressing wildlife intrusion, discourages the use of municipal biosolids and encourages the use of composted manure. The Maine Organic Farmers and Gardeners Association (MOFGA) has adopted its own GAP-type protocols, based on a Hazard Analysis and Critical Control Points (HACCP) methodology, supported by a basic training program, a manual and a sample farm plan. Organic farmers have the option of having their food-safety plan implementation audited and certified at the same time as their annual organic inspection.

Source: Elanor Starmer and Marie Kulick, Bridging the Gaps: Strategies to Improve Produce Safety, Preserve Farm Diversity and Strengthen Local Food Systems (Minneapolis, MN: Institute for Agriculture and Trade Policy, and Washington, DC: Food & Water Watch, September 2009), www.foodandwaterwatch.org/food/pubs/reports/bridging-the-gaps (accessed February 1, 2010).

Spotlight 13

Food Safety: Taking a Broad View

A great deal of attention surrounding the safety of fresh produce has focused on microbiological contamination of foods, (e.g. *E. coli* and *Salmonella*). This biological contamination is only one area of potential concern for food safety. Fresh produce may also be contaminated during production, processing or in a consumer's home with physical contaminants like dirt, hair, insects or glass. Chemical contamination is another area of concern with fresh produce. This type of contamination can include cleaning chemicals, naturally occurring toxins and pesticides. The latter continues to be a food-safety concern in agriculture. Pesticide impacts are more difficult to assess as a food-safety issue, as they can be associated with more chronic illness (e.g., cancer) versus the acute illness one might expect in the event of *Salmonella* or *E. coli* contamination. It can be more difficult to pinpoint direct causal relationships.

Because of the current consolidation in the food system and national distribution system of aggregated products, when a food-safety issue emerges, the negative impact can be nationwide and widespread. In addition to the impact on consumer health and consumer confidence, farmers growing the same commodity, though uninvolved in a particular food-safety crisis, can also suffer tremendous economic losses and even lose their farms as the outbreak is investigated. For example, in the *Salmonella* scare of 2008, it was suspected for several weeks that tomatoes were the source of the contamination. In the weeks it took to identify the source of the *Salmonella*—peppers from Mexico—Florida tomato producers lost an estimated \$300 million, and Florida tomato packers lost an estimated \$100 million. These losses were largely due to eroding consumer confidence in tomato safety, which caused restaurants, other food-service organizations and retailers to quit purchasing tomatoes. A more distributed and regional-based food system with the ability to trace produce back to individual farms could reduce the widespread impact of a food-safety contamination incident on both consumers and producers.

Source: Nicole Blake, "Tomato Growers Struggle to Salvage Sales," *Orlando Sentinel*, August 14, 2008, http://articles.orlandosentinel.com/2008-08-14/businesses/tomatoes14_1_tomatoes-winter-park-scare (accessed April 7, 2010).

One idea discussed by Farm to Fork participants and adopted by several other states is to change state procurement laws to give preference to locally produced food.

Recommended Actions

► **Action 4.1. Help network direct-marketing initiatives statewide.**

Farm to Fork participants recognized the potential to improve the effectiveness of direct marketing initiatives (e.g., farmers' markets, CSAs, food-buying clubs, etc.) by providing opportunities for statewide networking. Networking opportunities would facilitate shared learning, collaborative fundraising, enhanced training and expanded education efforts. One idea discussed was the formation of a N.C. Farmers' Market Association.

► **Action 4.2. Establish goals for state procurement of local food.**

Farm to Fork participants expressed interest in harnessing the purchasing power of state and local agencies in support of local food. One legal strategy that can be pursued is "best value procurement." Close examination of North Carolina purchasing legislation, the related N.C. Executive Order 156 and the State of North Carolina Agency Purchasing Manual reveals this as a possible avenue to pursue. State regulations take into account the long-term or overall cost effectiveness of purchases—not just the up-front lowest cost. "Best value procurement" is defined as "a procurement process that has as a fundamental objective the reduction of the total cost of ownership. The particular procurement methods are selected so as to result in the best buy for the state in terms of the function to be performed" (9 NCAC 6A .0102). For example, this permits the purchase of an ice machine that will not increase the state's water or electric bill, over a lower-priced alternative that will result in such an increase. Executive Order 156 directs state agencies to "develop and incorporate policies and practices into their daily operations that preserve natural resources, conserve energy, eliminate waste and emissions, and lessen overall environmental impact," as well as purchasing goods that "have a lesser or reduced effect on human health and the environment."

These rules present an opportunity to express a preference to the extent that local, organic and/or foods grown utilizing sustainable practices fall into this category. The rules also provide an opportunity to educate and work with procurement officials to demonstrate a linkage between such foods and the mandate of Executive

Order 156. Furthermore, the state already has a policy to promote the purchase of products with recycled content; this may serve as a model for local and/or organic food purchasing. Indeed, the state procurement manual currently directs that “where quality and availability allow, specifications are to be based on products grown or manufactured in North Carolina.” This special interest in North Carolina products is intended to encourage and promote their use, but is not exercised to the exclusion of other products or to prevent fair and open competition.

It will also be productive to pursue the adoption of local-food purchasing preferences at the county and municipal levels—particularly in more urbanized counties where food is not produced at a scale appropriate for sale to other states’ institutions. Therefore, reciprocal preferences for local-food purchases adopted by another state would be unlikely to have an impact on producers in North Carolina. Farm to Fork participants found that local governments will be more likely to establish local-food procurement preferences if they have state authorization to proceed in this direction.

► Action 4.3. Develop “Feed the Forces” as a model farm-to-institution program.

A key institutional marketing opportunity identified as a priority in the Farm to Fork initiative is support for the Sustainable Fort Bragg initiative, Feed the Forces. This initiative seeks to connect eastern North Carolina’s vast agricultural capacity to the food, fuel and fiber requirements of nearby Fort Bragg and other major military installations. Eastern North Carolina is home to extensive commodity-crop production. By 2015, Fort Bragg is expected to support 30,000 to 40,000 new residents.

The project seeks to support local farmers in transitioning to production of food crops, fuel feedstock and other agricultural products purchased by food-service and retail businesses/vendors serving the state’s military installations. In so doing, project partners hope to overcome some of the current barriers to local farmers accessing institutional markets, including developing systems and protocols regarding packaging, pricing, distribution logistics, food safety and product liability. Project partners intend to develop baselines and project procurement goals, with mechanisms to evaluate success and progress. Through the Farm to Fork initiative, the following partners committed to working on the Feed the Forces initiative: BRAC Regional Task Force, Military Growth Task Force of North Carolina’s Eastern Region, North Carolina’s Eastern Region, Sustainable Fort Bragg (SFB), Sustainable Sandhills (SS), CEFS, Cooperative Extension, N.C. Fresh Produce Safety Task Force, Foster-Caviness Foodservice, Compass Group (Foodbuy LLC), FoodLogiQ, SENCFS, Carolina Farm Stewardship Association (CFSA) and Eastern Carolina Organics. This project has the potential to develop into a statewide farm-to-institution model that facilitates other institutional marketing opportunities across the state. Funds from the Golden LEAF Foundation were recently awarded in support of this effort.



Daniel Kim

A key institutional marketing opportunity identified as a priority in the Farm to Fork process is support for the Sustainable Fort Bragg initiative, Feed the Forces.



Debbie Rous

Action 4.4. Conduct an assessment of local food-system infrastructure needs.

Separately or as part of conducting a statewide food assessment, the state should consider expanding its efforts to identify gaps in the state's infrastructure for aggregating, processing, distributing and marketing foods for local markets. These types of assessments can yield fruitful public/private partnerships and foster entrepreneurship, identifying needs that facilitate action on the part of funders, producers, food entrepreneurs, local governments and others. For example, NCDA&CS invested in an assessment of local poultry-processing capacity for small-scale producers.

This assessment showed that the western part of the state is most sorely lacking in capacity.³⁰ With this information and some management consulting, several farmers formed the Independent Small Animal Meat Producers Association of Western North Carolina (ISAMPA-WNC, www.isampa.org). The association was successful in securing the cooperation of McDowell County to provide land and over \$600,000 to support the association and the development of a meat-processing facility.

Action 4.5. Invest in business planning and management support for local food and farming enterprises.

Of particular importance are tools and strategies for developing sound business plans. Farmers and food entrepreneurs often have visionary ideas and technical skills, but lack a background in business planning and management. Example programs that offer important services are

- **N.C. MarketReady**, formerly known as N.C. State University's Program for Value-Added & Alternative Agriculture, which recently added a new program to help farmers work with their county Cooperative Extension agents to access business planning, management tools and training opportunities (www.ncmarketready.org)
- **Small Business Technology Development Center (SBTDC)**, which has offices throughout North Carolina specializing in business counseling and management education, as well as providing marketing and research services to aid in small business incubation (www.sbtdc.org)
- **University of North Carolina's Kenan-Flagler Business School**, including its **Business Accelerator for Sustainable Entrepreneurship (BASE)** program, which provides networking and resources for businesses with environmental and social objectives at the core of their business strategy (www.kenan-flagler.unc.edu/cse/BASE/index.cfm), and its **Center for Sustainable Enterprise (CSE)**, which provides

Action 4.6. Provide “patient capital” to food and farming enterprises.

New and transitioning farmers and food businesses need access to “patient capital” that matches the economic realities and potential profit margins inherent in sustainable, local food businesses and farming enterprises.

“Patient capital” refers to funds invested for a long-term rather than short-term return—often focused as much on social return as on financial return. A number of local enterprises have been launched with support from public sources and private foundations such as the Rural Advancement Foundation International–USA’s (RAFI–USA’s) Tobacco Communities Reinvestment Project and the Golden LEAF Foundation. The investment community increasingly recognizes the distinctive nature of local food and farming enterprises and the need to establish realistic expectations for returns on investment. Investment groups such as Investors’ Circle (www.investorscircle.net), RSF Social Finance (www.rsfsocialfinance.org) and the Natural Capital Investment Fund (www.ncifund.org) recognize the need to restructure investment strategies and expectations for food and farming enterprises to focus on sustainable, triple-bottom-line returns.

Another way to increase available credit in this sector is by working with loan underwriters to reduce risk in issuing loans. Programs that buy down interest rates from private lenders can reduce the cost of capital for beginning and transitioning farmers. An example may be found in the Golden LEAF Foundation’s recent grants to the Center for Community Self-Help and the N.C. Rural Economic Development Center (also known as the Rural Center). Golden LEAF’s grants to Self-Help, which is the country’s first statewide, private-sector financial institution focusing on economic development in depressed communities, allowed Self-Help to leverage the funds into loans of more than 20 times the grant value, creating or saving hundreds of jobs in areas most affected by the decline in tobacco. The Capital Access Program of the Rural Center will leverage \$3.4 million in grant funds into \$100 million in new loans by creating a special loan loss reserve that enables participating banks to make loans that carry a higher level of risk than allowed by conventional guidelines. Together, these programs facilitate entrepreneurship in communities that would not otherwise be able to access credit.

Action 4.7. Expand local-food job-training opportunities.

New local food businesses lack access to trained staff familiar with such skills as seasonal menu planning, utilizing fresh and local ingredients, and butchery. There is significant potential for job development in these specialized fields, as the demand for local foods rises. There is a particularly strong need to address the lack of trained butchers, who have all but disappeared in this country due to the move toward “case ready” meat that is cut and packaged off-site, outside of butcher shops and retail grocery stores. Many restaurant owners are realizing they need to have this expertise in-house in order to purchase local meat.³¹ Similarly, grocery stores in North Carolina, such as Whole Foods Market and Weaver Street Market, which purchase whole animals direct from local farmers, have their own butchers.



