

Can Entrepreneurship and Innovation Solve Food Insecurity?

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DIY Hydroponic Garden Tower - The ULTIMATE hydroponic system growi... 



The Green Wall - Educational Vertical Garden Bottle System Project 



Climbing Plants on Balconies, Patios and Decks – Screening and Greening  



World's largest vertical farm grows without soil, sunlight or water in Newark

AeroFarms has put \$30m into a green revolution that seeks to produce more crops in less space, but whether it's economically viable is an open question

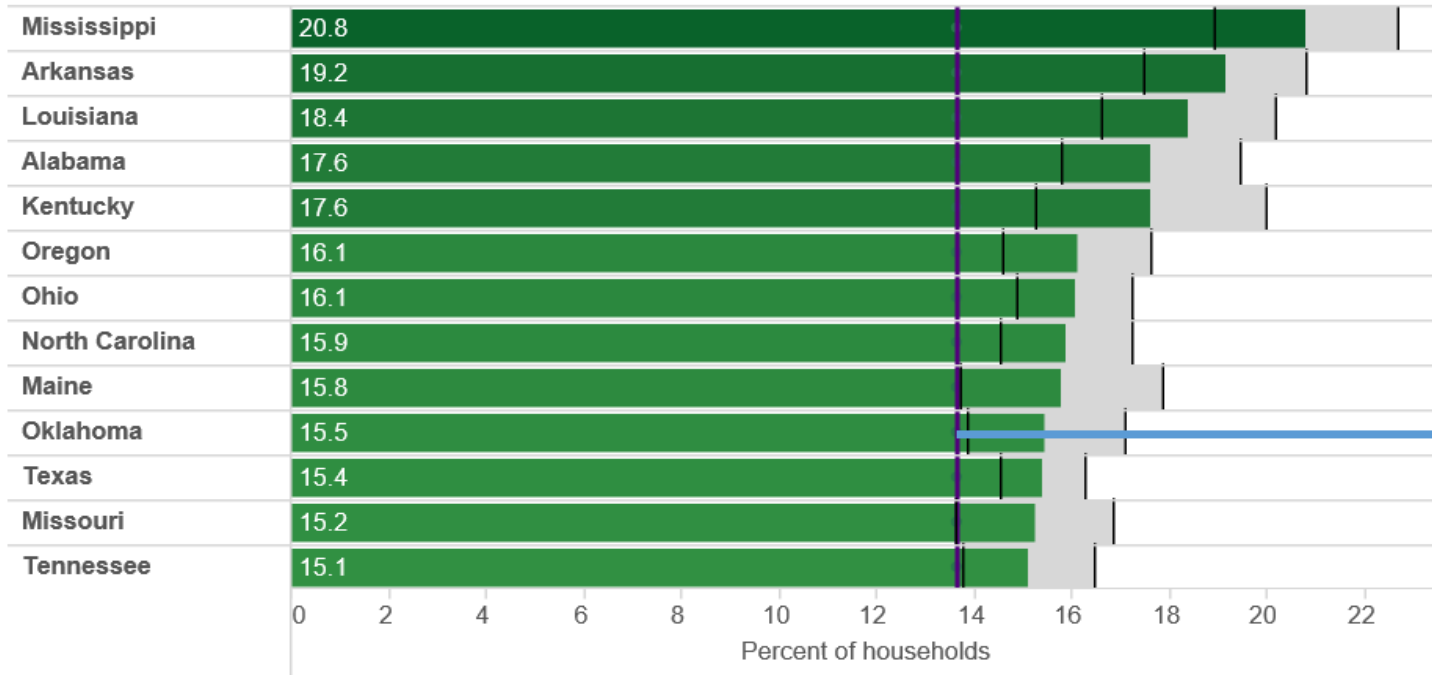


Food Security/Insecurity and Poverty

Definition and Reports

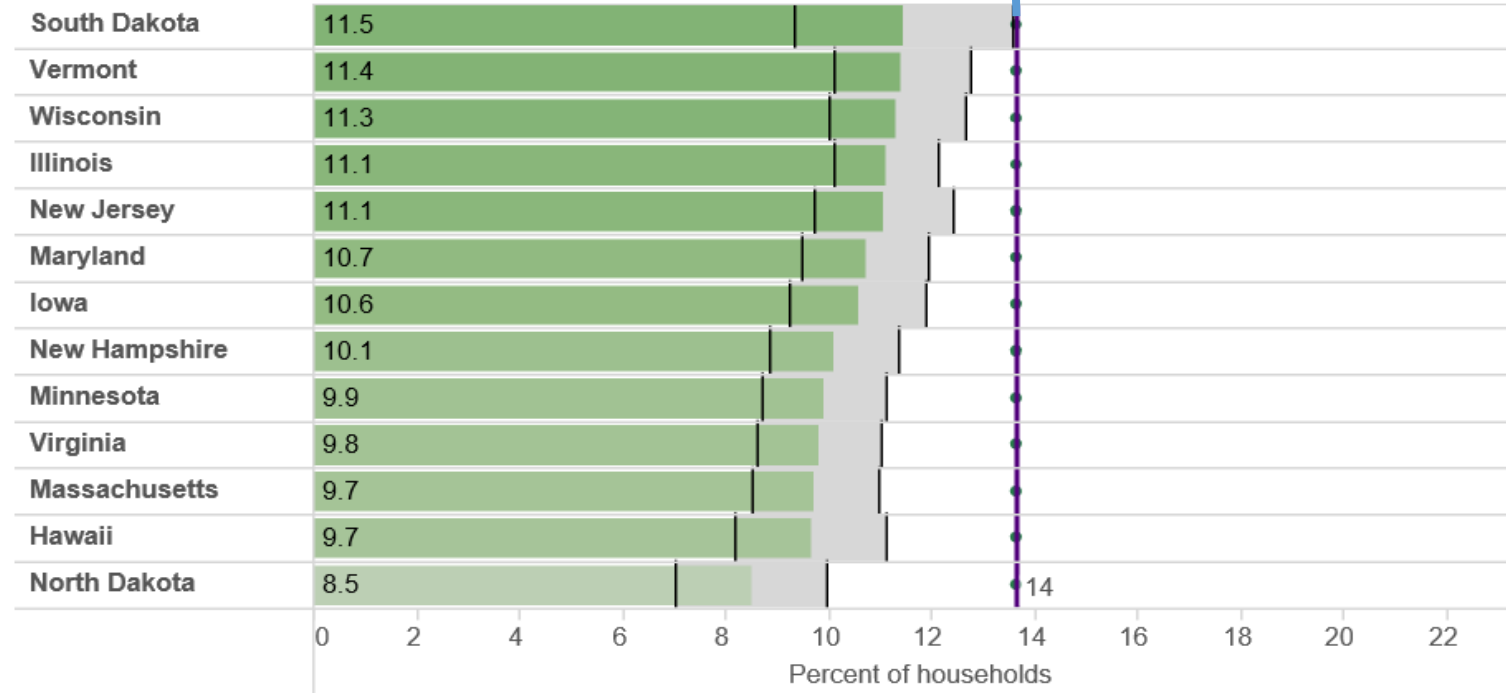
- <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/interactive-charts-and-highlights/>
- https://www.census.gov/data-tools/demo/saipe/saipe.html?s_appName=saipe&map_yearSelector=2015&map_geoSelector=aa_c

