

Sustainable Farms, Local Foods, Healthy Communities

# CENTER FOR ENVIRONMENTAL FARMING SYSTEMS

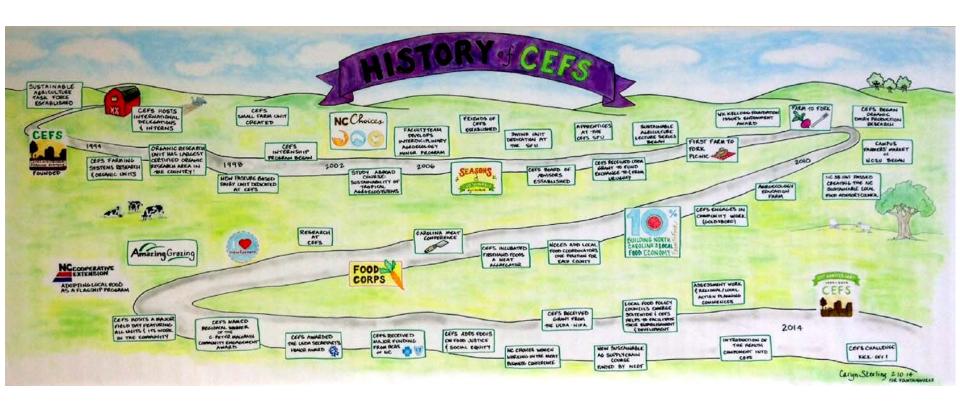






Working Through Partnership to Develop Sustainable and Equitable Local Food Systems

# CEFS... A Journey & Broader Vision towards an Equitable and Sustainable Food System





NCSU | NCA&TSU | NCDA&CS www.cefs.ncsu.edu

### 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 North Carolina Agricultural & **Technical State** University (NC A&T) North Carolina North Carolina State Department of Agriculture and University **Consumer Services** (NC State) (NCDA & CS)

#### Partnership Development





- NC State, NC A&T State University, NC Department of Agriculture and Consumer Services
- Influenced and inspired by partner groups



#### **Other Core Partners**





Agriculture Stakeholder Groups:

 Carolina Farm Stewardship
 Association, Rural Advancement
 Foundation International, American
 Livestock Breeds Conservancy, North
 Carolina Farm Bureau



### Our Focus Areas



### 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.



Farming Systems











#### 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).
- Demonstrating and supporting adoption of innovative conservation practices on outdoor hog production systems in North Carolina. USDA NRCS. 2007. (Morrow, 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)
- Assessing the greenhouse gas mitigation potential of organic systems in the Southeast. USDA-NIFA. 2012. (Hu, 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





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.

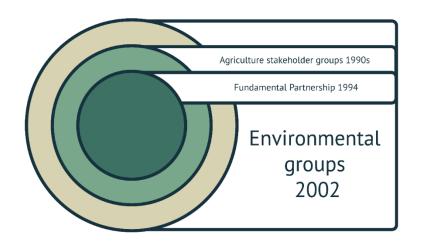
**2000:** Smithfield and the North Carolina attorney general strike a deal for the company to spend up to \$65 million on research for a replacement to hog-waste cesspools. Smithfield's cesspools overflowed during Hurricane Floyd in 1999.