Marc Hall



Chris Gunter

This provides training opportunities for community colleges and other educational institutions working at the local level. In 2009, Chatham County Community College began offering a “Natural Chef Culinary Program” to train future chefs and food service providers in food preparation techniques using local, seasonal and fresh ingredients. Public programming, including cooking classes and workshops, are also part of the program.³²

Action 4.8. Adopt legislation to support contract fairness for producers.

States can play a role to advance sustainable business practices and, in particular, help preserve competition in agriculture. In 2000, 16 state attorneys general joined together to advocate that states consider reasonable oversight of agricultural contracting.³³ The joint statement of the attorneys general noted the spread of contracts within highly concentrated agricultural markets and warned of the “greater and greater disparity between processors and farmers with respect to market information and bargaining power.” The attorneys general also noted, “Contracting can result in the unfair shifting of economic risk to farmers” and that contracts with confidentiality clauses destroy market transparency, limiting the ability of farmers to negotiate a fair deal. In response to these problems, the attorneys general provided model state legislation, the Producer Protection Act, designed to set basic minimum standards for contract fairness and promote meaningful competition in agriculture.³⁴ North Carolina should consider joining this effort and adopting legislation to require contract fairness.

Action 4.9. Advocate at the federal level to support small-scale, diversified farmers in the adoption of food-safety protocols.

North Carolina has developed a proactive approach to addressing new food-safety requirements for produce, including establishment of the N.C. Fresh Produce Safety Task Force, which is implementing a consensus approach to addressing food-safety issues on the farm. Its work includes support for training programs, certification assistance and cost-share for farmers to hire private auditors (see Spotlight 10). The federal government is increasingly involved in produce safety, and several proposals for legislation are under consideration. North Carolina should ensure that its voice is heard at the federal level as protocols are developed, particularly in support of the concerns and needs of the state’s many small-scale, diversified farming operations. In particular, the state should recommend

- protocols that maximize compatibility with environmental, conservation and waste-reduction goals, as well as organic and other certification requirements, preferably incorporating new audit criteria into existing certification inspections to eliminate duplicative burdens,
- incorporation of Soil and Water Conservation Districts into the rule-making process,

- a tiered, risk-based, market-based and scale-appropriate approach, and
- transparency and public oversight, especially for industry protocols, to enable effective assessment of whether there is solid and independent scientific grounding for their requirements.

In addition, the state should consider the development of a state produce safety audit and farmer education program that would provide

- educational and training resources to assist farmers in transitioning to new protocols, thereby encouraging participation and food safety,
- low-cost audits and trained auditors to ensure that their enforcement is fair and consistent, and that they understand the relationship between food-safety protocols, conservation program requirements and organic certification requirements, as well as an array of farming systems and practices, and
- financial assistance to defray the cost of mitigation measures for farmers located near animal operations whose waste-disposal practices they cannot control.



Ties Thraives

5. Cultivate Community Gardens Statewide

Background

Community gardens include gardens in neighborhoods, housing facilities, faith communities, schools, businesses, public agencies and other places. Well-tended community gardens and urban farms can produce healthy food, build soil quality and protect public green space. In addition, they offer residents the opportunity to come together in a collaborative and physically active environment. Typically, community gardens provide low-cost options for food production and physical activity, and they offer countless opportunities for “sweat equity” and for grassroots and democratic participation in their creation and management. Incorporation of gardens into schools and other child-focused venues creates the opportunity for hands-on, outdoor education about stewardship and food production and provides exposure to fresh and healthy foods that can help establish positive lifelong health habits.

Maintaining community gardens and urban farms can be challenging. They often fail, not because of plant loss, but because of a lack of organizational capacity on the part of community residents. Furthermore, people do not always know what to do with the food grown in gardens.

Spotlight 14

Wayne County: A Public Library Gets Involved

The Wayne County Public Library (WCPL) community garden was started in the summer of 2006 in response to an incidence of racial prejudice. With the help of multiple partners, including the library, the Friends of the Wayne County Public Library, staff with the Center for Environmental Farming Systems (CEFS), Goldsboro Parks and Recreation Department, Wayne County Cooperative Extension and 4-H, and the Boys and Girls Club of Wayne County, the garden now grows year-round with winter cover crops and is the center of a summer library program for children. WCPL is (1) developing a collection of gardening, health and nutrition literary resources, (2) hosting workshops on topics such as organic gardening, journaling and cultural awareness, and (3) offering hands-on gardening experiences for community residents. By promoting an appreciation of history and diverse cultures, and offering numerous opportunities for community members to meet and interact, the garden has become a vital element of the library.

www.wcpl.org

Spotlight 15

Urban Ministries Community Gardens: Engaging the Homeless

The Urban Ministry Center Community Garden in Charlotte is unusual because the gardeners are homeless. Other than that, the garden is like any other: growing food and beautifying the landscape with flowers, trees and native plants, while nurturing the community. Its practices are based on compost and organic soil amendments and chemical-free pest management. The gardeners at the Urban Ministry Center value shared stories and experiences as much as tomatoes, okra, broccoli and greens. The program aims to help participants gain new, self-sustaining skills and is connected to a growing network of public and private community gardens across the greater Charlotte area.

www.urbanministrycenter.org

A number of nonprofit organizations and public agencies in North Carolina work at the local and regional levels to promote and network community gardens. These include the Piedmont Interfaith Network of Gardens (PING) and RAFI-USA's "Come to the Table" effort, which has coordinated faith-based community gardens in regions across North Carolina and facilitated a series of regional training workshops (see Spotlight 30). Mecklenburg County has one of the largest "open" garden networks in the Southeast (see Spotlight 15). In Asheville, Bountiful Cities hosts and manages multiple gardens and demonstration gardens (see Spotlight 16). Anathoth Community Garden holds regular workshops in the rural Piedmont. South Eastern Efforts Developing Sustainable Spaces Inc. (SEEDS) assists in the development of new urban community gardens across Durham and promotes youth engagement in gardening through its Durham Inner-city Gardeners (DIG) program (see Spotlight 25).

In 2008, the N.C. Division of Public Health (DPH) and Cooperative Extension helped establish the N.C. Community Garden Partners (NCCGP), bringing together 25 individuals representing a broad array of organizations across the state interested in community gardening. The goals of NCCGP are to connect community gardens, gardening organizations and North Carolina citizens and to expand successful community gardening efforts statewide. Their first collaborative effort was a statewide survey of existing community gardens. As of November 2009, 94 community gardens had responded.

In addition to engaging in strategic planning, the NCCGP has

- developed a fact sheet and enhanced the N.C. Community Garden Web site (nccommunitygarden.ncsu.edu), which provides "one-stop shopping" for all of the partner products and activities and a launching point for getting more people involved in the partnership,
- published the *Eat Smart, Move More North Carolina: Growing Community through Gardens* primer that gives an overview of how to set up a garden (or link with existing gardens) and showcases state and community resources,³⁵
- created the N.C. Community Garden listserv,³⁶ and
- created an interactive community garden social-networking site on gardening.³⁷

Spotlight 16

Bountiful Cities: Creating Growing Opportunities

Bountiful Cities is a nonprofit organization in Asheville that seeks to nurture urban spaces that serve as models for sustainability through organic food production, water conservation, ecological building, community celebration and cooperative economics. Its work is represented in two core gardens: a permaculture-based vegetable garden on Pearson Drive in Montford and the Dr. George Washington Carver Edible Park at Stevens Lee Community Center, which has more than 30 varieties of fruit trees and an understory of berries and medicinal herbs. In these and other gardens, Bountiful Cities works with public, private, educational and nonprofit partners, creating growing opportunities in numerous venues and communities.

www.bountifulcitiesproject.org

Recommended Actions

► Action 5.1. Fund a statewide coordinator and other activities of the N.C. Community Garden Partners.

Well-tended community gardens and urban farms can produce healthy food, build soil quality and protect public green space.

The NCCGP provides the state with the public/private partnership that it needs to launch a statewide community gardening initiative. The goal is a community garden in every community in the state. Funds are needed to support a statewide coordinator to (1) manage the network, (2) map existing gardens, and (3) provide education and outreach. Funds are also needed to support specific existing community gardens to serve as models or “hubs” for outreach, education and peer support. Network activities would focus on (1) growing practices, (2) cooking and food-preservation skills, and (3) organizational management skills to make the garden self-supporting and sustainable.

6. Strengthen Local Government Initiatives

Background

North Carolina is home to 100 counties and 548 municipalities—towns, cities and villages. Food and farming issues are not always foremost on the minds of local governments, given the wide array of challenging issues they confront. This is particularly true in the current economic climate. In recent history, agriculture has not been viewed as having economic development potential. Indeed, the emphasis in rural areas has been development of alternatives to farming.

There is the significant potential for local food and farming businesses to be an economic development engine in North Carolina, particularly in rural areas. The Farm to Fork initiative highlighted a number of initiatives already underway at the local level that provide models for other local decision makers throughout the state. Some of these programs are low-cost options while others require up-front investments for future payback.

Encouraging local government engagement is critical. As we move forward, we need to continue to gather state-specific data pertaining to the economic development potential of local food economies. While information is forthcoming in other parts of the country, it is limited here. We need to continue to refine and determine the connections between supporting local food systems and creating jobs, circulating food dollars in a community and improving health outcomes for residents through increased access to fresh, healthy, local foods.



Ties Thraves



Debbie Pross

Recommended Actions

Action 6.1. Formalize policies that dedicate vacant land to promote farm, garden, market and infrastructure development.

Government-owned vacant land represents an important food-system asset that can be used on an interim or permanent basis for food production, processing and marketing. Local governments can dedicate land for farmers' markets, community gardens, urban farms and incubator farms and as sites for the development of processing, distribution and other food-systems infrastructure. The benefits to local municipalities include the potential to help create jobs, increase business activity and expand the tax base. Adopting official policies around vacant-land use commitments helps people understand how they can engage with their local county and city officials and also provides continuity and transparency around mutual responsibilities. Local governments will need to identify specific needs and conduct inventories of available vacant land and then select sites based on such considerations as neighborhood support, soil quality, water, light, security and parking.³⁸

Action 6.2. Develop a county agricultural economic development and farmland protection plan.

A county agricultural economic development and farmland protection plan requires that the county identify the extent and type of agricultural activity within its boundaries, describing the challenges and opportunities for preserving family farms. Such a plan also articulates how to preserve the local agricultural economy using such tactics as market development, farm diversification, infrastructure financing and technical assistance for new and transitioning farmers. In order for counties to receive state funds for farmland preservation and agricultural development, they must create these plans. NCDA&CS reports that out of the state's 100 counties, a total of six have developed and implemented county agricultural economic development and farmland protection plans—Alamance, Buncombe, Cabarrus, Haywood, Lincoln and Polk—with about 19 more plans in development.³⁹

Action 6.3. Employ agricultural economic and food-systems development staff.

In addition to working closely with Cooperative Extension staff, counties can consider hiring agricultural economic development coordinators. At least two counties in North Carolina have taken this step, with positive outcomes.

These types of positions can identify opportunities for state and federal funding, help write and secure grants to support infrastructure development, and network existing and potential businesses and organizations. For example, under the leadership of Noah Ranells, part-time agricultural economic development coordinator, Orange County raised \$1.5 million in two years to support

There is the significant potential for local food and farming businesses to be an economic development engine in North Carolina, particularly in rural areas.

the development of local food-systems infrastructure and farm mentorship programming, including a shared-use, value-added processing center.⁴⁰

In one year, Lynn Sprague, a full-time agricultural development director in Polk County, increased the number of farmers' markets in the county from two to six and the number of vendor sites from 30 to 100. He now operates a refrigerated truck to assist local farmers with produce distribution. In collaboration with Cooperative Extension and several nonprofits, Sprague secured the donation of a 32,000-square-foot building that will be retrofitted as an agricultural development center.⁴¹

Action 6.4. Invest in needed processing and other food-systems infrastructure.

