Land Grant University To You (LGU2U)

Funding Connections and Programming
Session 2

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LGU2U - Session 2 Funding Connections and Programming

Today's Topics

How competitive and capacity funds are used and managed.

Insights from NIFA staff about fund management and accountability.

How impact reports are used by NIFA.

The data used to describe LGU capacity.

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Panel Discussion

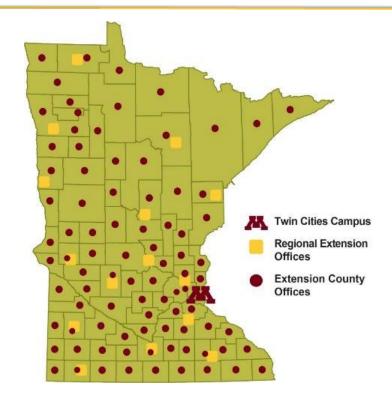
Dr. Beverly Durgan – University of Minnesota

Dr. Carolyn Lawrence-Dill – Iowa State University

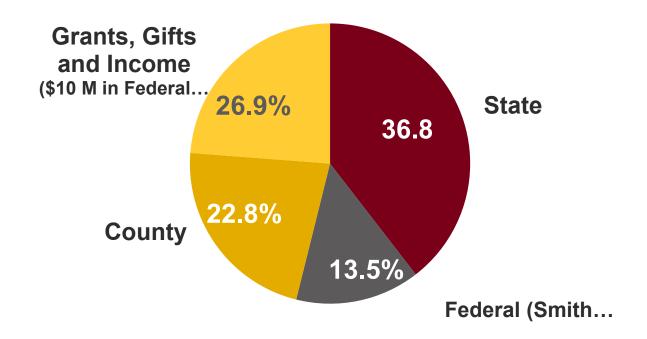
Dr. Shibu Jose – University of Missouri

Dr. Orlando McMeans – Southern University Ag Center

University of Minnesota Extension



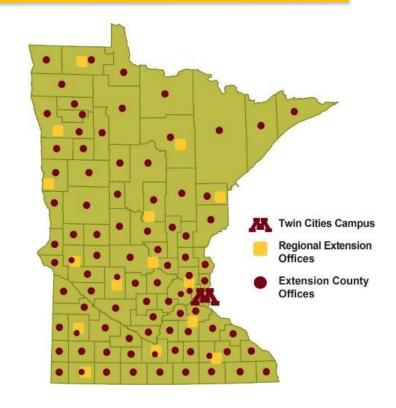
Extension 2022-23 Budget: \$79 M



Federal Capacity Funds

Smith Lever (EFNEP and RREA):

- Flexibility
 - To respond
 - To partner
 - Leverage other funding



Federal Capacity Funding allows flexibility to Respond to Disasters











Forest Assisted Migration Project Climate Smart Forestry

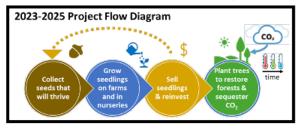
Extension, University & Community Partnerships

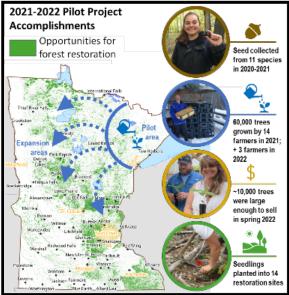
- Master Gardeners and Master Naturalists collect seeds
- Tree Seed drop off locations at 11 Regional Offices
- UMD Forest Research supports project
- RSDP providing facilitation and leadership
- The Nature Conservancy, MN Power, farmers...





MN Million - forest restoration for carbon sequestration





Partnerships



Extension faculty positions with NDSU

- Potatoes production
- Sugarbeet production
- Sugarbeet weed management
- Sheep Production
- Nutrition





Across Minnesota's 87 counties and First Nations

- 4-H is Minnesota's largest youth development organization, growing leaders in every part of the state
- 125,000 youth
- 15,000 volunteers



Learning and Leadership



Grace Lavan wins
MN State Conservation Award
from
the MN DNR by studying
pipeline impacts on wolves



Teen teachers share about how they are teaching children to reduce and repurpose plastic on the news