Food insecurity (2013-2015) Percent of households

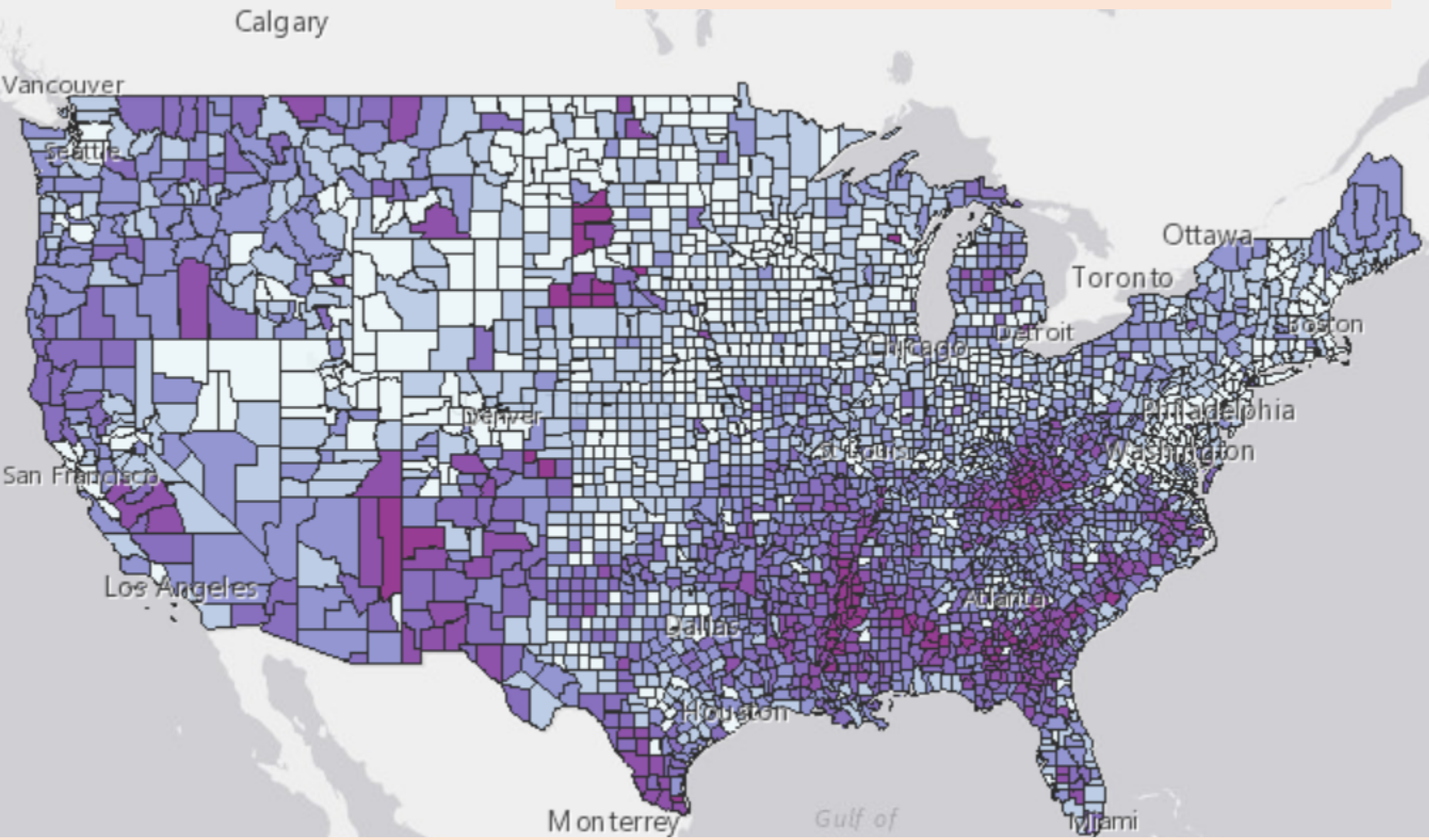


US average

Food-insecure households are uncertain of having, or unable to acquire, at some time during the year, enough food to meet the needs of all their members because they had insufficient money or other resources for food