Building a local food economy requires a food-systems infrastructure. Many people focus on the role local governments can play in protecting farmland. However, increasing production for local markets without the capacity to slaughter, process, store, distribute and market farm products makes it difficult, if not impossible, to scale up local food systems. Much of the infrastructure that exists is set up to service larger-scale farms and/or is privately held and not available to independent farmers and food entrepreneurs. The Farm to Fork initiative identified investment in local food-systems infrastructure as a critical need but suggests that infrastructure investments need to be considered in tandem with the results of community food assessments in which market demand, production capacity and existing physical infrastructure are identified. It further emphasized that because of the expense associated with food-systems infrastructure, these investments will likely need to be made at the regional level, requiring coordination across political boundaries.

For example, Cabarrus County has taken the initiative to invest in local food-systems infrastructure. Despite the large number of beef producers in the county, the nearest slaughter facility is hours away. Most producers have cow/calf operations and do not sell their animals locally. The county does, however, have a local meat fabrication business with a steady clientele and customer base, and its beef does not come from local farmers. With a grant from the ADFP Trust Fund, the county will be adding a beef/swine/sheep/goat kill floor to the meat fabrication business to enable local farmers to have their animals slaughtered, butchered and packaged for local markets.

Action 6.5. Address land-use and zoning ordinances.

Perhaps one of the most important and pragmatic actions local governments can engage in is a review of existing zoning ordinances to identify and modify policies that create barriers or in other ways fail to support local farms, community gardens and allied food enterprises (e.g., slaughter and processing facilities). Zoning is a common land-use planning tool in which towns and counties are divided into distinct areas for specific uses—industrial, residential, mixed use, etc. According to North Carolina law, bona fide farms are exempt from most county (but not city) zoning laws.

While zoning can be perceived as a deterrent to farming, it can be a useful tool for protecting agricultural operations. A careful review by a zoning and



Courtesy of Appalachian Sustainable Agriculture Project

Spotlight 17

North Carolina Counties and Municipalities Taking Action to Support Local Food Economies

Cabarrus County dedicated 30 acres of land near Concord to develop the Elma C. Lomax Incubator Farm, which currently includes nine beginning farmers, a mentor farmer, and beehives maintained by a local beekeepers group. Future plans include a park with nature trails and educational programming. In 2010, the Board of Commissioners will appoint a food policy council to oversee the preparation of a community food assessment.

The **City of Clayton** provided land, start-up funds and promotion for the Clayton Farm and Community Market.

The **City of Durham** provides land and infrastructure to support a weekly farmers' market.

The **City of Fayetteville** is currently developing a Unified Development Ordinance (UDO) which includes provisions for farmers' markets.

The **City of Raleigh** now includes community gardens in its comprehensive sustainability plan and provides \$2,500 neighborhood improvement grants to establish and maintain community gardens.

Guilford County adopted land-use and zoning ordinances that allow farmers' markets and community gardens.

Madison County worked extensively with N.C. Cooperative Extension and other partners to promote the county's farmers, in part through the establishment and ongoing support of the Madison Farms Value-Added Center, which allows farmers to wash, sort and store produce and then sell it to Madison County Schools.

McDowell County provided vacant land for the development of a small animal-processing facility to support independent farmers located in the western part of the state seeking to expand their poultry and rabbit production businesses.

Orange County supported development of a farm incubator program (Breeze Farm) and shared-use kitchen facility.

The **Town of Black Mountain** proposed new land-use ordinances that include agriculture, greenhouses and farmers' markets.

The **Town of Carrboro** has provided space for the farmer-run Carrboro Farmers' Market for the past 20 years, leasing the town commons at an exceptionally low rate and providing meeting space for market's board of directors free of charge.

The **Town of Chapel Hill** recently approved an ordinance allowing backyard chickens and set aside public land for a community garden.

The **City of Goldsboro** provided vacant land toward the development of an in-town farm and is exploring the community interest in additional city-driven community garden projects.

farmland protection expert can be important in making a community farmer-friendly. A number of resources are available to help guide local governments, including those developed by the American Farmland Trust (AFT) and the National Association of Counties (NACo).⁴² Below are examples of some of the zoning issues that can be addressed by local governments:

- **Development patterns:** Effective strategies will differ depending on whether a region is rural, suburban or urban; in rural areas, most zoning ordinances in North Carolina promote sprawl development (e.g., one house per one-acre lot). Flexibility is needed within zoning ordinances to allow for more sustainable development patterns that preserve rural character, allow for growth and support farming activity. Example approaches for rural areas include "open space" or "cluster" zoning in which the same amount of development is allowed to occur as under conventional zoning but on half the parcel area, dedicating the remainder to conservation easements and other uses conducive to agriculture.⁴³ An example of a model ordinance that incorporates a wide range of tools, including cluster zoning, is Loudoun County, Virginia.⁴⁴ In more developed areas, "smart growth" policies can be used to encourage development and utility extension where public infrastructure already exists and discourage development in less populated areas or where productive land exists. Even in more urban communities, zoning ordinances can be changed to support small-scale food production in mixed-use and residential neighborhoods. For example, at least 15 North Carolina towns and cities are supporting small-scale egg production by allowing backyard chickens (see Spotlight 18).
- **On-farm housing:** Many intensively managed, diversified farms support interns and apprentices, or are multifamily operations. Zoning ordinances can be amended to include provisions that allow more than one household on a farm, housing for interns on farms and temporary housing for training workers.

- **Control utility extensions:** The extension of utilities into areas of active agriculture, particularly in metro areas, creates development pressures that may result in the loss of farms. Zoning ordinances can be used to prohibit utilities in certain zoning districts, as seen in the Cabarrus County zoning ordinance.⁴⁵

Action 6.6. Purchase conservation easements to protect farmland.

Conservation easements are deed restrictions that landowners voluntarily place on their properties to prevent development and keep the land available for farming and food production into the future. Landowners can sell these deeds to privately held land trusts, soil and water conservation districts or public agencies, including local governments. Counties can provide support by making these programs available, either initiating and/or working with existing federal, state or nonprofit programs. A logical but underutilized funding source for counties is deferred tax revenue generated when farmland goes out of production.

The state's ADFP Trust Fund (see Action 3.1) provides funding for local governments and land trusts to purchase conservation easements. Since its inception, the program has protected (or is in the process of protecting) 9,000 acres of farmland. But this is only one source of funding, and North Carolina has 24 local land trusts.⁴⁶

Action 6.7. Promote local food-system businesses and special events.

Local governments have an important role to play in celebrating and promoting different aspects of their local food systems, such as area farmers, food businesses, community gardens, partnerships and volunteer opportunities. All of these increase awareness of the value of building a vibrant local food economy. Promotion opportunities include sponsoring and coordinating special events, celebrations, tours and local-food expos. Counties and municipalities can work with the N.C. Department of Transportation (NCDOT) to support signage along highways about local farmers' markets, wineries and other local-food businesses. The N.C. Department of Commerce's Division of Tourism, Film and Sports Development also promotes local farms. Some regions include maps to local farms on their Web sites to capture the growing interest in small farms. Cable television channels and radio stations can be used to showcase local personalities, educational events and community partners.



Debbie Roos

Spotlight 18

North Carolina Municipalities Allowing Backyard Chickens

Asheville
Carrboro
Chapel Hill
Charlotte
Durham
Fayetteville

Graham
Greensboro
Pittsboro
Raleigh
Sanford

Siler City
Southern Pines
Wake Forest
Wilmington
Winston-Salem

Spotlight 19

Woodbury County, Iowa, Commits to Local, Organic Food Procurement

As a means to support the health of its citizens and economic development in this rural region, Woodbury County, Iowa, has committed to purchasing locally grown (within 100 miles of the Sioux City, the capital) organic (and transitional) foods. All departments—including jails, work-release programs and juvenile detention centers—in the county are instructed to purchase local, organic food through their food service contractor. When these foods are not available, preference is given to local, conventionally grown food. Guidelines stipulate that the food-service contractor utilize a single-point-of-contact broker, which is currently the Woodbury Farms Food Cooperative. Woodbury County has adopted property tax rebates on land (as opposed to improvements) owned by farmers who convert to organic practices. These rebates are funded by an annual allocation of \$50,000 to be split among applicants. Such farms are eligible for relief for five years, provided they continue in production, obtain organic certifications in the third year following acceptance into the program, and continue to adhere to organic standards for the remaining two years.

Source: Woodbury County Policy for Rural Economic Revitalization “Local Food Purchase Policy,” www.woodburyia.com/departments/EconomicDevelopment/WC%20LFPP%20v3.pdf, 2006 (accessed April 6, 2010).

Action 6.8. Buy locally produced and processed food.

North Carolina’s municipal and county governments control budgets that allocate funds for food service in schools, jails and medical centers. For example, in Cabarrus County each year, the county spends approximately \$1 million on meals for inmates.⁴⁷ In Orange County, expenditures for school meals exceed \$4 million annually.⁴⁸ Directing even a small percentage of the total budget for food toward procurement of local products has the potential to create an immediate and large market for nearby farmers. Models for this approach include Woodbury, Iowa (see Spotlight 19); San Jose and Los Angeles, California; and Madison, Wisconsin, all of which have adopted percentage preferences for bids submitted by small, independently owned and operated local businesses.⁴⁹

A variety of challenges exist to procurement of foods from local farmers, particularly within institutional settings. In many counties and municipalities, the supply of local products may not yet be available in the volume needed to service larger markets such as schools and jails. Other barriers have been mentioned previously, such as the lack of liability insurance availability and Good Agricultural Practices certification.

However, county governments can address some of these barriers while setting a policy to procure 10 percent of fresh produce from local sources. Smaller, but still meaningful commitments can be made to use local food when hosting meetings, conferences or workshops. Local governments can voice this preference and work with caterers and food-service providers to source local, seasonal, organic and sustainably produced foods. Local governments can set policies to procure more local food while examining other ordinances such as zoning for farmers’ markets, which will work synergistically to strengthen the local food system and the local economy.

7. Address Public Health and Food Access Disparities

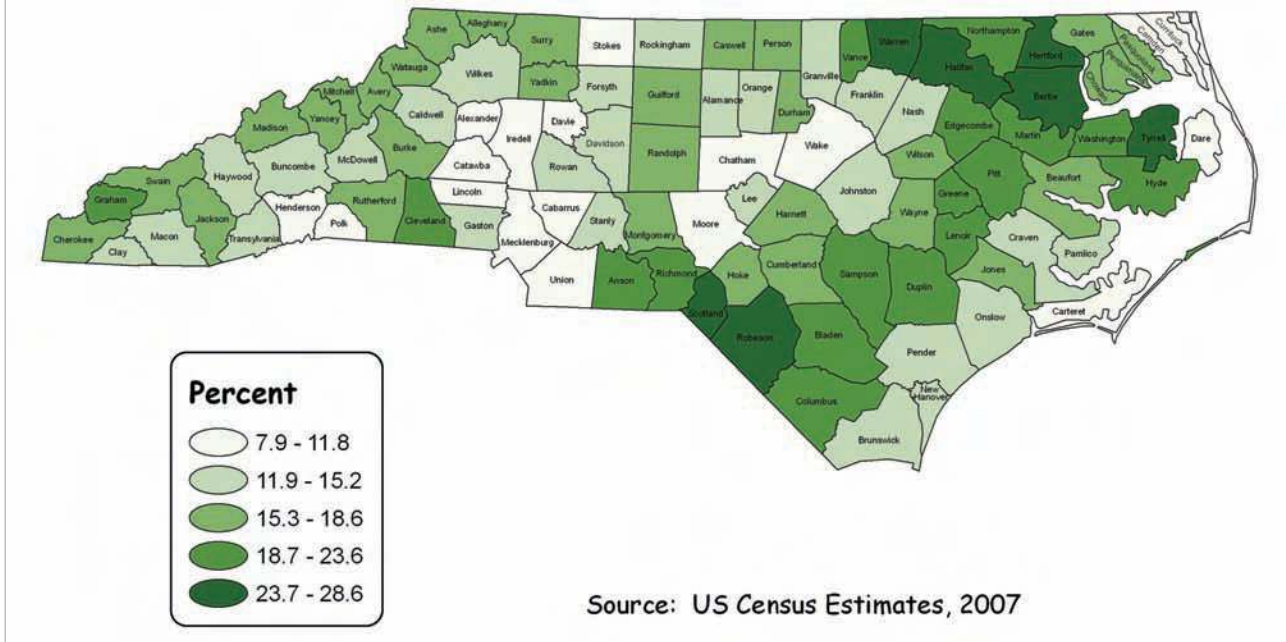
Background

Promoting consumption of and encouraging access to fresh, healthy foods is an important way to address chronic disease incidence and food insecurity in North Carolina, particularly in underserved communities. As discussed previously, diet plays a significant role in many (but not all) chronic diseases, including diabetes, obesity, cardiovascular diseases and many cancers. North Carolina has the 12th highest rate of adult obesity in the nation, and today, more than a third of the state’s 10- to 17-year-olds is overweight or obese.⁵⁰ A major concern is consumption of inexpensive, high-calorie, nutrient-poor