Nicole Cash wins the National Youth in Action Award in STEM for robotics design for toddlers with disabilities

Key Partner--Volunteers



233,194

hours given



Programs

- Master Gardeners
- Master Naturalists
- Aquatic Invasive **Species Detectors**

3,690 volunteers





63 average hours per volunteer

\$7.5 million

value to Extension



131

partnering organizations

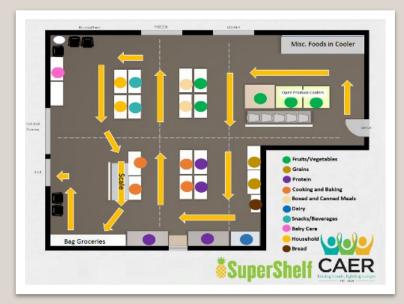


Supershelf makes the healthy choice the easy choice



Shoppers take the most of what they encounter first

Behavioral economic principles are used when developing SuperShelf layouts





Signage is available in several different languages

Extension's website – Connecting with MN

- 13M pageviews (up 11%)
- 8M users (up 18%)
- 63% access via mobile
- 83% come from searches
- Users rate pages on average
 4.54 out of 5 stars (n=5,865)
- Most popular content:
 - dairy nutrition, houseplants, growing fruit, garden insects, horse health, soil management and nutrients, Extension courses and events



Federal Competitive Funds

AFRI (NIH, DOD, CDC):

- Partnership with other Colleges
 - Many non-extension college programs are funded by grants
 - School of Public Health
 - Medical School
 - Leverage other funding
 - Build our capacity in non-traditional extension program areas

"Climate-smart" decision-making

Minnesota Climate Adaptation Partnership (MCAP):

- Climate resilience = Mitigation + Adaptation
- Multi-agency partnership, collaborations across sectors and levels of government
- Opening the window of opportunity for liquid manure application in northern, increasingly unpredictable climates (AFRI)



CYFAR (Workforce)

- Partnership between Youth Development and Family Development
- 5-year federal funding
- Minneapolis and Moorhead
- STEAM clubs, campus immersions & parent ed
- Educational pathways



Agriculture & Animal Science - Workforce

- Partnership between Youth Development and Agriculture, Food and Natural Resources
- Global Agricultural Learners -AFRI grant
- Animal science education, showcase events, animal disease outbreaks and biosecurity education efforts



Rural Stress: Mental Wellbeing of Youth & Farm Families

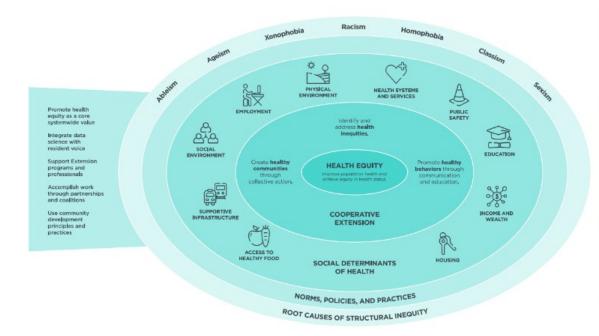


USDA Partnership with 16 Midwest states

- Community meeting with key stakeholders in Todd, Polk and Norman counties
- Multidisciplinary Extension team Family Resiliency, 4-H, and Agriculture, Food and Natural Resources
- Mental wellbeing resources for county fairs and community events
- Provided suicide education to over 150 professionals & community members

We are NOW implementing goals proposed by Federal Partners

NIFA - National Framework for **Health and Wellness**





USDA ACTIONS ON NUTRITION SECURITY



HOW DOES NUTRITION SECURITY INTERSECT WITH HEALTH EQUITY?

Structural racism increases food insecurity and the risk of diet-related chronic diseases. for historically underserved populations. Efforts to improve nutrition security also promote health equity.

WHY DOES NUTRITION SECURITY MATTER?





of health care spending is related to diet-related chronic disease





HOW WILL WE ACHIEVE NUTRITION SECURITY?