### **NC** Choices

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



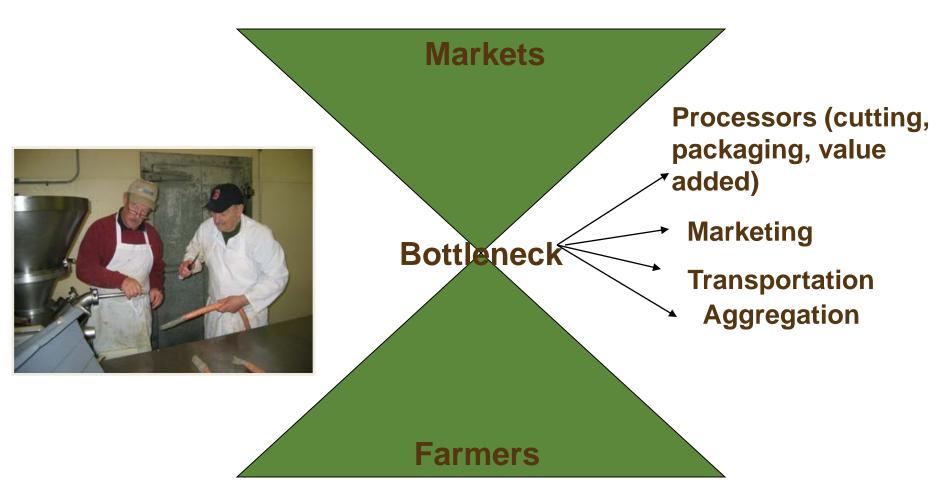
#### Partnerships Expanded Further



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





### (M)EAT LOCAL BOX









HOME / ABOUT / REGISTRATION / SPEAKERS / SCHEDULE / KEYNOTE / SPONSORS / MEDIA / LODGING / CONTACT US









### Register Today for the 2015 Carolina Meat Conference!

www.carolinameatconference.com

Spaces in the Specialized Tracks are almost gone!
Sign up today to secure your spot!



Home Chef Track: Rabbit Processing with Adam Danforth and Vivian Howard



Dr. Michele Pfannenstiel: Hazard Analysis & Critical Control Points (HACCP) Training



Whole Lamb Track: It's More Than Just Meat with Adam Danforth



Value-Added Pork Track: Whole Animal to Cured in a Professional Kitchen with Tyler Cook and Craia Deihl

### **Expanded Partnerships**

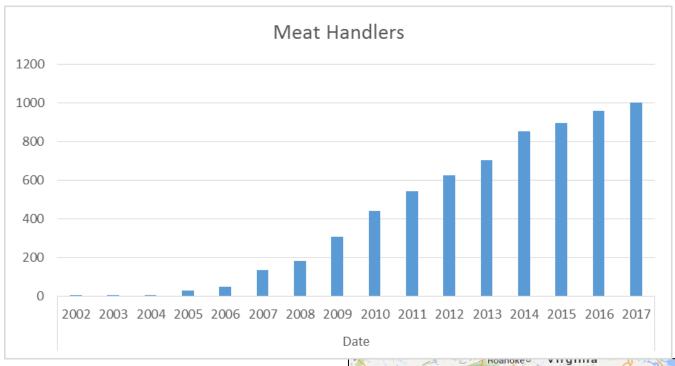
- Producers
- Producer Groups
- State Agencies
- NGOs
- Processors
- Retailers
- Wholesalers
- Conventional Agriculture
- Sustainable Agriculture
- Labeling Groups
- Chefs







