Sustainable Farms, Local Foods, Healthy Communities

CENTER FOR ENVIRONMENTAL FARMING SYSTEMS

Working Through Partnership to Develop Sustainable and Equitable Local Food Systems
CEFS... A Journey & Broader Vision towards an Equitable and Sustainable Food System
CEFS Beginning 24 years ago

Mission: To develop and promote agricultural systems that protect the environment, enhance rural and urban communities, and provide economic opportunities in North Carolina and beyond
NC State, NC A&T State University, NC Department of Agriculture and Consumer Services

Influenced and inspired by partner groups
• **Agriculture Stakeholder Groups:**
  Carolina Farm Stewardship Association, Rural Advancement Foundation International, American Livestock Breeds Conservancy, North Carolina Farm Bureau
Our Focus Areas

- Research Farm
- Academic
- Education and Outreach

Integrating Research, Education, and Extension
Research Farm (This was CEFS!)

Each unit provides research opportunities for faculty as well as demonstration models and teaching tools for farmers, extension agents and students.
Addressing Complex and Interdisciplinary Problems

- A model for long-term, large-scale systems research directed toward agricultural sustainability. USDA SARE. 1997. (Mueller et al)
- Sustainability indicators as management tools to guide farmers, scientists, policy makers and the general public. USDA SARE. 2005. (Wossink et al).
- Assessment of the diversity of entomopathogens in vermicomposts and their potential as biological control agents for agricultural insect pests. NSF. 2009. (Cardoza, et al)
- CEFS Long-Term Systems Research: Providing the Building Blocks for Resilient Food Production Systems. USDA SARE (2016-2018)
Embedded Academic, Extension and Outreach

- Farm Apprenticeship Program
- Summer Internship Program
- Workshops and Training
- Student Farm
- Field Days
Our First Work with Food Systems

Huge Spill of Hog Waste Fuels an Old Debate in North Carolina

Published: June 25, 1995

HAW BRANCH, N.C., June 24 — The worst hog-waste spill in state history sent 25 million gallons of waste gushing into the New

The 1996 Pulitzer Prize Winner in Public Service

on the environmental and health risks of waste disposal systems used in North Carolina's growing hog industry.

2000: Smithfield and the North Carolina attorney general strike a deal for the company to spend up to $65 million on research for a replacement to hog-waste cesspools. Smithfield's cesspools overflowed during Hurricane Floyd in 1999.
NC Choices

- CEFS First Food Systems Project
- Work across the Supply Chain, from Farm to Fork to solve problems
- Funded by WK Kellogg Foundation
Partnerships Expanded Further

Environmental Defense Fund
Neuse River Foundation
North Carolina Coastal Federation
Sierra Club
Southern Environmental Law Center
Sustainable North Carolina
Local Meat Bottleneck: Processing, Aggregation, and Distribution

Bottleneck

- Processors (cutting, packaging, value added)
- Marketing
- Transportation
- Aggregation

Markets

Farmers

[Diagram showing the connections between markets, bottlenecks, processors, marketing, transportation, and aggregation, with a photograph of two individuals working in a meat processing facility.]
(M)EAT LOCAL BOX
Expanded Partnerships

- Producers
- Producer Groups
- State Agencies
- NGOs
- Processors
- Retailers
- Wholesalers
- Conventional Agriculture
- Sustainable Agriculture
- Labeling Groups
- Chefs
Rise in NCDA & CS NC Farmer Meat Handler Registrations
Expanded Focus Areas

Research Farm

Food System Initiatives

Education and Outreach

Integrating Research, Education, and Extension
What is a Food System?