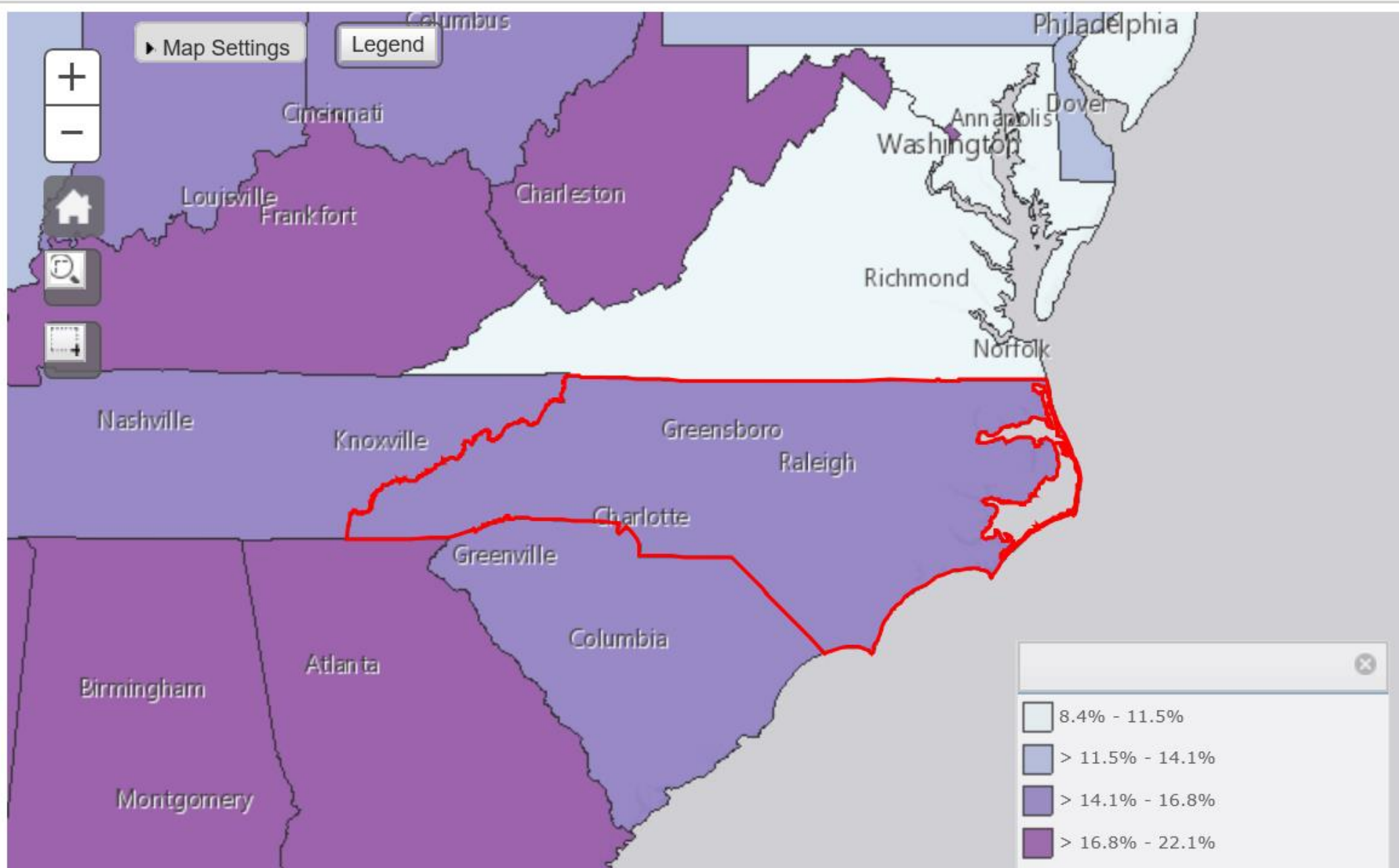
2015 All Ages in Poverty in the US



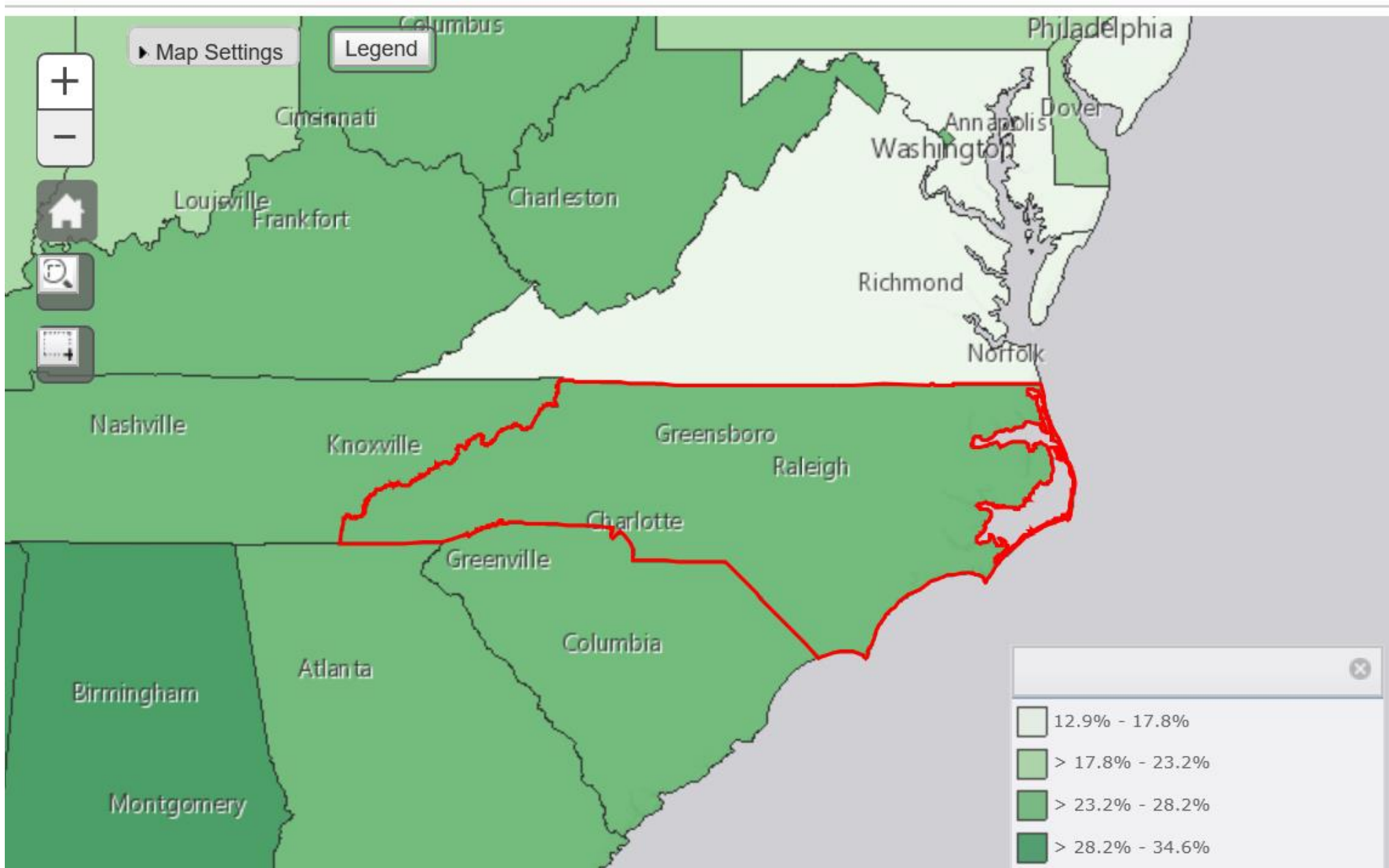
Reset

https://www.census.gov/data-tools/demo/saipe/saipe.html?s_appName=saipe&map_yearSelector=2015&map_geoSelector=aa_c