Courtesy of Appalachian Sustainable Agriculture Project

North Carolina Percent Poverty Estimates by County, 2007



Courtesy of N.C. State Center for Health Statistics

foods such as sugar-sweetened beverages, which research now links directly to obesity and Type 2 diabetes.⁵¹ Similarly, a diet high in sodium (salt) can raise blood pressure—a major risk factor for heart disease and stroke. Most of the sodium (77 percent) that people consume comes from highly processed food products.⁵²

Fig. 3. North Carolina Percent Poverty Estimates by County (2007).

Like much of the nation, many people in our state lack access to fresh, healthy foods. Close to 13 percent of households in North Carolina are considered “food-insecure.”⁵³ Food insecurity exists when an individual or family lacks adequate or consistent access to the foods necessary to lead an active, healthy lifestyle. North Carolina ranks second in the nation for children under five who are food-insecure, and the state is 10th in food insecurity for children from birth to 18 years old.⁵⁴ Food insecurity is closely associated with poverty in North Carolina. In 2007, the adult poverty rate in North Carolina was 14.3 percent, compared with 13 percent at the national level.⁵⁵ A number of North Carolina’s eastern, more rural counties are estimated to have the largest percentage of people living in poverty (see Fig. 3).⁵⁶

Lack of access to fresh, healthy foods signifies one aspect of food insecurity. According to the USDA’s Economic Research Service (ERS), 2.2 percent of United States consumers are constrained in their ability to access affordable nutritious food because they live far from a supermarket or large grocery store and do not have easy access to transportation.⁵⁷ The recent rise in demand for food at local food banks indicates that food insecurity is increasing. The Food Bank of Central and Eastern North Carolina has seen demand nearly double since 2007.⁵⁸

North Carolina has the 12th highest rate of adult obesity in the nation, and today, more than a third of the state’s 10- to 17-year-olds are overweight or obese.

Spotlight 20

Gleaning in North Carolina with Society of St. Andrew

The Society of St. Andrew, an ecumenical ministry with nonprofit status, is dedicated to providing hunger relief through gleaning—the salvaging of surplus produce from farms and packinghouses. The Society of St. Andrew also works to elevate awareness about the problem of hunger and engage people in understanding how they can be a part of the solution. The Society of St. Andrew, North Carolina is part of a national organization committed to addressing not only the need for supplemental food in households, but assuring that food is nutritious.

In 2008, the Society of St. Andrew, North Carolina saved more than 6.2 million pounds of produce, providing it to more than 2,600 emergency feeding agencies in North Carolina. This collection and distribution was done with the aid of more than 700 growers and 11,000 volunteers across the state.

www.endhunger.org

In the last decade, while demand for food donations increased, food donations have dropped, compounding the problem. Technological improvements in retail food distribution decreased the amount of overstocked processed food items in grocery store chains, and most of the remaining overstocked items are now being sold to discount stores. This means fewer canned goods and cereals are available to food banks. In addition, agricultural improvements can lead to less produce available to food pantries. For example, crop breeding efforts have improved the physical shape and uniformity of a major sweet potato variety grown in North Carolina. Farmers have been able to sell more of their crops, leaving fewer culls and oversized or undersized potatoes to donate to food banks.

A great opportunity exists to deliver fresh, local foods to hungry people. Emergency food distribution efforts are not often coordinated, thereby missing opportunities to collaborate and gain efficiencies by sourcing surplus local food. There are times when fresh, local produce is available in fields to be harvested, but no one is available to glean it, nor is there a transportation, storage or processing infrastructure in place to take advantage of it. While these issues are being

resolved on a small-scale or on a case-by-case basis, there does not yet exist a coordinated statewide response. Although the Society of St. Andrew gleaned over 6 million pounds of produce from 700 farmers' fields in 2008 (see Spotlight 20), the group reports that 100 million pounds of produce are wasted every year in North Carolina. This is due to a lack of volunteers to harvest, the vehicles to transport and the facilities to store fresh produce.

It is also the case that while people go hungry, a tremendous amount of food is wasted in this country. A 2004 study estimates that between 40 and 50 percent of food is wasted in the United States. This number includes fruits and vegetables left unharvested in fields and orchards, as well as food wasted by households, manufacturers and retailers. American households throw away 1.28 pounds of food per day. Commercial retail food establishments throw away 54 billion pounds of food annually. Of these, convenience stores have the highest percentage of food losses, at over 26 percent.⁵⁹

Recommended Actions

Improving access to and encouraging consumption of fresh, healthy, local foods are important ways to address food insecurity and poor nutrition in underserved communities throughout our state. Improving the quality, freshness and diversity of food may also help prevent obesity and other diet-related diseases. Across the United States, many initiatives have focused on ways to identify and reduce disparities in food access and public health through food banks, community gardens and other programs.



Courtesy of Society of St. Andrew

► Action 7.1. Expand and strengthen North Carolina’s SNAP-Ed programming.

The Supplemental Nutrition Assistance Program (SNAP-Ed) is a federal program within the USDA that provides funds to states to support nutrition education and outreach in low-income communities and populations.⁶⁰ There are currently five SNAP-Ed programs in North Carolina, pulled together under one application that comes from the N.C. Food and Nutrition Services (NC FNS) program administered by the state’s Division of Social Services (DSS) within the N.C. Department of Health and Human Services (NCDHHS). Each of the SNAP-Ed projects and programs serves a different geographic area. Some serve only one county, and others serve multiple counties. They include Surry County, Durham County, the Poe Center for Health Education’s Nutrition and Physical Activity Program in Wake County (serves multiple counties), Family and Consumer Sciences at N.C. State (serves multiple counties) and Nutrition Education for New North Carolinians (serves Guilford and Forsyth counties). All of the programs serve school-age children, and some also serve adults. SNAP-Ed awards matching funds, which means the state must provide half of the funding, which can include in-kind services. An example of an in-kind service would be state support for specialists in family and consumer science or local health departments who conduct nutrition education in schools or other community settings. USDA funds are renewable and generally increase each year. However, in 2009, due to the state budget deficit, the program funds did not increase.

Close to 13 percent of households in North Carolina are now considered “food insecure.”

Currently, North Carolina receives considerably less funding through SNAP-Ed than neighboring states with similar needs. To increase federal funding in North Carolina for the SNAP-Ed program, the state government must work to create the necessary matching funds. Also, more state and community nutrition education programs and partner organizations that meet the criteria for the SNAP-Ed funds could then join in the SNAP-Ed process. For example, in California, Iowa and Arizona, SNAP-Ed funds come to the state health department (as the primary coordinating SNAP-Ed agency in their states) and are used to fund statewide social marketing campaigns supporting fruit and vegetable access and consumption and the purchase of more locally grown fruits and vegetables.

Many innovative nutrition education, policy and environmental change programs have been developed and evaluated through Eat Smart, Move More North Carolina (see Action 7.4) and the 60-plus partner organizations involved in this statewide movement. Many of these programs would be great additions to the North Carolina SNAP-Ed proposal to USDA.

Action 7.2. Support and expand EBT use at direct-market venues.

One way to increase access to fresh, local, healthy food for the very poor and working poor in North Carolina is to make it possible to use NC FNS Electronic Benefits Transfer (EBT) cards at farmers’ markets, roadside stands, CSAs and other direct farm-to-market venues. Leaflight, a nonprofit organization that coordinates the 21st Century Farmers’ Markets program, is



Courtesy of Leaflight's 21st Century Farmers' Market Program



the primary program working statewide to increase access to and production of locally grown food bought using EBT and other payment methods. Currently, 12 farmers' markets participate in the program.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program uses coupons and vouchers to administer food package benefits to its customers. Within two to three years, the state program (housed in the Nutrition Services Branch of the DPH) will begin to develop an EBT system. It is important that the WIC and NC FNS EBT systems are designed and built to be complementary. This will make it easier for WIC and NC FNS customers—who in some instances receive some benefits in both programs—and it will also be easier for the farmers' markets that currently participate in the WIC Farmers' Market Nutrition Program and the Senior Farmers' Market Nutrition Program (the latter two programs issue food coupons during the summer months for use only at select farmers' markets).

Action 7.3. Coordinate and enhance statewide emergency food-distribution opportunities.

A great opportunity exists to deliver fresh, local foods to hungry people. Additional public/private partnerships are needed to enhance statewide food distribution and gleaning efforts. These efforts could include using existing private infrastructure for storage and transportation, educating growers about the benefits of donating produce that would otherwise go to waste, and reaching out to public institutions, such as university campuses, to engage youth in food distribution and gleaning efforts.

Action 7.4. Coordinate existing nutrition education programs.

A variety of nutrition education programs exist in North Carolina, but they are not particularly well coordinated and integrated. In addition, SNAP-Ed funds from the USDA are not well utilized in North Carolina (as noted above). Strategic planning is needed to better coordinate existing efforts among partnering state agencies. Strategic planning needs to include a survey of existing training resources and development of an outreach plan. The focus should be on introducing food purchasing and preparation skills (with an emphasis on local foods) into existing curricula and programs for lower-income families with children and adolescents who are overweight or at risk for obesity and/or food insecurity.

Execution of such a strategic planning process would strengthen state agencies and organizations that, like the ones outlined below, are working together to provide programming to teach consumers about healthy eating and cooking:

- **Eat Smart, Move More:** A broad array of agencies and organizations have come together to create a statewide movement called Eat Smart, Move More North Carolina (www.EatSmartMoveMoreNC.com), which provides a five-year (2007 to 2012) plan for the state to engage in activities to prevent obesity and related chronic diseases (such as heart disease, cancer and diabetes). Eat Smart, Move More North



Carolina provides excellent resources, including education, policy and environmental change and advocacy materials, to promote healthy eating and physical activity for North Carolinians. “Families Eating Smart and Moving More” and “Eat Smart, Move More, Weigh Less” are examples of programs available through local partners like Cooperative Extension and local health departments.