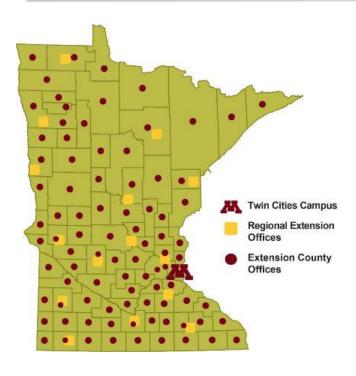




University Partnerships with a Purpose

- Medical School
- Public Health
- College of Pharmacy
- College of Education
 & Human Development
- Institute on Community Integration
- Tribal Partners

University of Minnesota Extension



Thank You!

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CALS/AES @ Iowa State University

How Capacity and Competitive Processes can Overlap and be Mutually Beneficial

Unique Partnerships across LGUs

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY









Fourteen Departments:

Agricultural & Biosystems Engineering

Agricultural Education & Studies

Agronomy

Animal Science

Biochemistry, Biophysics, and Molecular Biology

Ecology, Evolution & Organismal Biology

Economics

Flood Science & Human Nutrition

Genetics, Development & Cell Biology

Horticulture

Natural Resource Ecology & Management

Plant Pathology, Entomology and Microbiology

Sociology and Criminal Justice

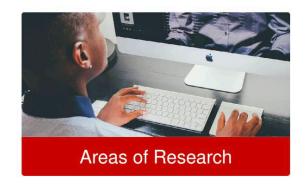
Statistics

FY22 Experiment Station Budget was \$35,134,245

Ag Experiment Station Funds

State Appropriations	\$29,462,535	~84%
Federal Appropriation	ns \$5,671,710	~ 16%

Spending federal funds & match requires an approved capacity project.









Ásrún Kristmundsdóttir

- New AES coordinator?
- Competitive Pre-Award

CARES Team



+ Darwin Campbell Data Analyst







Join the Funding Opps Listserv

CALS Internal Funding Opps

Gather a team

Grant writing / consulting

Travel support

Conference hosting support

Research seminar coaching

Request something else

More Funding Opportunities

Research funding opps from the VPR

Limited submission opportunities

Grantsmanship training

Open access fee support

Cost-sharing program for research tools







CAPER: CALS Advisory

Research and Discovery
Newsletter

News for Researchers

Strategic Seed Grants for Facilities & Equipment

YEAR TWO! The AES <u>invites proposals</u> to advance research and research capacity through investing in equipment and/or supporting infrastructures for existing Hatch/Multistate Projects.

NIFA Webinars

Sept 1: Regional Innovation and Demonstration of Climate-smart Agriculture for Future Farms (CAFF) and Sept 7: NIFA Climate Adaptation and Resilience Plan

Call for Proposals: NSF Regional Innovation
Engines Teambuilding Support

Apply now! Funding opportunity to support teambuilding - proposals reviewed on a rolling basis.

Capacity Funds, esp. Hatch & Hatch Multistate

Hatch

- Primarily salary support
- Equipment and Infrastructure Competition

Benefits to the competition!

CoSPRT

Coordination

Hatch Multistate

- \$ to travel to official meetings
- \$ to hold a meeting
- PD gets these benefits, can designate another





An unlikely connection? University of Virgin Islands



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Capacity and Competitive Funding:The University of Missouri

Shibu Jose

Associate Dean for Research & Director, MO Experiment Station

Capacity Funds: Driving Our Research Mission



Congressman William H. Hatch of Missouri

The Hatch Act of 1887

Laid the foundation for Agriculture research in the US

Capacity Funds

- Over 90% in faculty salary
- Capacity Funds + State match is the lifeline of our College, CAFNR
- It drives our research mission in CAFNR
- Enable our faculty to bring in additional extramural competitive funding

Capacity Funds	2016	2017	2018	2019	2020	2021	2022
Hatch	5,085,221	5,050,095	5,054,180	5,394,173	5,373,901	5,353,629	5,356,905
Hatch Multi-State	1,084,126	1,087,692	1,090,593	1,168,379	1,166,861	1,170,661	1,175,484
McIntire Stennis	631,995	629,776	631,352	673,887	671,695	653,703	655,844
Animal Health	38,828	54,002	54,666	61,095	57,469	59,150	55,389
	6,840,170	6,821,565	6,830,791	7,297,534	7,269,926	7,237,143	7,243,622