2015 All Ages in Poverty



2015 Under Age 5 in Poverty



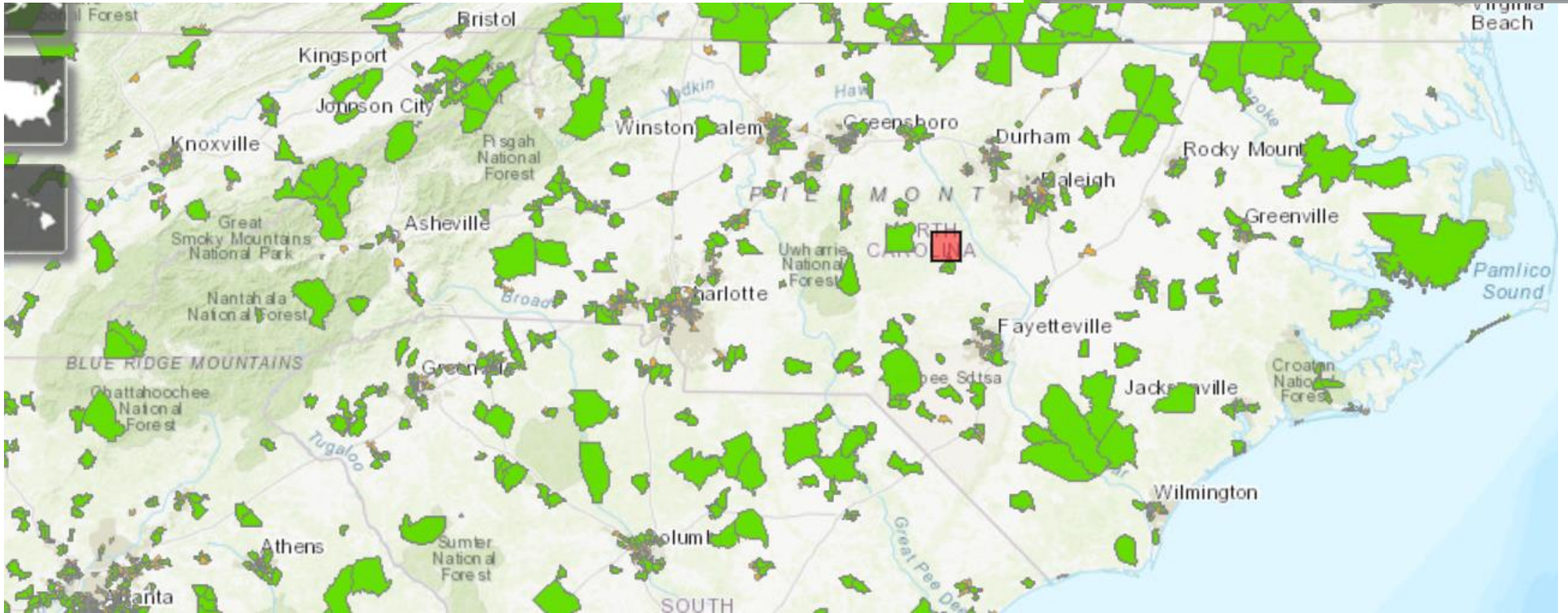
Food Desert

- <https://www.ers.usda.gov/data/fooddesert/>

▾ Low Income & Low Access Layers 2015 ?

LI and LA at 1 and 10 miles ?	<input checked="" type="checkbox"/>	■	<input type="range"/>
LI and LA at 1/2 and 10 miles ?	<input checked="" type="checkbox"/>	■	<input type="range"/>
LI and LA at 1 and 20 miles ?	<input checked="" type="checkbox"/>	■	<input type="range"/>
LI and LA using vehicle access ?	<input type="checkbox"/>	■	<input type="range"/>