#### Rise in NCDA & CS NC Farmer Meat Handler Registrations



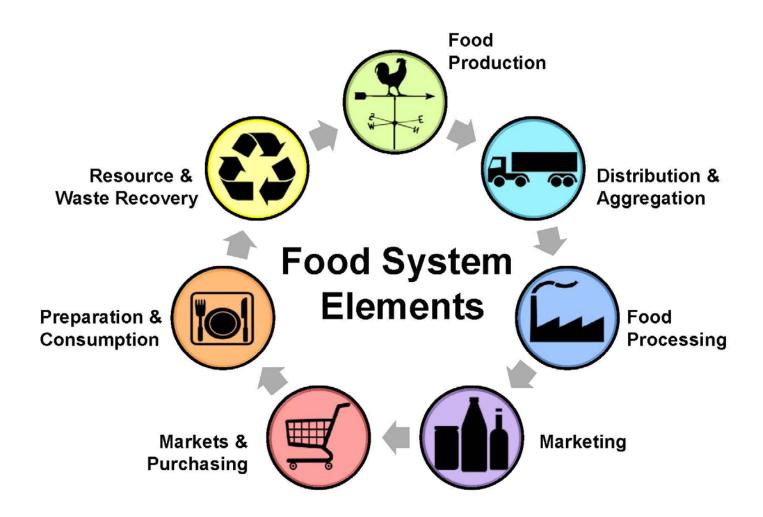




### Expanded Focus Areas

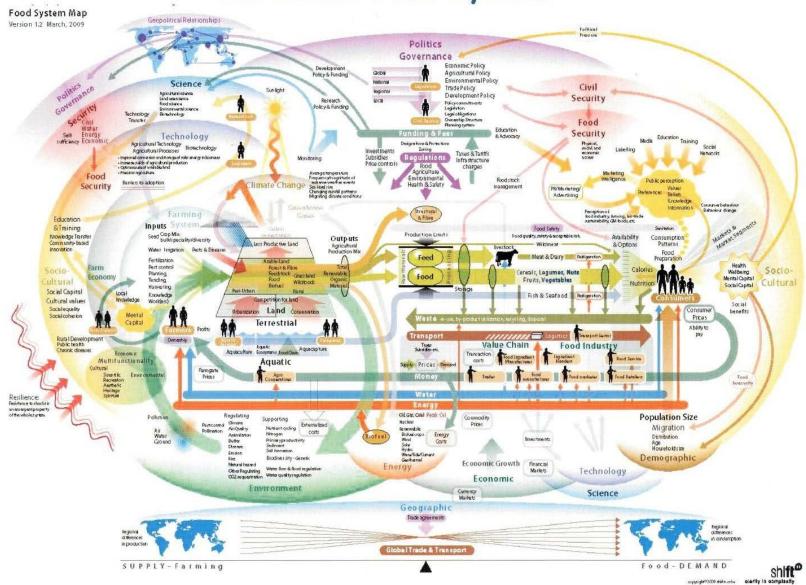


### What is a Food System?



### Of Course, it's not that Simple

#### The Global Food System



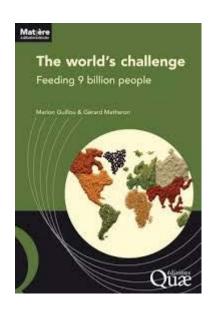
### Why Food Systems?







### The Purpose of Agriculture?













## Current Food Systems in the US are Associated with High Food Insecurity and Poor Health Outcomes

Food Insecurity in the US and NC	Diet Related health Outcomes in the US and NC
49 million in US Food Insecure (14.1 percent). Food Insecurity higher among black and Hispanics, rural areas, and inner-cities	Nationally, 1 in 3 children are overweight or obese
In North Carolina, 17.3 percent are food insecure	1/3 of the children born in 2000 or later will develop diabetes if trend continue
Children: 1 in 4 North Carolinian Children are Food Insecure	27 percent of those who go to military recruiting stations are too heavy to serve

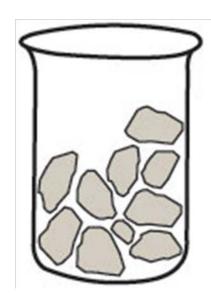
### Not Just Production Systems

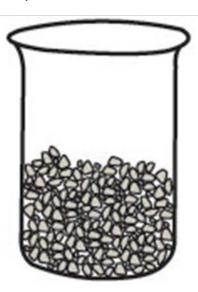
Biological and Technological Innovation

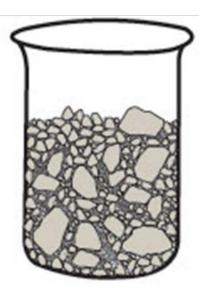
#### **Everything Else...**

(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...