- **Family and Consumer Sciences:** One of the Eat Smart, Move More North Carolina partners, Cooperative Extension’s Family and Consumer Sciences (www.ces.ncsu.edu/depts/fcs) provides a variety of educational and training materials for improving health and wellness through better nutrition. A training and outreach guide, “Cook Smart, Eat Smart” is now available, which teaches cooking techniques that can be used to build a repertoire of entrées and side dishes to encourage preparing and eating more meals at home. There is an emphasis on healthy preparation techniques, simple ingredients and limited use of prepared foods. In addition, information is presented to help participants plan, shop and stock a pantry that encourages simple meal preparation.
- **Operation Frontline:** Another innovative nutrition education program is Operation Frontline (www.foodshuttle.org/frontline.html), which focuses on offering nutrition and cooking classes that emphasize healthy, affordable meals. The goal is to create a long-term solution to hunger by giving people the confidence and ability to be more self-sufficient and improve their eating habits and food-budgeting skills. Operation Frontline, a partnership of the Inter-Faith Food Shuttle (IFFS) and Share Our Strength (SOS), is an exciting program that mobilizes local culinary and nutrition professionals to teach cooking and nutrition classes to low-income teens, children and adults.

8. Increase Consumer Education and Outreach

Background

To grow widespread support for fresh, local foods in North Carolina, public education campaigns are essential. While in some regions of North Carolina there is strong and growing consumer interest in fresh, local, sustainable and/or organic foods, there is no uniform demand or emphasis across the state. A few organizations and agencies operate effective public education and marketing campaigns in North Carolina, such as ASAP and the NCDA&CS “Got to be NC” program. But these efforts are moving forward separately and often

Spotlight 21

Inter-Faith Food Shuttle: Innovative Approaches to Hunger Relief

The Inter-Faith Food Shuttle (IFFS) is a nonprofit organization dedicated to alleviating hunger by getting nutritious food into the hands of hungry people across the Greater Triangle. IFFS has recently crafted a new approach to complement its numerous programs. Its Farm and Community Garden Project addresses its mission and responds to an increasing demand for healthy foods in all neighborhoods by creating local sources of fresh fruits and vegetables for underserved communities. With a full-time farm manager and nutritionist, The Farm and Community Garden project provides seedling transplants for IFFS community gardens; grows fresh, local, nutritious food to be sent out to IFFS agencies; and teaches organic gardening to low-income kids and families and to life-challenged adults and teens. IFFS also participates in the Plant a Row national program sponsored by the Garden Writers Association (www.gardenwriters.org) that encourages garden communities to donate fresh vegetables, fruits, herbs and flowers to people in need. Much of this food is distributed through the Mobile Farmers Market Project, a dynamic response to food insecurity that brings the benefits of local farmers’ markets to underserved communities through direct distribution of fresh fruits and vegetables. IFFS models push hunger relief one step further, increasing food security by providing the resources for people to learn to grow and cook healthy, fresh food themselves, thus nurturing knowledgeable and self-reliant communities.

www.foodshuttle.org



with limited knowledge of each other. This challenge speaks to the importance of networking various outreach groups and creating effective unifying messages. Other considerations include identifying critical target populations and framing the issue so that it has broad appeal but also addresses specific audiences. State and local decision makers who focus on concerns related to the economy and job creation represent a key target audience.

All consumers in North Carolina have an opportunity to contribute to building a sustainable food economy by making choices every day about what foods they eat, including where, how and by whom those foods were grown. Even a small commitment to purchasing seasonal and locally produced foods translates into real opportunities for area farmers and supporting businesses.

Recommended Actions

► Action 8.1. Launch statewide “Eat 10% Local, Sustainable Food” Campaign

Farm to Fork participants identified the immediate opportunity to educate the public and decision makers about the importance of eating fresh, local, sustainably produced and organic foods. An outgrowth of the Farm to Fork initiative is a commitment from Cooperative Extension to host a Web site and facilitate the development of a “Eat 10% Local, Sustainable Food” campaign.

The Golden LEAF Foundation recently approved funding for the 10% campaign, which will be launched in mid-2010. The campaign involves a wide range of partners, including Cooperative Extension and Compass Group, a major institutional buyer that has committed to participating in the campaign. The goals of the campaign are to

- conduct an interactive statewide advocacy campaign to engage North Carolina residents in achieving the goal of consuming 10 percent of their food from local sources,
- develop and populate a Web portal that will stimulate and support a grassroots effort among communities, organizations, businesses, policy makers and governments across North Carolina in achieving the goal (Cooperative Extension will designate local-food coordinators in every county to support the campaign), and
- increase institutional awareness of the benefits of purchasing fresh, local, sustainably produced and organic foods in North Carolina in all sectors (schools/universities, government, business, hospitals, nonprofits) and engage partners in establishing and meeting local-food goals for their venues from farms of all sizes (paying special attention to include small- and mid-scale farms in the institutional marketing program).

The “10%” campaign will complement existing local and regional branding and promotional campaigns already taking place in North Carolina by encouraging greater consumer awareness, commitment and support for these efforts. These campaigns include but are not limited to the following programs:

- **Appalachian Grown:** ASAP’s Appalachian Grown™ (<http://www.asapconnections.org/appalachiangrown.html>) program certifies food and agricultural products grown or raised on farms in western North Carolina and the southern Appalachian Mountains. Displayed with

food and farm products, the Appalachian Grown label helps consumers, retailers and wholesalers better distinguish and identify local agricultural products. The program has grown considerably in recent years. Currently, 450 farms and 150 businesses (with 200 locations) participate.

- **“Got to Be NC”** marketing initiative: For the past 20 years, NCDA&CS has managed a “Goodness Grows in NC” program to support NC farmers selling foods raised, grown and/or made in North Carolina. This program includes several food marketing initiatives, including Got to Be NC and NC Farm Fresh. Got to Be NC is a brand that NCDA&CS promotes, particularly within retail grocery stores (www.gottobenc.com). NCDA&CS provides in-store promotional materials highlighting specific commodities from North Carolina, such as “Got to Be NC Blueberries.” Nearly 60 stores within major retail chains, including Harris Teeter, Lowes Foods, Kroger and Piggly Wiggly, participate in the program. For the past five years, NCDA&CS has been promoting www.NCFarmFresh.com, an online directory of North Carolina products focused on fruits, vegetables, nursery products and Christmas trees. The directory includes 1,000 farms, 119 certified roadside stands and 116 farmers’ markets.
- **Carteret Catch:** Founded in 2005, Carteret Catch is an educational organization dedicated to raising awareness of the local seafood landed by Carteret County fishermen. It provides information on the seasonality of popular commercial species, assessing product quality, in-home seafood safe-handling practices, and the heritage and traditions of commercial fishing communities. The membership of Carteret Catch includes 14 fishermen, 11 restaurants, 11 associate members, five wholesalers, four retailers and two corporate sponsors. The program has inspired local seafood branding initiatives in North Carolina (and beyond), including in Brunswick County (www.brunswickcatch.com) and Ocracoke (“Ocracoke Fresh: Caught today the traditional way”). The N.C. Aquarium debuted its “Local Catch” seafood availability cards in 2007 based on the Carteret Catch model. Carteret Catch is a member of the NCDA&CS “Freshness from North Carolina Waters” program and co-brands with NCDA&CS to augment its local branding initiatives.

Spotlight 22

CFSA: Connecting Consumers to Sustainable Farms

The Carolina Farm Stewardship Association (CFSA) is a membership-based organization of more than 900 farmers, processors, gardeners, businesses and individuals in North and South Carolina who are committed to sustainable agriculture and the development of locally based organic food systems. As part of its consumer education efforts, CFSA has been hosting annual farm tours in multiple regions across the Carolinas for more than a decade. Its tours are both educational and fund-raising events for CFSA, a 26-year-old nonprofit organization. CFSA’s Annual Piedmont Farm Tour is the largest event of its kind in the United States and is co-sponsored by Weaver Street Market cooperative grocery in Carrboro. Weaver Street Market has been an essential partner in building the Piedmont Farm Tour into a Triangle institution. In 2009, North Carolina saw approximately 10,000 farm visits through the tour, allowing consumers to see firsthand the impact that small local farms have by turning to sustainable agriculture as a way to preserve their economic viability and better steward our natural resources.

www.carolinafarmstewards.org



Courtesy of Carolina Farm Stewardship Association

9. Promote Farm-to-School Programming and Engage Youth

Background

There are two primary reasons it is important to engage children and youth in the food system—to improve their health and well-being and to encourage future food-system leaders. We need a new generation of farmers, food entrepreneurs, policy makers and consumers who understand and value healthy eating habits and know where their food comes from.

Children's health and well-being is connected to diet, nutrition and food security. Access to an ample quantity and variety of fruits and vegetables at school, at home and in the community is critical—especially for school-age children, given that poor dietary habits can linger or worsen into the high school years and adulthood. Eating plenty of fruits and vegetables at an early age can provide children and youth with lifelong healthy eating habits and reduces the risk of diet-related chronic diseases.⁶¹

Many children in North Carolina do not receive adequate daily nutrition. A few indicators:

- Seventy-five percent of North Carolina children ages 5 to 17 get less than three of the recommended five daily servings of fruits and vegetables.⁶²
- Almost all (95 percent) of North Carolina children eat fast food during a typical week, and 67 percent eat french fries or chips during a typical day.⁶³
- Eighty-six percent of North Carolina high school students reported eating fewer than five servings of fruits and vegetables daily in the seven days prior to the survey,⁶⁴ putting North Carolina children and high school students below the national average for fruit and vegetable consumption for both boys and girls and students of all racial groups.⁶⁵
- Children comprise 50 percent of food stamp recipients in North Carolina, increasing their likelihood of inadequate nutrition.⁶⁶

There is also a need to engage older youth, distinct from children. This attention to older youth requires not only a focus on education but on

Spotlight 23

NCDA&CS: Sourcing Local Produce for North Carolina Schools

The N.C. Farm to School Program was formed in 1998 by the N.C. Department of Agriculture and Consumer Services (NCDA&CS) Food Distribution and Marketing Divisions and the Department of Defense (DoD) Produce Merchandising Office to develop a system for North Carolina schools to receive fresh produce grown by local farmers. All school districts in North Carolina are eligible, and the program has served more than half of the state's school districts thus far. The program now distributes at least 10 fresh produce items, including strawberries, watermelons, cantaloupes, several varieties of apples, slicing and grape tomatoes, sweet potatoes, red and green cabbage, and broccoli. The NCDA&CS Food Distribution Division works with the Child Nutrition Directors across the state to see what items of produce the school cafeterias can use. Next, as the various produce items come into season, the Food Distribution Division sends out order forms to the school districts to verify quantities needed. The Marketing Division works with the North Carolina commodity associations and individual farmers to harvest, pack and store the produce in climate-controlled facilities to maintain optimum quality and shelf life. The Marketing Division also develops promotions for the school districts to promote North Carolina-grown produce and sends out educational materials supplied by commodity associations to schools statewide. The Food Distribution Division uses its fleet of tractor-trailers to pick up the produce and deliver it to the school districts.

As a result of the Farm to Fork process, in 2010, the state's Department of Public Instruction (DPI) hopes to promote local sourcing of produce as a part of its administration of the U.S. Department of Agriculture (USDA) Fresh Fruit and Vegetable Program. This program provides competitive grant funds to support fresh-fruit and vegetable consumption at schools where a high percentage of students qualify for free or reduced-price meals. Preference will be given to schools that source North Carolina-grown produce and that develop plans to incorporate North Carolina produce into the course of study at each grade level. Curriculum integration of North Carolina products could include addressing how produce is grown; when it is harvested; how it is stored, transported and marketed; where local food can be purchased; and the nutritional benefits of produce and healthy food choices.

www.ncfarmtoschool.com

leadership development and exposure to future career and community-engagement opportunities around food systems. Youth (high-school and college age) are on the brink of adulthood and are too often left out of the conversations about social issues. According to a *USA Today* article, less than 10 percent of the electorate in 2004 were young adults (ages 18 to 24), a phenomenon most commonly attributed to their not having a role in the conversation.⁶⁷

*“In order to have serious change, you have to involve young people,” says [Aneem] Steel of the Food Project. “Change has to be long-term. It may not happen in our lifetimes, but we have to plant the seeds today. We have to prepare young people to be our future leaders.”*⁶⁸



Rodney Taylor

Building a sustainable food system in North Carolina requires an investment in the next generation—educating children so they understand, experience and value food—and engaging youth as active participants and potential future leaders in the food system.