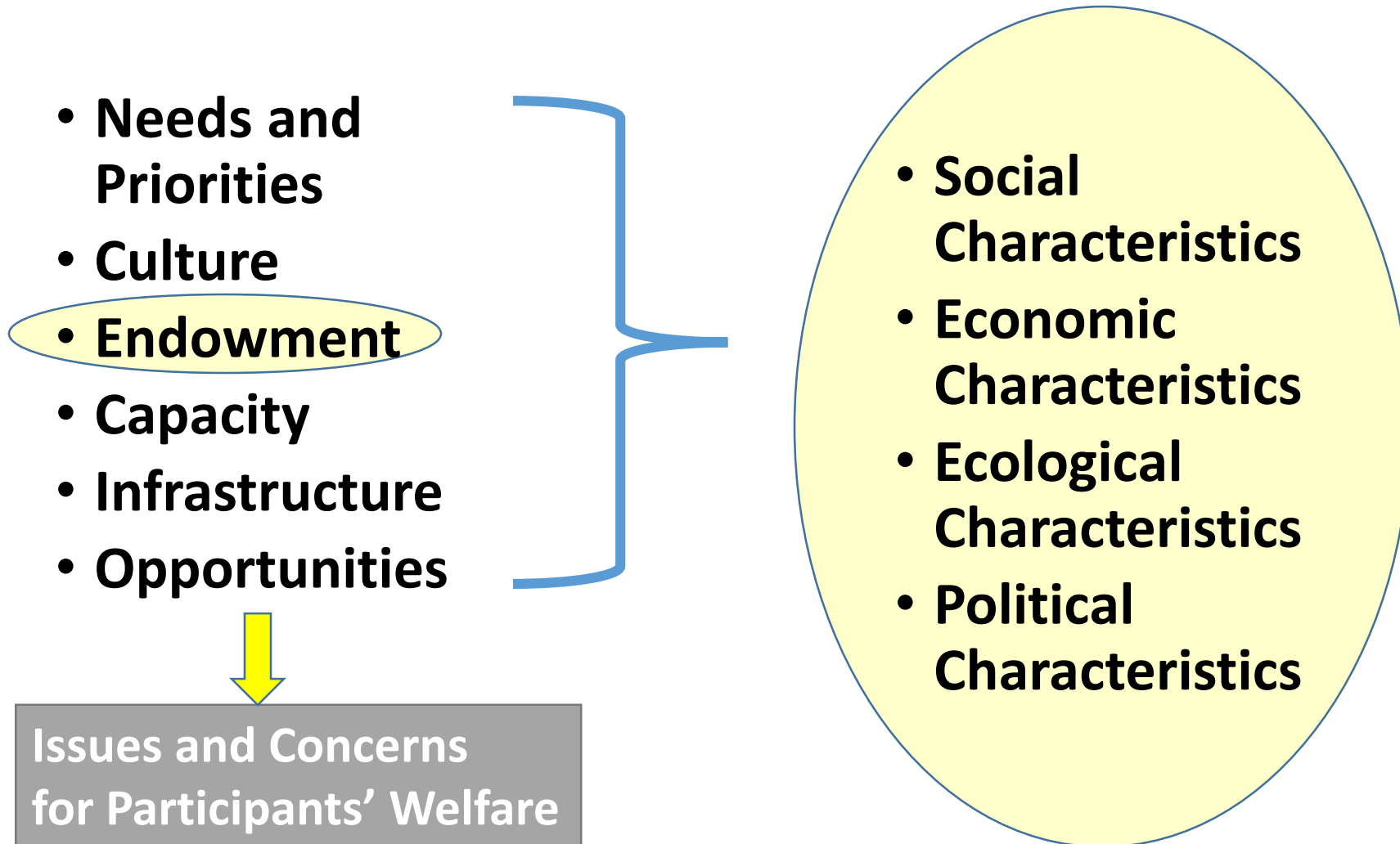
▾ Component Layers 2015 ?



Process of Entrepreneurship

- **Creating and seeking** opportunities for individuals and/or teams
- **Transforming** ideas into opportunities with or without resources
 - Expanding markets for existing products/services
 - Creating new products/services
- **Integrating** value added across industries
- **Developing** entrepreneurial characteristics
 - Independent
 - Risk taking
 - Taking control
 - Realistic optimism

A Framework to Stimulate Innovation, Creativity, and Entrepreneurship



Ranked #1 in the US



Ranked #2 in the US



Ranked #5 in the US




CEFS



NCSU | NCA&T | NCDA&CS

The Center for Environmental Farming Systems is a partnership of North Carolina Agricultural and Technical State University, the North Carolina Department of Agriculture and Consumer Services, and North Carolina State University.

Home About Field Research Food System Initiatives Extension & Outreach Academics & Education Youth Publications

Resources 



Work with CEFS! CEFS Communications Specialist | Field Research Assistant | Local Food Policy Council Administrative and

<https://cefs.ncsu.edu/>



Farming Systems Research Unit



Pasture-Based Dairy Unit



Pasture-Based Beef Unit



Organic Research Unit



Small Farm Unit



Alternative Swine Unit

My Vision

To become a **leader** in using **innovative strategies** to design, develop, implement, and convey **research-based solutions** that will

- **conserve natural resources**
- **improve environmental quality**
- **promote job and wealth creation**
- **enhance community health**