#### YORK FEDERATION OF STUDENTS FOOD BANK

#### 2017/2018 FALL & WINTER **HOURS OF OPERATION**

**MONDAY - WEDNESDAY:** 10AM - 6PM (CLOSED 1PM - 2PM)

> THURSDAY 2PM - 6PM

**FRIDAY** 10AM - 4PM

**CLOSED WEEKENDS &** STATUTORY HOLIDAYS

March 6









New on-campus fo bank, Blazer Kitche set for grand opening

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











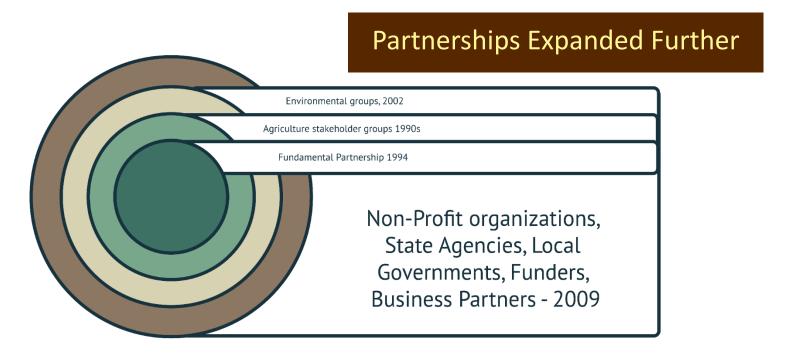


2009, Center for Whole Communities, Whole Measures for Community Food Systems

### Building a Local Food Economy





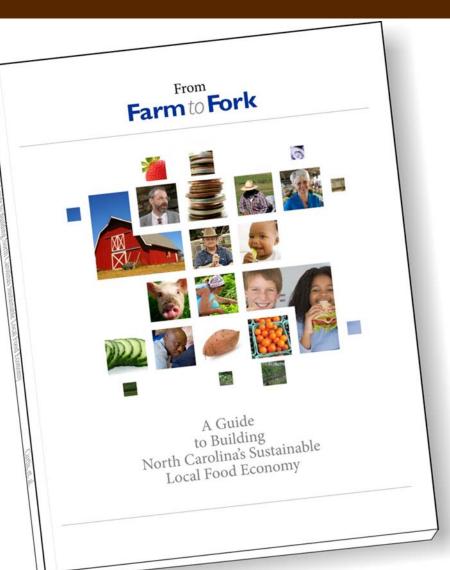


 Agriculture stakeholders, environmental groups, local government officials, nutritionists, health professionals and organizations, anti-hunger groups, faith based organizations, youth-based organizations, economic developers, funding partners, entrepreneurs, retailers, consumers, academic institutions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

#### Outcomes: Partnerships and Buy-in Grew Opportunities

**Developed Statewide Action Plan** 

https://cefs.ncsu.edu/resourc es/from-farm-to-fork-a-guideto-building-north-carolinassustainable-local-foodeconomy-2010/



#### Food System Initiatives

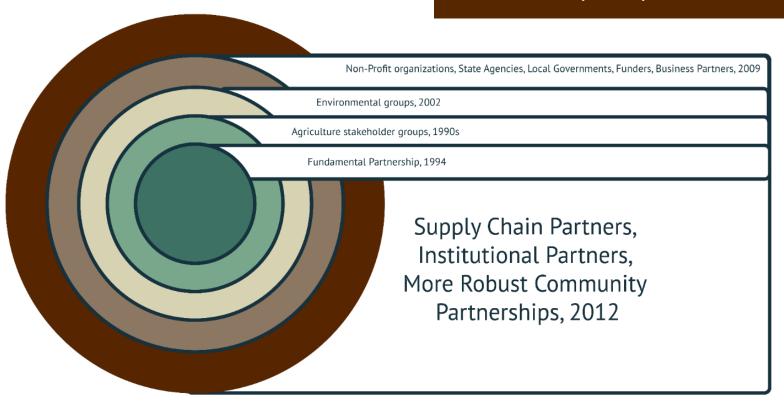


### Our Evolving Program and Expanded Mission

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



#### Partnerships Expanded Further



#### **COMMUNITY FOOD STRATEGIES**

Search Here

Go

About Us -Council Development -Technical Assistance \* Network of Councils -Contact Us Resources -



Community Food Strategies is a multi-organizational team of food systems experts providing leadership and technical support for food council development across North Carolina.