	Projects	People
Hatch	41	96
McIntire-Stennis	8	13
Multi-State	30	36

MU CAFNR Research Enterprise

6 Divisions

188

Ranked Faculty
101.5 (11%)
Research FTE

2 105

Postdocs



Research Extension and Education Centers (REECs)

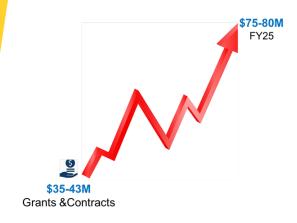


430

Graduate Students



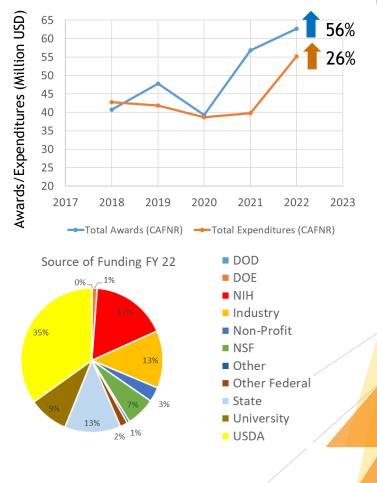
Competitive Funds: Leveraging Capacity Funds



Double Awards and Expenditures

FY 22 62.7M in Awards 55.2M in Expenditures

Leveraging capacity funds by 8X



The Impact: Advancing Agriculture

Why is Ag Research Relevant?

We contribute to the R&D to support Ag, Food and Natural Resources in MO and beyond

Together,
Agriculture
(\$93.7B) &
Tourism (\$17B)
contribute 33%
to MO GDP

- Correlating Soil Health Parameters, Agriculture Production and Environmental Services Across A Diversity of Landscapes and Production Practices
- Discovery of genetic resources and improvement of drought tolerance in soybean
- Improving Production Efficiency and Reliability of Cropping Horticultural Crops
- Advancing the Genotype to Phenotype Relationshi Through Genomics in Livestock
- Understanding habitat use and spatial ecology of fish and wildlife populations in forested landscapes
- Developing Management Strategies for Healthy Forests
- Economic analysis of contemporary agricultural environmental policy issues to inform public policy



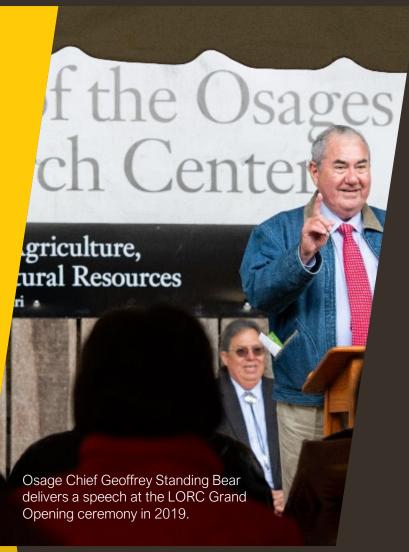
The Impact: Economic Growth



SCYLE

Partner or Perish

- Patterning with Lincoln University (1890)
- > Other 1890s, 1862s, Federal and State agencies, Private Sector
- > A new opportunity to partner with the Osage Nation
 - ➤ Thanks to the vision of a donor, late Mr. Doug Allen, an endowment was established (another way to leverage federal funds!)
 - > A professorship in agroforestry created in 2009 (\$3M)
 - A new research farm (valued at \$1M; donated by Mr. Allen), Land of the Osages, established in 2019 (\$6M)



MU Partnership with the Osage Nation

- MU is a Land Grant University founded on Osage lands via the 1862 Morrill Act
- Agroforestry is rooted in Indigenous knowledge, science, and practices
- > MU Land of the Osages Research Farm
 - Potential for collaborative food, agriculture, and natural resources research with Osage Nation
- Transforming challenges into opportunities
 - Increasing Native presence & visibility at MU
 - Seeking meaningful collaborative research
 - Training for intercultural competence

Some of the Initial Successes

- Osage Nation Harvest Land Farm orchard design (2019-2020)
- Agroforestry Training Academy scholarships for Osage participants (2 participants fully funded by MU)
- Archaeological survey at Land of the Osages Research Center led by Osage staff
- ▶ Peer reviewed publications in co-authorship with Osage Nation experts