My Work in Food and Farming Systems

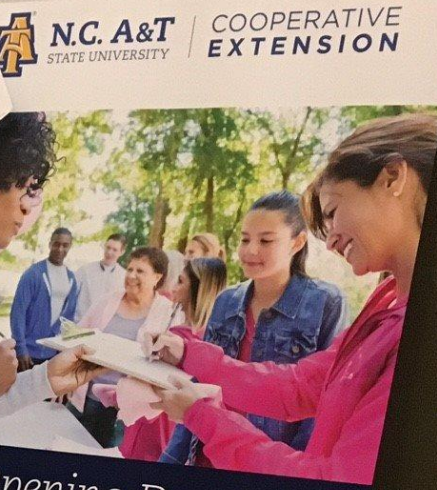
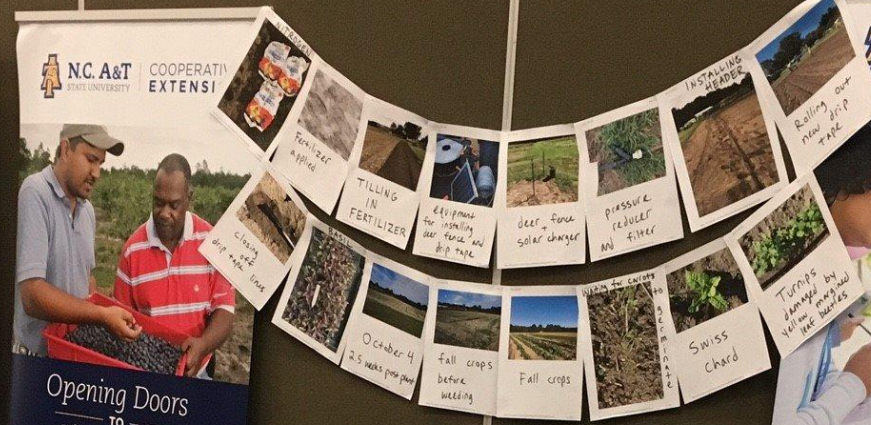
Re-build, re-energize, re-connect

- **Stakeholders of NC** in all counties and **Community Listening Sessions**
- **Small Farm Unit in Goldsboro, NC**
 - multifunctional farm enterprise financial analysis
 - organic/conventional comparative studies
 - specialty crops
- **Creative Farming and Healthy Eating** program in rural communities
- **Dollar Enterprise** - Entrepreneurship programs at A&T and communities
- **From academia to reality** - integrated research, teaching, and outreach activities – faculty, staff, students at A&T!





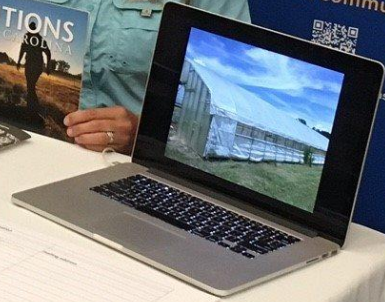
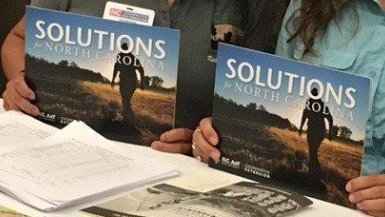
MARKET MAKER
A web-based tool...
Connecting willing markets and quality sources of food from farm and fishery to fork



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COOPERATIVE EXTENSION



Stacks of 'SOLUTIONS IN NORTH CAROLINA' brochures on the table.





...y of the
NC CHAIN GANG?

A Cotton Economy:
THE ERA OF SHADDOPPING

The North Carolina
CHAIN GANG

The Beginning of the
ROAD CAMP PRISON SYSTEM

From Hard Labor to
"HARD TIME"





Dollar Enterprise - 22630 - ABM 250 – 001
Tuesday 4:30pm to 7:20pm Proctor Hall 160
(open to all majors and all classifications)

Dollar Enterprise has been recognized as one of the best entrepreneurship courses in America.

We are seeking confident, energetic, enthusiastic, self-motivated, team oriented, and serious entrepreneur want-to-be to join us in learning about the entrepreneurship process and how it impacts our life and society.

The objectives of this course are:

- 1. To create a real business on campus and practice business skills, professional communication, and teamwork.**
- 2. To support students to develop critical thinking as successful entrepreneurs.**
- 3. To create future entrepreneurial leaders across industries and labor force.**



Can entrepreneurship and innovation solve food insecurity issues?

Issues in food systems

- **Availability** – production, intermediary
- **Affordability** – price, preparation
- **Accessibility** – transportation, time of traveling
- **Accountability** – food safety, health

Grow

knowledge, information,
networks, opportunity



Enrich People
Imagine Place
Cultivate Prosperity

Open Discussion and Thank you!

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