#### Who is Involved

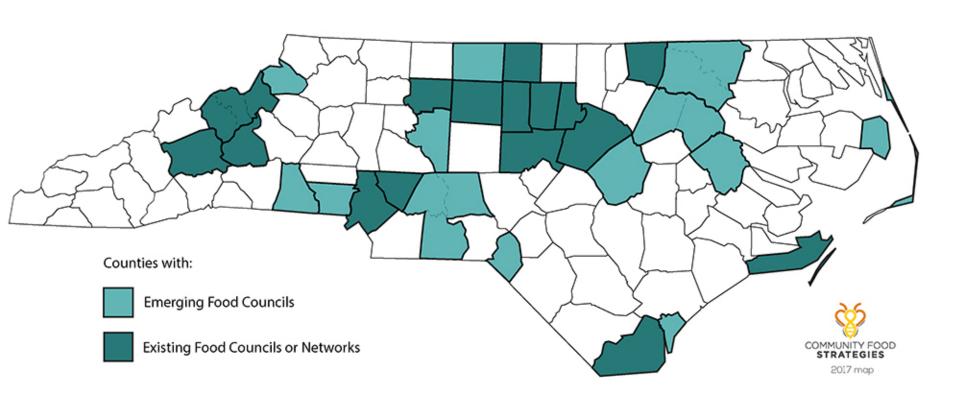
Food councils are intentionally cross-sector, and work to continually expand the network and engage diverse and strategic players.

- 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

#### **Developing Local Councils – Emerging & Existing**



### 2017 ACCOMPLISHMENTS OF NC FOOD COUNCILS

communityfoodstrategies.org

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

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

Caswell Local
Foods Council
hosted a free
soup lunch every 2nd
Wednesday of the month
in 2017, attracting 50100 attendees each
month.

Pitt County
Farm and Food
Council became
a county sanctioned
council, held three
community forums, and
started work with
three action
circles.

Cabarrus County Farm & Food Council engaged in a food access study with UNC-Charlotte partners.

Capital Area
Food Network
assisted with the
completion of the Wake
County Comprehensive
Food Security Plan,
and held multiple
community forums
for input.

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

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

Davidson
County Local
Food Network
funded a farmers market
awareness campaign,
including billboards,
stickers, and farmto-plate dinner
marketing

PROMOTING FARMERS & ECONOMIC DEVELOPMENT



**EOUITY** 

North Carolina

Local Food Council

expanded their

membership with a goal

of more diverse voices

representative of

their work.

THE NETWORK ADDRESSING

Alamance
Food
Collaborative
partnered with Elon
University classes on
student projects that
propelled their
councils top
priorities.

Warren County

Local Foods

Promotion Council

completed a farmer

survey and online map

to create a Local

Food Guide.

**INCREASING** 

**EXPANDING** 

Network developed a strategic plan for their Farm Advocacy Circle.

Capital Area Food

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

INCREASING AWARENESS

ADVOCATING POLICY & PROGRAM CHANGE

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

Orange Council Food Council funded several members to attend racial equity trainings.

Greater High Point Food Alliance hosted a Food Security Summit and a Youth Food Summit

Forsyth

Community

Food Consortium

hosted monthly

Local Food Meet-ups to

increase awareness of

local food initiatives

and encourage

collaboration.

Toe River

Food Security

Network hosted

listening sessions with

pre-school teachers about

gardens, and with faith-

based food pantry

staff and county

government

Asheville-

Buncombe FPC

hosted a 2017

Candidates Forum,

highlighting the Food

Policy Action Plan they

developed, which was

passed by the City

of Asheville.

Greater High

Point Food

Alliance worked with

High Point City Council

to fund a Community

Garden Coordinator

through the Guilford

Co. Extension

Office.