Lovell, S.T.; Hayman, J.; Hemmelgarn, H.; Hunter, A.A.; Taylor, J.R. 2021. Community
Orchards for Food Sovereignty, Human Health, and Climate Resilience: Indigenous
Roots and Contemporary Applications. *Forests 12*, 1533. https://doi.org/10.3390/f12111533

USDA NIFA New Beginning for Tribal Students grant program

MU-Osage Food & Ag Program for Tribal Student Recruitment, Engagement, and Success | \$497,378 | 2021-2025

- Summer experiential learning program for Osage HS students (five students in summer 2022 along with a mentor)
- Scholarships for Osage students in CAFNR (four set up; one current student)
- Learning exchange & training for project staff





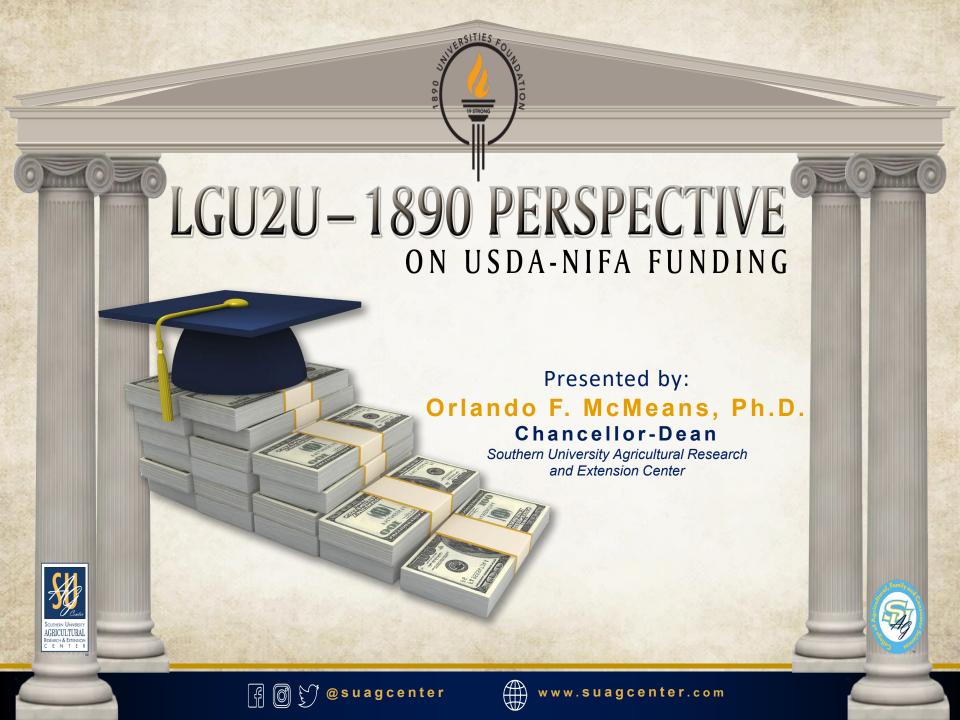


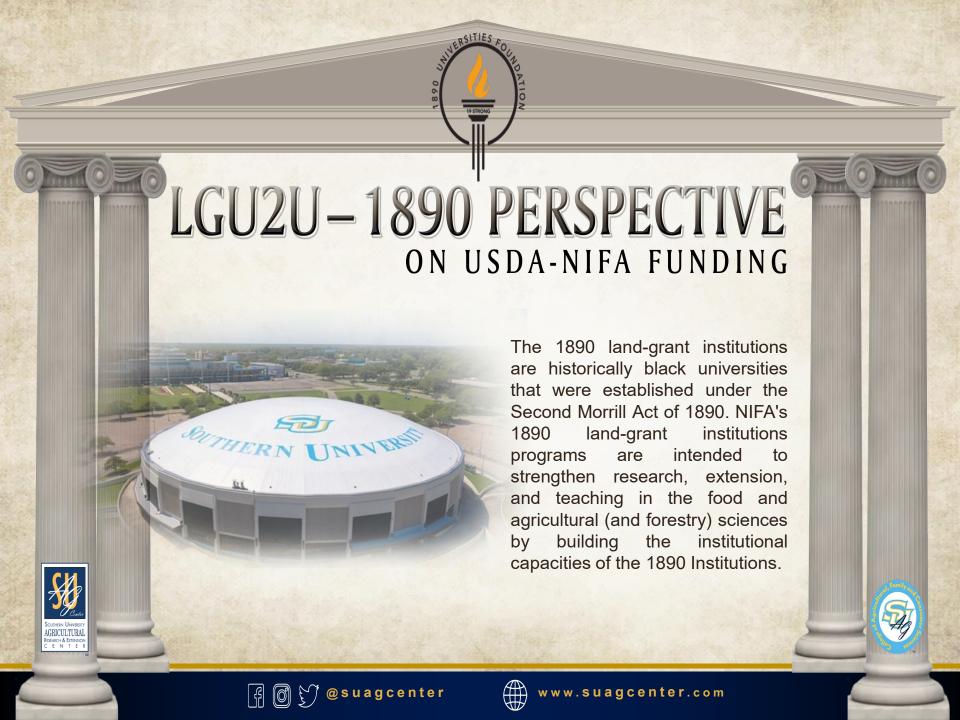


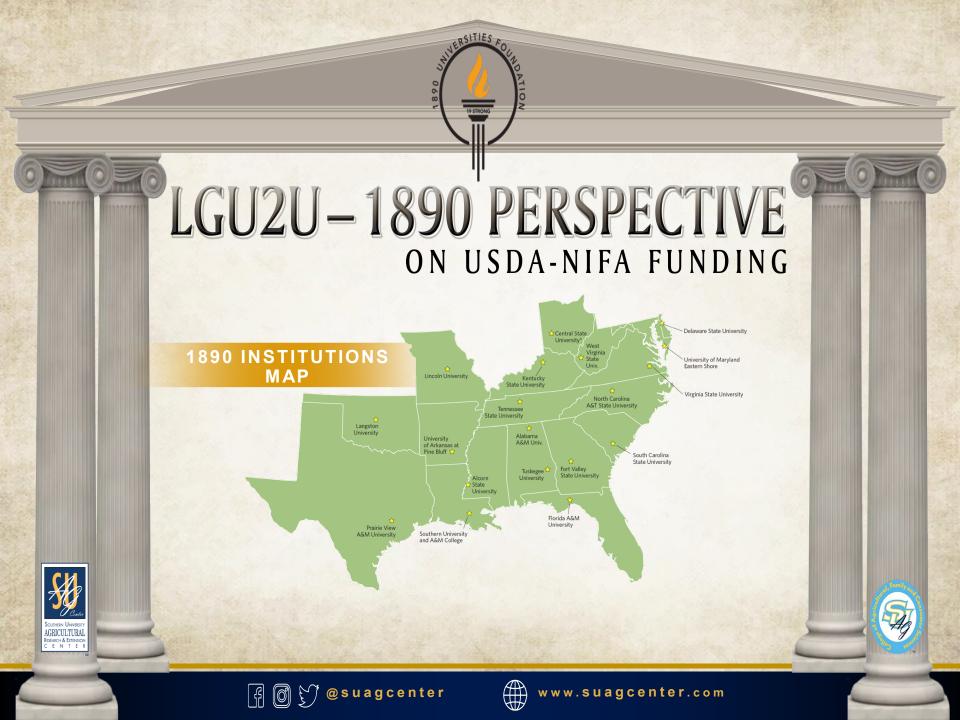




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LGU2U-1890 PERSPECTIVE ON USDA-NIFA FUNDING