Recommended Actions

► Action 9.1. Develop a model farm-to-school pre-service teacher instruction program.

Farm-to-school programs connect farmers, fresh local food and students (K-12 as well as within colleges and universities) to help address two major challenges: rising rates of obesity (and associated diet concerns) and the loss of farming as a way of life. Farm-to-school programs include such activities as (1) teaching students about healthy eating habits and where their food comes from, including hands-on experiences in growing, cooking and marketing, and (2) bringing healthy food from local farms to students, such as through local sourcing of foods for school lunch programs. Forty-three states now have farm-to-school programs, with nearly 9,000 schools and more than 2,000 school districts participating.⁶⁹ North Carolina is one of three states in the country that support statewide programs of local sourcing for school lunch programs. Managed by the NCDA&CS, the N.C. Farm to School Program focuses on providing distribution and other services to connect local farmers and local schools. NCDA&CS is currently working with more than half the school districts in the state (see Spotlight 23).

Farm-to-school programs have been shown to play an active role not only in helping children adopt healthy eating habits but also in increasing self-esteem, responsibility and parental involvement.⁷⁰ National studies demonstrate multiple benefits of school gardening, including strengthening learning opportunities and improving health habits.⁷¹ There are many school systems in North Carolina that participate in farm-to-school activities at the grassroots level. For more information about farm-to-school programming in the Southeast, visit ASAP’s Growing Minds Web site (www.growing-minds.org).



Courtesy of Appalachian Sustainable Agriculture Project

Spotlight 24

Gardening-Based Education at Dillard Academy

Seeds to Sales is a science-based farm/garden project of the Center for Academic, Social, Technology, Literacy and Economic Solutions (CASTLES) N.C. 21st Century Community Learning Center program, providing K-6 students who attend Wayne County Public Schools and Dillard Academy K-4 Charter Public School with after-school and summer gardening-based education. This project, based on two different farm/garden plots on nearly three acres, includes a CASTLES market stand at the local Wayne County Health Department Mini Mobile Farmers' Market, as well as value-added production of pickles and chowchow with seniors. This work has been so successful in increasing grade-level performance according to the N.C. Standard Course of Study that Dillard Academy has incorporated the garden into the regular school day across the entire curriculum. In efforts to offer replicable elements, the UNC Center for Health Promotion and Disease Prevention (HPDP) is engaged with Dillard to provide evidentiary studies to illustrate this effectiveness, and offering pure inspiration, the W.K. Kellogg Foundation invited the CASTLES children to California to open the 2009 Food and Society conference with their garden choir.

www.dillardacademy.org

There is a pressing need to support teachers, child-nutrition directors, parents and community members who want to provide farm-to-school programming. A critical step is to provide training for teachers to integrate farm-to-school instruction into the curriculum to educate children about where their food comes from and use hands-on educational experiences that are tied directly to the N.C. Standard Course of Study. By showing teachers-to-be how to integrate activities such as school gardens, farm field trips and experiential nutrition education, we will equip the next teacher vanguard to address math, science, language arts, healthful living and other curricular subjects with exciting learning opportunities. Integrating a farm-to-school program effectively requires a focus on inquiry-based learning, which has not been widely emphasized but is the expectation of the current Standard Course of Study. Working together with parents and community organizations, teachers can take advantage of local agricultural resources, expertise and connections.

The Farm to Fork initiative identified strong support for developing a pre-service teacher training program. Such an approach would need to (1) produce a flexible template for teachers to adapt farm-to-school programming to different communities (rural, urban and suburban), (2) make sure the training includes teachers across all grade levels, including high school, and (3) incorporate hands-on field training. Several additional potential

sources of support were identified, including seeking an endorsement from the N.C. Department of Public Instruction (DPI), connecting with AmeriCorps and reaching out to textbook publishers. There was interest in developing farm-to-school programming for existing teachers as well and, in particular, considering how this area might be incorporated into continuing education programs such as through the N.C. Center for the Advancement of Teaching (NCCAT).

► **Action 9.2. Develop a teen-focused social network.**

Social networking by youth is one of the dominant trends across socioeconomic and cultural groups. Social networking tools offer great opportunities to reach and connect young people—teens in particular—interested in and involved in food-related projects and organizations. The Farm to Fork initiative identified the opportunity to use social networking tools (such as Facebook and Twitter) to engage youth and young adults. In addition, there is interest in creating a statewide network of organizations focused on and/or run by youth and young adults that would use both virtual and face-to-face engagement. Specific programmatic elements were discussed, including the ability to focus on crafting the network through local and regional food celebrations. Furthermore, this network could support the development of a statewide “map” of youth-focused food-system organizations and programs, helping to identify network linkages and shared learning opportunities.

Action 9.3. Expand 4-H curriculum to include a focus on sustainable food systems.

Across the state, North Carolina offers quality agricultural education programs focused on younger children. Of particular note are 4-H's K-12 curriculum (www.nc4h.org/4hcentennial/index.html), Discover Agriculture (www.ag.ncat.edu/extension/discoveragriculture/index.htm) and the Farm Bureau's Ag in the Classroom program (www.ncagintheclassroom.com), both of which provide interactive experiences for students to learn about agricultural science and, more specifically, farming. The opportunity to reach youth through these programs is tremendous. In North Carolina alone, 4-H works with 239,000 young people every year, second only to the public school system in reach. It engages 25,000 volunteers statewide and has an extensive alumni body, including 50 percent of the N.C. General Assembly.⁷² Typically, the 4-H curriculum is developed around distinct disciplines, such as horticulture and animal science. There is an immediate opportunity to develop a sustainable agriculture and food-systems curriculum with 4-H. CEFS, Cooperative Extension and 4-H are in the planning stages of addressing this opportunity as an outgrowth of the Farm to Fork initiative.

Action 9.4. Support youth leadership development.

While 4-H effectively reaches K-12, youth and young adults are a vital but underrepresented audience in building local food systems. Youth leadership development across the country has been tied to sustainable agriculture through successful efforts such as the Building Local Agricultural Systems Today (BLAST) program at The Food Project (www.thefoodproject.org). Important strides toward making farming relevant and appealing to youth and young adults have been accomplished also through creative efforts such as *The Greenhorns* (www.thegreenhorns.net), a documentary about young farmers. Major foundations and organizations have recognized the necessity of focusing on youth leadership, including the W.K. Kellogg Foundation (www.wkkf.org) and the Rooted In Community National Network (www.rootedincommunity.org).

Spotlight 25

SEEDS: Empowering Youth Through Urban Gardens

South Eastern Efforts Developing Sustainable Spaces, Inc. (SEEDS) is a nonprofit organization with the mission “to educate youth and adults through gardening and growing food while cultivating respect for earth, for life and for each other.” SEEDS was founded in 1994 and began with a two-acre plot in Northeast Central Durham that rented for \$1 per year. The Phoenix House, a transitional program for homeless men, partnered with SEEDS in much of the initial garden construction. To increase access to locally grown, organic produce to non-gardeners, SEEDS took the lead in creating the city's first permanent farmers' market—today's Durham Farmers' Market, located under a permanent pavilion in Durham Central Park. In early 2000, SEEDS created Durham Inner-city Gardeners (DIG), a youth-driven entrepreneurial business in which teenagers grow produce, herbs and flowers to sell at the Durham Farmers' Market. DIG youth grow in a hoop house and a market garden across the street from SEEDS' original plot. The program continues to empower teens by teaching not only organic gardening, but also sound business practices, healthy food choices and food-security values. In 2003, SEEDS created SEEDlings, an after-school and summer program. The program is low cost and serves children in first through fifth grades by providing a safe and supportive environment where kids can explore, play and learn. SEEDS rents (for \$1 to \$35 per year based on ability to pay) 25 raised garden beds for community members' use, to grow produce for their families. Throughout the organization's history, volunteers have fueled SEEDS' development and expansion and helped make it the model program it is today.

www.seedsnc.org



Spotlight 26

Fair, Local, Organic (FLO) Food at UNC–Chapel Hill

Fair, Local, Organic (FLO) Food is a student organization at the University of North Carolina at Chapel Hill committed to educating students about the food system and creating a better food economy at the University of North Carolina. FLO Food's main goal is to work with Carolina Dining Services (CDS) and community members to create connections that result in more local, organic and sustainably produced food options on campus for students. Through public events and roundtable discussions, including its 2008 "People, Power, Pork" event, FLO Food brings together students and academics from different segments of the local food value chain, including factory workers, farmers, chefs and food businesses/specialists. FLO Food has focused on forming a collaborative relationship with dining officials to create mutually beneficial solutions—for students, the university and local farmers. Through these collaborative efforts, this year for the first time, CDS began purchasing grass-fed ground beef from local producer Cane Creek Farm and serving students burgers twice a week. This year, they are purchasing 800 pounds per month. FLO Food has seen its membership grow, helping it to develop the capacity to reach students more effectively and increase the scope of its work.

studentorgs.unc.edu/flo

There are also models for youth leadership development around food systems in our state. One is the DIG program at SEEDS (www.seedsnc.org), which empowers teens by teaching organic gardening, sound business practices, healthy food choices and food-security values (see Spotlight 25). Another is UNC–Chapel Hill's Fair, Local, Organic (FLO) Food, a student-run organization at the University of North Carolina at Chapel Hill that works closely with dining service administrators, local farmers, community members and students to provide more fresh, local, organic and sustainably-produced food in on-campus dining (see Spotlight 26). FLO Food and The Real Food Challenge (www.realfoodchallenge.org/southeast), a national student campaign for a just and sustainable food system, collaborated to create the 2009 Southeast Youth Food Activist Summit (SYFAS), the first of its kind in the Southeast, bringing 70 students and other young-adult activists from across the East Coast to Chapel Hill to share strategies and to strengthen a youth food network.

Farm to Fork participants discussed the opportunity to enhance and expand the scope of these activities through the creation of a N.C. Youth Food Corps. Such an organization would partner with existing youth-focused initiatives at the state and national level to educate and facilitate career options for youth graduating from high school or college, across different food sector professions. Program strategies could include, but are not limited to, the development of internships, mentorship opportunities, leadership training and incubation of youth-led food-system projects and enterprises. Another option is the creation of a Statewide Youth Food Council that supports leadership development and food-systems literacy and education. This structure would enable and increase the visibility of opportunities for youth in North Carolina to engage in local food policy councils as well as the newly created statewide N.C. Sustainable Local Food Advisory Council. There is strong interest in making sure these efforts are intentionally diverse—geographically, ethnically/racially and socioeconomically. Support was strong for participating youth to commit to a pay-it-forward ethos, where those trained would in turn train others, effectively participating in peer-to-peer mentoring of the youth following their terms.



Courtesy of FLO Food

UNC students sample local food.