Gaston Co.
Food Policy
Council hosted
National Farmers
Market Week events at
all three county farmers
markets, and hosted
four community
education events.

Orange County
Food Council
hosted two forums,
welcomed four new
council members, and
started Food Access &
Local Food Economy
work groups.

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

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













#### **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



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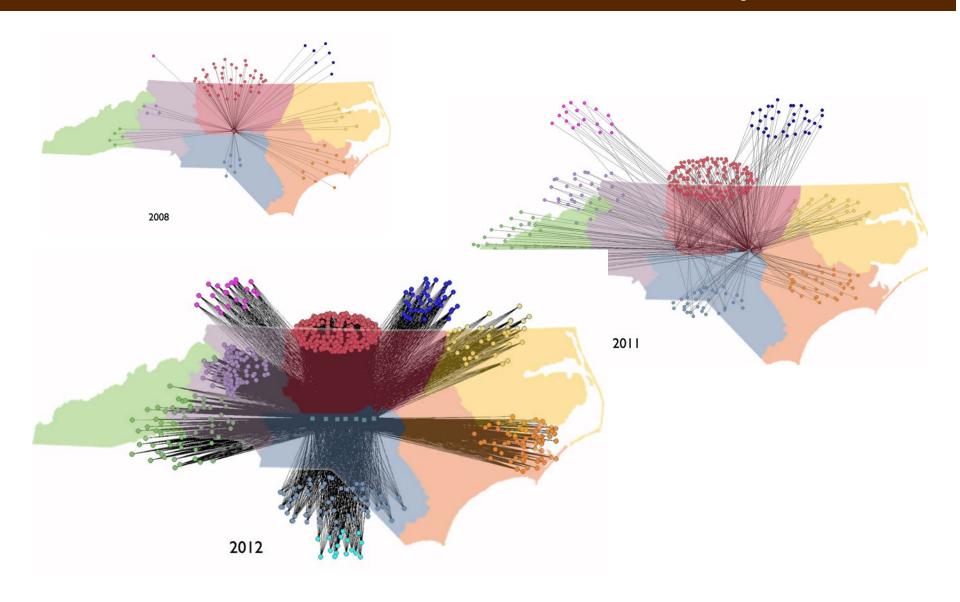


The paradox of education is precisely this - that as one begins to become conscious one begins to examine the society in which he is being educated. The purpose of education, finally, is to create in a person the ability to look at the world for himself, to make his own decisions, to say to himself this is black or this is white...The obligation 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".

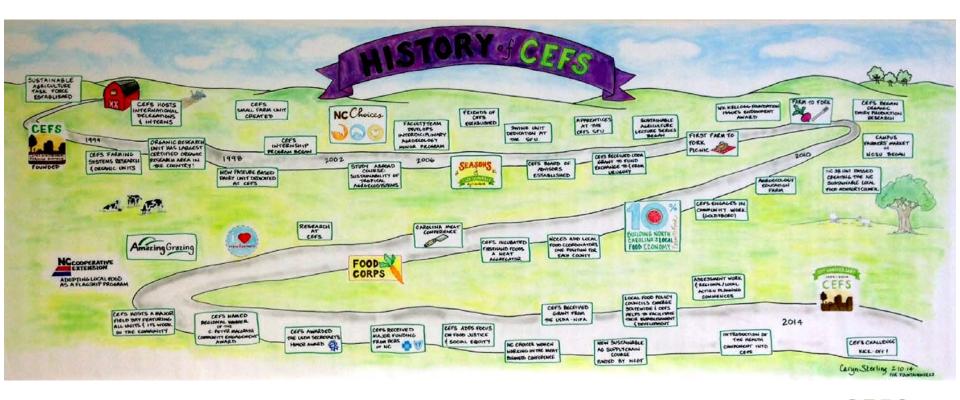
-- from "A Talk to Teachers" by James Baldwin

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### **CEFS Network and Partner Analysis**



# CEFS... A Journey & Broader Vision towards an Equitable Food System





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