CAPACITY BUILDING FUNDS

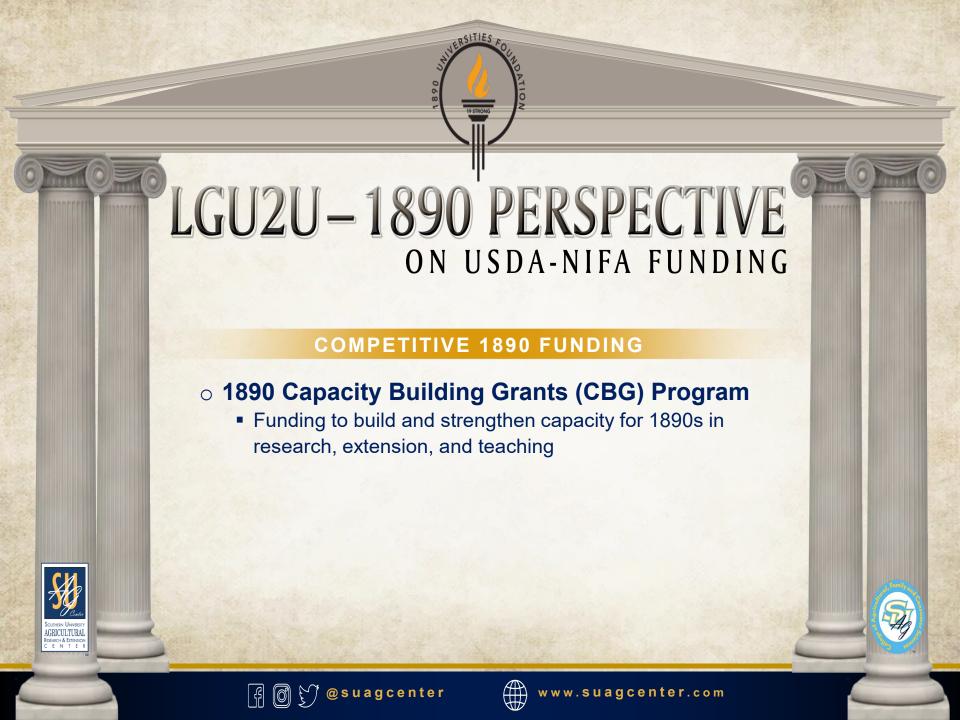
- **Evans Allen**
 - Research staple funding for 1890s
 - The ceiling is 30% of Hatch
- 1890 Extension
 - Extension/Outreach staple funding for 1890s
 - The ceiling is 20% of Smith Lever
- 1890 Facilities Funding
 - Annual allocation of funding to support building and renovations of Agricultural facilities and related infrastructure in connection with R/E/T

- Due to limited amount of annual allocation: Often must accrue funding over years for larger construction and renovation projects.
- Cost of construction over 20% greater after pandemic.
- 1890s have received some criticism. for having a significant amount of funding carried over













LGU2U-1890 PERSPECTIVE ON USDA-NIFA FUNDING

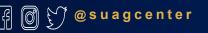
OTHER KEY PROGRAMS & FUNDING

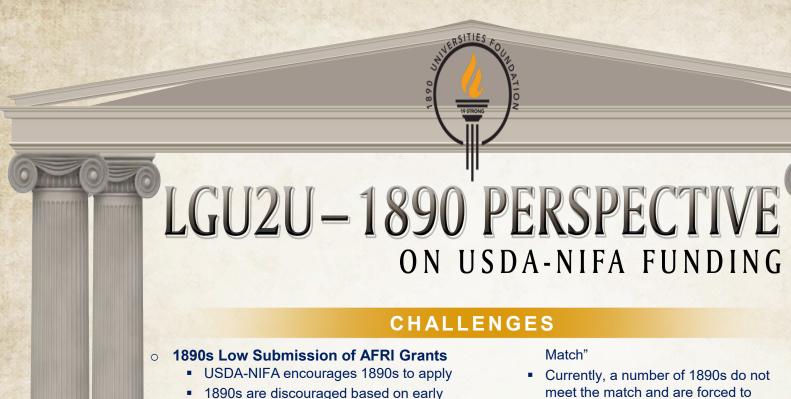
- 1890 Scholarship Program
 - Newest 1890 program
 - The purpose is to increase the number (and quality) of students studying agriculture, food, natural resource sciences, and other agriculture-related disciplines
 - Legislation allocates \$500,000 in mandatory funding per 1890 Institution

- Up to an additional \$500,000 in discretionary funding per 1890 Institution
- Each 1890 has received \$1,000,000 in scholarship funding annually
- Southern University's 1890
 Scholarship program is called Jag
 S.T.A.R.S. (Student Training in Academics, Research and Service)