Endnotes

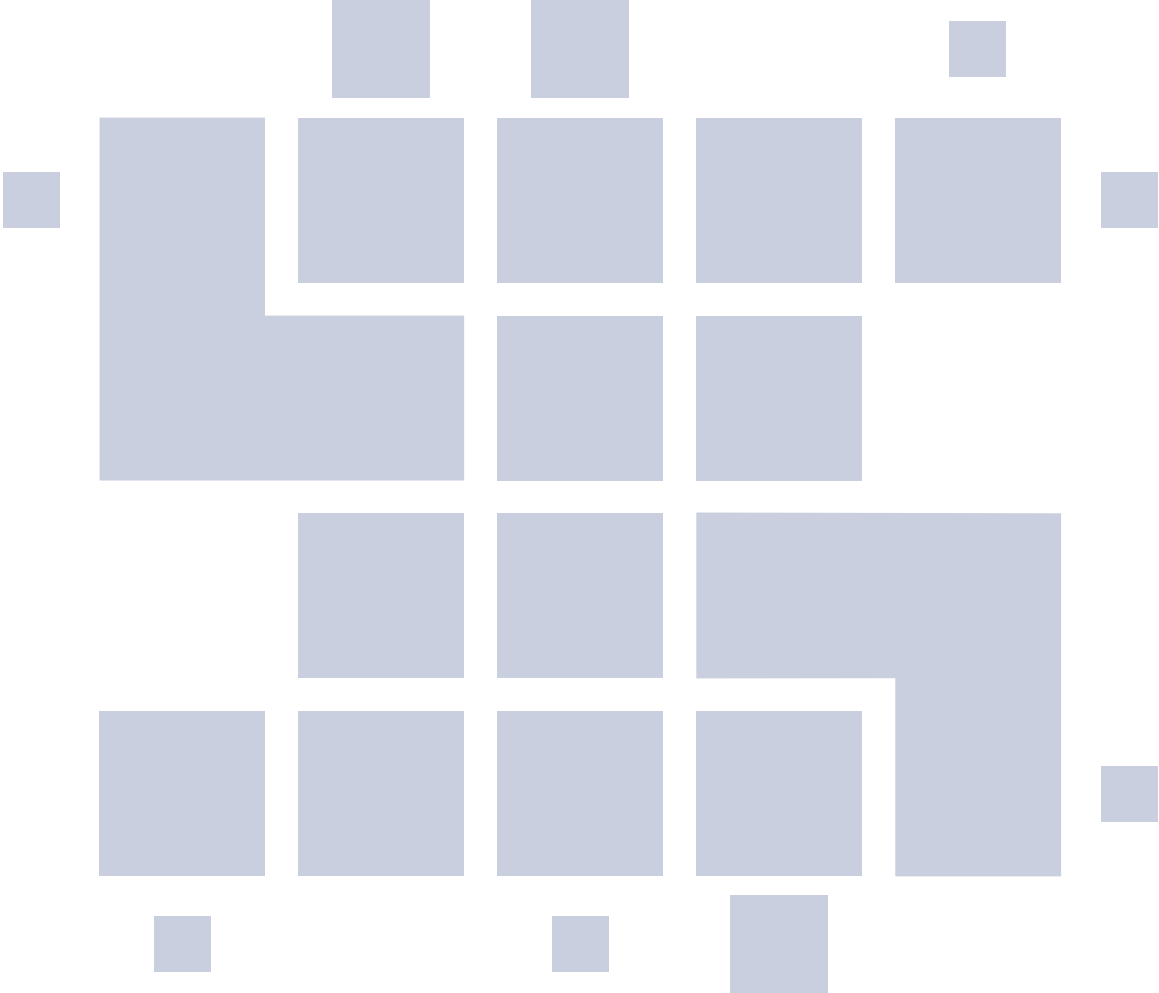
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Section 3.

10 Things You Can Do to Make a Difference in Your Community





Becky Kirkland

Everyone has an opportunity to contribute to building a sustainable local food economy. Simple choices we make every day—including the foods we eat, how we spend our time and who we engage in conversation—can translate into meaningful effects. The following is a basic list of actions that you can take to make a difference in your community.

1. Cook with fresh, seasonal, local foods.

Today's typical consumer spends just 32 minutes per day preparing food. This includes cooking, serving and cleaning up.¹ North Carolinians spend 50 percent of their food dollars dining out.² These two facts alone indicate the dominance of pre-prepared, highly processed foods in our diet. Everyone is busy. But remember, dining out can take time too. It requires time for transportation to and from the restaurant, getting seated (sometimes standing in line), ordering, waiting for the food to arrive and paying the bill. Consider how you spend your time, and see if you can find a few more minutes every day to cook. Prepare large quantities and freeze “meal-size” portions for convenience during the work week.

Cooking might also save you money. Cook for Good (see Spotlight 27) demonstrates that by planning ahead and shopping locally and seasonally—including with local and/or organic ingredients—it is possible to eat well on \$1.37 per meal (per person), which is \$0.67 less than the food-stamp allowance. Cook for Good demonstrates that cooking does require advance planning; however, low-cost, nutritious meals made from fresh, local ingredients can be made in the same amount of time as it takes to dine out every week.

2. Buy from your local farmers and food businesses.

Make your purchases as directly as possible by shopping at farmers' markets, participating in a CSA or food-buying club, and seeking out restaurants and retailers that offer local foods.

Shopping at a farmers' market, if you have one in your area, is a great way to support local farmers and buy fresh, seasonal foods.

Spotlight 27

Cook for Good: Eating Local on a Budget

In 2007, Linda Watson decided to experiment with the available eating options possible on a food-stamp allowance. For three weeks, she fed her family on \$1 per meal. Living within walking distance of a Whole Foods Market and a Food Lion, and on a bus route to the N.C. State Farmers Market, Watson planned to shop for one consecutive week at each of these locations. Based on the results of that experiment and much further exploration, she has crafted a program for eating largely fresh, local or organic foods and has built a business based on sharing her knowledge of low-budget shopping, cooking and eating practices. What is her go-to recipe for winter? Tomato sauce with collards and onions, because “the collards add body to the sauce and the sauce hides the collards from picky eaters who won't eat their greens.”

www.cookforgood.com

- For a listing of farmers' markets by county, visit the N.C. Department of Agriculture and Consumer Services (NCDA&CS) **NC Farm Fresh** Web site (www.ncfarmfresh.com/farmmarkets.asp).
- To find local farmers and foods in your area, search online at the **Carolina Farm Stewardship Association** (CFSA) Web site (www.carolinafarmstewards.org). In the western part of the state, visit the **Appalachian Sustainable Agriculture Project** (ASAP) Web site (www.asapconnections.org) for its local food directory.
- Many farmers also list their farms and products on sites such as **www.localharvest.org**.

You may also be able to participate in a subscription or Community-Supported Agriculture program (CSA). Farmers who organize CSAs ask for payment up front during the winter, which allows them to plan their production schedules and gives them working capital to purchase seeds and other supplies. CSA participants receive weekly deliveries of fresh vegetables, fruits and other foods (e.g., meat and eggs) throughout the growing season. North Carolina is now also home to one of the country's first community-supported fishery programs (CSFs) (see Spotlight 28). Remember that farmers often offer half shares, which are appropriate for individuals or small families or as a way for a first-time participant to try a CSA.

- For a listing of CSAs in your county, visit the “**Growing Small Farms**” Web site (www.ces.ncsu.edu/chatham/ag/SustAg/csafarms.html).

Another option may be to participate in a food-buying club that sources from local farmers and/or food businesses. Food-buying clubs consist of groups of people who pool their financial resources to purchase bulk foods at wholesale prices. Groups typically form around shared interests in particular types of food (e.g., natural foods). A buying club can be as small as five people or as large as 100. Membership fees and/or volunteer hours support group coordination and food distribution. A few food-buying clubs focused on local foods have emerged in North Carolina, including the Charlotte-based Know Your Farm (see Spotlight 8) and the Raleigh-based Triangle Meat Buying Club (www.trianglemeatbuyingclub.com), which facilitates group ordering of local fish, cheese, and pasture-raised meat and poultry.

Choosing restaurants that serve local foods is also important, as is frequenting grocery stores and specialty stores that provide fresh, local, organic and sustainably produced foods. Remember to thank the store owners and staff who are responsible for the local sourcing. They need to be reminded that their efforts are worthwhile and appreciated. Encourage them to market their local-food offerings with signage and point-of-sale information that makes it easy for consumers to identify and choose local foods.

- To find local foods, particularly restaurants in your area that focus on sourcing from local farmers, visit www.slowfoodusa.org, which lists regional chapters in North Carolina in the following areas: Asheville, Boone, Cape Fear/Fayetteville, Charlotte, Down East (Greenville), Piedmont Triad and Research Triangle.

3. Start your own or participate in a community garden.

Gardening is a great way to provide yourself and your family with fresh, healthy foods. If you don't have space, land or know-how, consider joining a community garden.



Debbie Ficus

Spotlight 28

Walking Fish: A Community Supported Fishery

Walking Fish is the Southeast's first-ever community-supported fishery (CSF) initiative, developed by Duke University's student chapter of the American Fishery Society in partnership with Carteret Catch (www.carteretcatch.org). It works very much like a Community-Supported Agriculture program (CSA) for fruits and vegetables; members pay an up-front subscription fee and receive weekly deliveries of seasonal fresh fish and seafood. The CSF provides fishermen with a secure source of income and enables consumers to support local fishermen. Walking Fish just completed its first year and has sold 400 subscriptions to Durham residents.

Pioneering work on the CSF concept took place in Carteret County in 2006 and 2007. Funding from the North Carolina Fishery Resource Grant Program allowed Carteret Catch fishermen to create shares of fresh, wild-caught shrimp for sale to county residents and tourists. While this initial CSF was not sustainable for logistical reasons, this work prompted the creation of successful CSFs in Maine and Massachusetts.

www.walking-fish.org

Spotlight 29

The Crop Mob: Innovative Community Engagement

Describing itself as a group of “young, landless and wannabe farmers who come together to build and empower communities by working side by side,” the Crop Mob began in fall 2008 with a work day at Piedmont Biofarm, where 20 people harvested 1,600 pounds of sweet potatoes. The group has grown consistently in its first year, completing more than 2,000 hours of work at monthly work days at 12 farms and gardens in and around Orange and Chatham counties. Many of the Crop Mob’s members are experienced farmers and gardeners who are committed to passing on their knowledge to future agricultural workers. The model has been inspirational, and a new group in the Raleigh area has taken up “mobbing” in largely urban contexts.

www.cropmob.org

- To find a community garden in your area, visit the **N.C. Community Gardens** Web site (www.ces.ncsu.edu/depts/hort/garden/communitygarden/index.html), and for a primer on developing a community garden, look at its *Eat Smart Move More North Carolina: Growing Communities through Gardens* (www.ces.ncsu.edu/depts/hort/garden/communitygarden/primer.html).
- Come to the Table also hosts a network of faith-based community gardens, the **Piedmont Interfaith Network of Gardens** (PING) (www.cometothetablenc.org/ping.html), in the central part of the state.

4. Advocate for healthy foods at your child’s school or day care.

Join your child for lunch at his or her school or day care. Try what the school offers. If you think it should be improved, talk to administrators, teachers and other parents. Privately owned day cares and schools have flexibility regarding the foods they serve. Let them know you care about

whether your child is served healthy foods. Eating preferences formed at a young age set the stage for lifelong habits. Indicate that you are selecting a day care or school based not only on criteria such as academics, cost, convenience and safety, but also on whether or not they offer fresh, healthy foods.

Many factors influence the foods served in public schools, including federal and state policies. Don’t let this deter you from figuring out ways to support improvements in school food. One way to get involved is through the development of school wellness policies. Each educational agency participating in the federal school lunch program is required to have school wellness policies to guide and address the health of the school community.³ Often these are developed by school wellness teams that include parents and relevant members of the community. Consider joining your school’s team—or starting one if it doesn’t yet exist—and advocating on behalf of healthy foods and farm-to-school programming in your child’s school. For more information on farm-to-school programs throughout the country, visit the National Farm to School Network Web site (www.farmtoschool.org).

You may also want to

- volunteer to bring in healthy snacks from local farmers and businesses,
- start and maintain a school garden, if there is land available,
- write a grant on behalf of the school to help support a school garden, greenhouse or other needed supplies,
- organize a field trip to a local farm,
- start a small farmers’ market, if the school is located in a centralized area with a lot of foot traffic, or
- sell shares in a CSA as a fund-raising activity.