Adapted by Christy Shi, Center for Environmental Farming Systems.
From: Wilkins, J. and Eames-Sheavly, M. Discovering the Food System; An experiential learning program for young and inquiring minds. Cornell University, Departments of Nutritional Science and Horticulture. http://www.discoverfoodsyst.cornell.edu/
Of Course, it’s not that Simple
Why Food Systems?
The Purpose of Agriculture?
Current Food Systems in the US are Associated with High Food Insecurity and Poor Health Outcomes

<table>
<thead>
<tr>
<th>Food Insecurity in the US and NC</th>
<th>Diet Related health Outcomes in the US and NC</th>
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<tr>
<td>49 million in US Food Insecure (14.1 percent). Food Insecurity higher among black and Hispanics, rural areas, and inner-cities</td>
<td>Nationally, 1 in 3 children are overweight or obese</td>
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<td>In North Carolina, 17.3 percent are food insecure</td>
<td>1/3 of the children born in 2000 or later will develop diabetes if trend continue</td>
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<td>Children: 1 in 4 North Carolinian Children are Food Insecure</td>
<td>27 percent of those who go to military recruiting stations are too heavy to serve</td>
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Not Just Production Systems

Biological and Technological Innovation

Everything Else...
(Supply Chain Development, Reducing Food Waste, Improving Access, Education, Youth Leadership, Racial Equity, Adoption, Economics, Policy etc.)

Improved Food Security and Health Outcomes
We aren’t even feeding our own students.

New on-campus food bank, Blazer Kitchen, set for grand opening March 6

Buckeye Food Alliance is a nonprofit, on-campus food pantry committed to providing a variety of nutritious food options to the 15% of Ohio State students that are food insecure.

Food Insecurity On Campus: Is Your Ivy Leaguer Starving?
Goal of Systems Redesign

Healthy People
Vibrant Farms
Thriving Local Economies
Strong Communities & Supportive Policy
Equity
Resilient Ecosystems

2009, Center for Whole Communities, Whole Measures for Community Food Systems
Partnerships Expanded Further

- Environmental groups, 2002
- Agriculture stakeholder groups 1990s
- Fundamental Partnership 1994

Non-Profit organizations, State Agencies, Local Governments, Funders, Business Partners - 2009

- Agriculture stakeholders, environmental groups, local government officials, nutritionists, health professionals and organizations, anti-hunger groups, faith based organizations, youth-based organizations, economic developers, funding partners, entrepreneurs, retailers, consumers, academic institutions and other agencies
Outcomes: Partnerships and Buy-in Grew Opportunities

Developed Statewide Action Plan

[Website Link]

Food System Initiatives

CEFS

COMMUNITY FOOD STRATEGIES

NC GROWING TOGETHER
Connecting Local Foods to Mainstream Markets

FOODCORPS
NORTH CAROLINA

NC Farm to Early Care & Education
A Center for Environmental Farming Systems Initiative

UFOODS

CORE FOOD SYSTEMS

WHOLE CROP HARVEST

NCSU | NCA&T | NCD&CS
www.cef.ncsu.edu

THE CENTER for ENVIRONMENTAL FARMING SYSTEMS
Cultivating Thriving Communities & Sustainable Farms
CEFS develops and promotes just and equitable food and farming systems that conserve natural resources, strengthen communities, improve health outcomes, and provide economic opportunities in North Carolina and beyond.

Our Evolving Program and Expanded Mission
Partnerships Expanded Further

- Non-Profit organizations, State Agencies, Local Governments, Funders, Business Partners, 2009
- Environmental groups, 2002
- Agriculture stakeholder groups, 1990s
- Fundamental Partnership, 1994

Supply Chain Partners, Institutional Partners, More Robust Community Partnerships, 2012
Strengthening Partnerships & Aligning Results

Community Food Strategies is a multi-organizational team of food systems experts providing leadership and technical support for food council development across North Carolina.
Food councils are intentionally cross-sector, and work to continually expand the network and engage diverse and strategic players.

- Local government officials
- Planning departments
- Food pantry staff
- Soil and Water District staff
- Teachers
- Faith leaders
- Food Businesses

- Higher education
- Community Leaders
- Cooperative Extension
- Restaurant owners
- Farmers
- Public health officials
- Economic Developers
- Non-profit organizations
2017 Accomplishments of NC Food Councils

Durham Farm and Food Network provided mini-grants to local pantries to improve services offered to clients.