Becky Kirkland

5. Organize a farmers' market, Community-Supported Agriculture program (CSA) or food-buying club.

If you don't have ready access to local foods in your area, consider starting a farmers' market or a CSA or food-buying club at work, in your neighborhood or through your place of worship. Creating one of these avenues has the potential to increase the convenience and affordability of fresh, local foods, and it provides farmers with a new market outlet. Duke University Hospital, First Health Moore Regional Hospital, UNC Hospitals and Research Triangle Institute offer successful models for workplace-supported agriculture.⁴

- For a comprehensive guide to bringing fresh, seasonal produce to your organization, see *Eat Smart North Carolina: Bring Fresh Produce to Your Setting* (www.ces.ncsu.edu/depts/fcs/pdfs/produceguide.pdf).
- For how-to information about starting a CSA or farmers market at your workplace, visit the **Center for Environmental Farming Systems** (CEFS) Web site (www.cefs.ncsu.edu/resources/workplacecsabulletin.html).
- For more information about how your church or place of worship can get involved, visit the **Come to the Table** Web site (www.cometothetablenc.org). This initiative helps to organize faith-based organizations in North Carolina interested in stewardship of local farmers' work (see Spotlight 30).
- For more information about how to start a local meat-buying club, visit the **NC Choices** Web site (www.ncchoices.com).

6. Build food-system relationships.

A food system ultimately depends on strong relationships at the community level. Regardless of where you are within the food system—academic, advocate, buyer, chef, city planner, consumer, dietician, doctor, farmer, gardener, government official, parent, student, teacher, volunteer—you can reach out and strengthen community connections. Start a conversation with the produce or meat buyer where you buy your food. Talk with school administrators about foods served at schools. Discuss your interest with chefs and restaurant owners. Meet with local government officials to let them know that you care about local food and farms. Write an editorial. Throw a party for friends and neighbors, and talk about where your food comes from. Community conversations enhance awareness, build partnerships and lead to action.

Spotlight 30

Come to the Table: Engaging the Faith Community

Engaging lay leaders and ministers, nonprofits, government officials and individuals, *Come to the Table* explores the connections between food security, faith and farms. To do this, *Come to the Table* nurtures the development of faith-led food-system projects that feed communities, support farmers and farmworkers and foster a connection to the land. In addition to regional gardening and project-development trainings for families in the church and beyond the church, *Come to the Table* also offers a free resource guide called *Come to the Table: How People of Faith Can Relieve Hunger and Sustain Local Farms in North Carolina*. This 40-page guidebook includes an overview of the theology and issues surrounding farming and food security in North Carolina, easy tools for identifying the needs and resources in communities, sample projects and a resource list. *Come to the Table* is a project of the Rural Life Committee of the N.C. Council of Churches with support from the Duke Endowment and offers a model for congregationally supported agriculture.

www.cometothetablenc.org



Becky Kirkland



Jennifer Curtis

7. Promote transparency in packaged foods.

One of the challenges to making real choices in the marketplace, particularly for packaged food products, is a lack of labeling information that outlines how, where and by whom food is grown, raised and processed. Nutritional labeling gives consumers information about the nutritional content of packaged foods. This information enables real choices between foods based on such criteria as caloric intake, grams of fiber, and vitamin and mineral content—but similar detailed information about the sources of foods and the practices used in their production are difficult to find. One of the few comprehensive and legally enforced labeling programs related to production practices is the organic program, which dictates specific production and processing practices, including that synthetic fertilizers and pesticides are prohibited.

Transparency across a wide range of sustainability measures (e.g., the environmental impact of production practices or labor practices) has not yet arrived for most packaged products, which makes it extremely challenging to make purchasing decisions based on full information.

What to do? Ask your retailer for information about where, how and by whom packaged foods were produced. The retailer in turn will ask for this information from distributors, who will then ask it of their suppliers, and so on through the supply chain. Over time, this will create an incentive for food companies and manufacturers to document and make transparent this information about their supply chains.

Spotlight 31

Development-Supported Agriculture: How Neighborhoods Can Embrace Farms

Development-supported agriculture, in which homes are centered around a farm, is analogous to a housing development centered around a golf course. The model is designed to supply residents (and potentially the surrounding community) with fresh foods, to provide a low-risk start-up opportunity for a new farmer and to create a variety of lifestyle benefits for families and children who have the opportunity to grow up on a farm. As with Community-Supported Agriculture programs (CSAs), community members help underwrite the start-up and operating costs. A few such initiatives exist in North Carolina and are still in the early stages of development.

For example, Rhodes Gap, located in Orange County, is a new neighborhood focused on sustainable development. Green home-building, resource conservation, native-plant landscaping and local food production are core principles of the neighborhood's design and function. The development spans 35 mostly wooded acres and is divided into 10 lots. The developer dedicated one lot and one acre of common space to commercial organic vegetable production and provided for key farm infrastructure, including a barn, wells, an irrigation system and deer fencing. Lots went on sale in the fall of 2009, and the farm was designed and is being managed by the Earthwise Company, LLC. Other potential models include The Farmstead in the Triad area and Sandy Point near Edenton.

www.earthwiselife.com/food/projects
www.thefarmstead-nc.com
www.sandypoint.us

8. Support the development of community farm and garden trusts.

Community farm and garden trusts aid in the protection of affordable, long-term access to farmland. This protection is vital in fast-growing parts of the state where the demand for fresh local foods is highest but the availability of affordable land for food production is increasingly scarce. The concept is to secure farmland in a region through community partnerships and nonprofit ownership structures that help share the risk and cost of land acquisition and farm management. Different ownership models are possible, depending on the needs and assets within a community.

The core function of a community farm trust is to buy or accept gifts of land and lease the land back to farmers using renewable, long-term leases. The trust owns the land as a commons, removing it from the speculative market. There are several examples of farm and garden trusts throughout the country, including the New Communities Farm, a 5,800-acre tract in Albany, Georgia, set

up for African-American farmers during the civil rights movement.⁵ Work is underway to establish an urban-agriculture land trust in Durham called Cornucopia.⁶

Nonprofit land trusts have traditionally focused on preservation of open space and natural resources, but recently have begun considering ways to promote working lands and sustainable farming enterprises. The Triangle Land Conservancy (TLC) (www.triangleland.org), for example, recently acquired a 250-acre parcel of land in Orange County, where it is supporting a number of local food and farming projects.

- To learn more about land trusts in North Carolina, visit the Conservation Trust for North Carolina Web site (www.nclandtrusts.org).

9. Involve children and youth.

Our children, increasingly at risk for diet-related diseases, are too often disconnected from food. Habits that children form around eating can last a lifetime. Cook with your children. Not only is this a way to spend quality time together, it engages them in hands-on nutrition education and builds valuable life skills. Shop with them. Take them with you to the farmers' market and to visit farms. Plant seeds with them for your window sill, in your back yard or in your neighborhood gardens. Help grow an informed and educated generation that enjoys and understands the value of fresh, healthy foods and a sustainable food system.

10. Monitor statewide local food policy developments.

Join the **Local Foods Action Plan listserv** (www.cefs.ncsu.edu/getinvolved/listservs.html) to get updates on statewide developments for building a local food economy in North Carolina. Monitor progress of the **N.C. Sustainable Local Food Advisory Council** (www.ncagr.gov/localfood). Connect with others involved in advancing sustainable food systems in our state by joining the **NC Food NETWORK** (www.ncfoodnet.org).



Courtesy of Appalachian Sustainable Agriculture Project

Endnotes

¹ Lisa Mancino and Constance Newman, "Who's cooking? Time spent cooking by gender, income and household composition" (American Agricultural Economics Association 2006 Annual meeting, Long Beach, CA, July 23-26), <http://purl.umn.edu/21456> (accessed February 3, 2010).

² Calculated using data from U.S. Department of Agriculture, Agricultural Marketing Service, "North Carolina: Population Profile," Transportation and Marketing, 2004, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5058244&acct=stmktpfrl> (accessed February 3, 2010).

³ "Local Wellness Policy: Requirements," U.S. Department of Agriculture, Food and Nutrition Service Web site, n.d., http://www.fns.usda.gov/tn/healthy/wellness_policyrequirements.html (accessed February 3, 2010).

⁴ "Community Supported Agriculture: Welcome," RTI International Web site, 2010, <http://www.rti.org/csa/> (accessed February 3, 2010); "10th Annual Duke Farmers Market," Duke University, Department of Human Resources Web site, <http://hr.duke.edu/farmersmarket> (accessed February 3, 2010).

⁵ David Harper, "Community Land Trusts: Saving the Land to Which We Belong," *Exchange* (Summer 2007): 9-13 http://www.landincommon.org/files/EXC_26_03_05_1_.pdf (accessed February 3, 2010).

⁶ For more information, contact David Harper at Land in Common (david@landincommon.org).

Appendix A

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Appendix B

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Appendix C

Acronyms

ACE: Pennsylvania's Agricultural Conservation Easement Purchase Program
ADFP: North Carolina Agricultural Development and Farmland Preservation
ASAP: Appalachian Sustainable Agriculture Project
BASE: University of North Carolina Kenan-Flagler Business School's Business Accelerator for Sustainable Entrepreneurship program
BLAST: Building Local Agricultural Systems Today
BRFV: Blue Ridge Food Ventures, LLC
CASTLES: Center for Academic, Social, Technology, Literacy and Economic Solutions
CCCC: Central Carolina Community College
CDC: Centers for Disease Control and Prevention
CDS: Carolina Dining Services
CEFS: Center for Environmental Farming Systems
CFSA: Carolina Farm Stewardship Association
CIW: Coalition of Immokalee Workers
CRP: Conservation Reserve Program
CSA: Community Supported Agriculture
CSE: University of North Carolina Kenan-Flagler Business School's Center for Sustainable Enterprise
CSF: Community-Supported Fishery
DIG: Durham Inner-city Gardeners
DoD: United States Department of Defense
EBT: Electronic Benefits Transfer
ECO: Eastern Carolina Organics
EQIP: Environmental Quality Incentives Program
ERS: USDA's Economic Research Service
FACTA: Food, Agriculture, Conservation, and Trade Act of 1990
F2F: Farm to Fork
FDA: United States Food and Drug Administration
FLO Foods: Fair Local Organic Foods
FNS: Food and Nutrition Services (formerly known as Food Stamps)
FSIS: USDA's Food Safety and Inspection Service
FTC: Fair Trade Commission
GAP: Good Agricultural Practices
HAACP: Hazard Analysis and Critical Control Point
IFFS: Inter-Faith Food Shuttle
MOFGA: Maine Organic Farmers and Gardeners Association
NC A&T SU: North Carolina Agriculture & Technical State University
NCCAT: North Carolina Center for the Advancement of Teaching
NCCGP: North Carolina Community Garden Partners
NCDA&CS: North Carolina Department of Agriculture and Consumer Services
NCDENR: North Carolina Department of Environment and Natural Resources
NCDL: North Carolina Department of Labor
NCSU: North Carolina State University
NLGMA: National Leafy Greens Marketing Agreement
OSHA: Occupational Safety and Health Administration
PING: Piedmont Interfaith Network of Gardens
RAFI-USA: Rural Advancement Foundation International, USA

SEEDS: South Eastern Efforts Developing Sustainable Spaces
SENCFS: Southeastern North Carolina Food Systems
SFB: Sustainable Fort Bragg
SNAP-Ed: Supplemental Nutrition Assistance Program
SOS: Share Our Strength
SS: Sustainable Sandhills
SYFAS: Southeast Youth Food Activist Summit
TLC: Triangle Land Conservancy
USDA: United States Department of Agriculture
USDL: United States Department of Labor
USDOJ: United States Department of Justice
USEPA: United States Environmental Protection Agency
WCPL: Wayne County Public Library
WHIP: Wildlife Habitat Incentives Program
WIC: Women, Infants and Children
WIT: Working Issue Team

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