Warren County Local Food Promotion Council completed a farmer survey and online map to create a Local Food Guide.

Capital Area Food Network developed a strategic plan for their Farm Advocacy Circle.

Davidson County Local Food Council received a USDA SNAP/EBT grant for a farmers market awareness campaign, including billboards, stickers, and farmer table tent marketing.

McDowell Local Food Advocacy Council received grant funding to create a feasibility study and project development for a Community Food and Health Hub.

Forryth Community Food Council hosted monthly Local Food Meet-ups to increase awareness of local food initiatives and encourage collaboration.

Tate River Food Security Network hosted five community conversations with preschool teachers about gardens, and with faith-based food pantry staff and county governments.

Greater High Point Food Policy Council hosted a 2017 Candidates Forum, highlighting the Food Policy Action Plan they developed, which was passed by the City of Ashville.

Charlotte-Mecklenberg Food Policy Council hosted a food advocacy training for 50+ community members and leaders.

Durham Farm & Food Network received funding to support the development of a sugary beverage advocacy campaign rooted in racial equity.

Orange County Food Council honored several members to attend racial equity trainings.

Asheville-Buncombe Food Policy Council launched a Double Up Food Bucks project for greater access to healthy foods.

Cassville Local Foods Council hosted a free soup lunch every 2nd Wednesday of the month in 2017, attracting 50-100 attendees each month.

Cape Fear Food Council formalized their council structure and committees, which meet monthly and filled all council and four committee chair positions.

North Carolina Local Food Council expanded their membership with a goal of more diverse voices representative of their work.

Just Fruits Collaborative recruited an Advisory Board, formalized its structure, and drafted a plan of work.

Mamaste Food Collaborative partnered with Elon University classes on student projects that propel their councils’ top priorities.

Durham Farm & Food Network received funding for leadership to support the development of a sugary beverage advocacy campaign rooted in racial equity.

Greater High Point Food Security Council hosted a 2017 Candidates Forum, highlighting the Food Policy Action Plan they developed, which was passed by the City of Ashville.

Durham Farm & Food Network hosted a public engagement event to announce their newly created 4-part Policy Platform and encourage new participation.

Charlotte-Mecklenberg Food Policy Council hosted a food advocacy training for 50+ community members and leaders.
About

CEFS Mission:
CEFS develops and promotes just and equitable food and farming systems that conserve natural resources, strengthen communities, improve health outcomes, and provide economic opportunities in North Carolina and beyond.

Purpose of Our Equity Work:
The equity work of CEFS is a long-term commitment to work internally and collaboratively with community and grassroots groups to address root causes of food systems inequities and build collective solutions through the lens of structural racism as an entry point. Our approach begins with developing an understanding, analysis and shared language of impacts of structural racism in our food system. Our commitment is to be a part of this transformative process.
About CORE work

Goal: To create institutional food system change by addressing the historical and current impacts of structural racism on our food and agricultural systems.

Hosts Learning Spaces to...

- Build a shared language around equity
- Build a shared analysis of institutional impact of structural racism on our food system
- Build a shared history on the impact of structural disparity on our food system
- Share tools and framework (developed by and with our CORE partners at dR Works and OpenSource Leadership Strategies, Inc.) for addressing inequities in our food system thru the lens of structural racism

The paradox of education is precisely this - that as one begins to become conscious one begins to examine the society in which he is being educated. The purpose of education, finally, is to create in a person the ability to look at the world for himself, to make his own decisions, to say to himself this is black or this is white...The obligation of anyone who thinks of himself as responsible is to examine society and try to change it and to fight it - at no matter what risk. This is the only hope society has. This is the only way societies change”.

-- from “A Talk to Teachers” by James Baldwin
CEFS Network and Partner Analysis
CEFS... A Journey & Broader Vision towards an Equitable Food System