- low success rates
- AFRI requires a matching component on a dollar-for-dollar basis of the federal allocation.
- Still encourage 1890s to apply for AFRI

State Match

- 1890s are federally mandated to match its research and extension formula funding 1 to 1 with a non-federal match
- Commonly referred to as a "State

- request a waiver
- A minimum of 50% match is required (and the other 50% can be waived at the discretion of the Secy. of Ag) or else lose federal funding
- While 1890s continue to advocate for increases in USDA federal research and extension formula funds, it also exacerbates the issue around meeting the state match requirement













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Accountability for Competitive and Capacity Funding

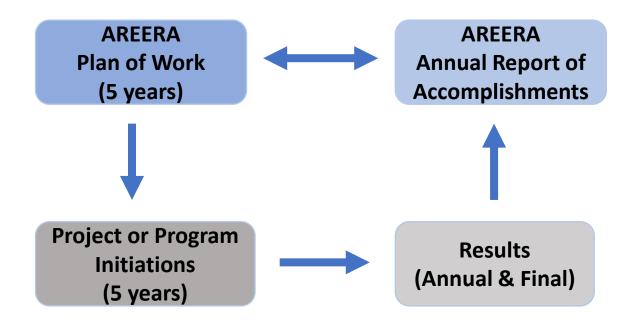
Deb Hamernik
Deputy Director
Institute of Food Production & Sustainability

LGU2U Phase II Program November 17, 2022

Accountability:

- Competitive programs:
 - NIFA relies on the peer-review process to recommend projects for funding
 - NPL (as the program contact) oversees peer-review process and follows recommendations from peer-review panel to make funding decisions
 - Renewal applications:
 - Peer reviewers evaluate progress as described in renewal application
 - Also review final progress report in NIFA Data Gateway

AREERA Capacity Funding



LGU: Merit or Scientific Peer Review

NIFA: Administrative Review

Accountability (continued):

- Capacity programs:
 - Funding allocated directly to LGU
 - Directors decide how to spend capacity funds
 - Salaries
 - Seed grants to enhance competitiveness
 - Start-up or retention packages
 - Long-term or high risk/high reward projects (breeding, germplasm preservation, ecological studies, etc.)
 - Items hard to fund through competitive programs (databases, monitoring, etc.)
 - LGU conducts merit or scientific peer review of projects and programs
 - NIFA conduct administrative review

NIFA Administrative Review Capacity Initiations:

- Usually NPL (sometimes Division Director)
- Align NIFA subject matter expertise with scope of project/program
- Administrative review focuses on ensuring:
 - Compliance with legislative purpose of the funding/federal laws and NIFA guidelines.
 - Alignment with the mission of the USDA-NIFA and is relevant to food and agricultural sciences (as defined in AREERA).
 - Planned activities are consistent with the approved **5-year Plan of Work**.
 - Compliance approvals for research with human subjects (IRB) or vertebrate animals (IACUC)

Review Annual Reports (competitive)/Results (capacity):

- NIFA reviews:
 - Progress toward completion of objectives
 - Potential for outputs, outcomes, and impacts after completion
 - Changes in project or program direction due to unforeseen circumstances

NIFA Expectations (Capacity and Competitive):

- Outputs: Abstracts, publications, # trainees, patents, inventions, new germplasm, etc.
- Outcomes: New knowledge; Changes in management practices or behavior (adoption of new farming practices, change in diet)
- Impacts: Long-term changes in conditions (profitability, environment, health and well-being, etc.)

Review Final Reports (competitive)/Results (capacity):

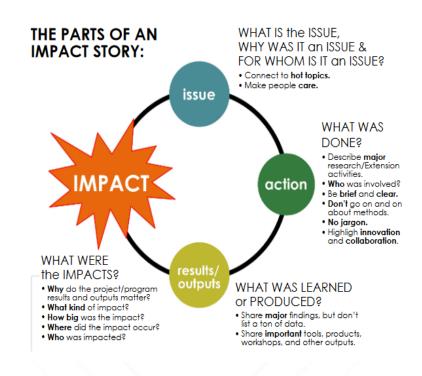
- Covers entire duration of project or program (not just last year)
- NIFA looks for outcomes and impacts to communicate success stories:
 - Addressed important or timely problem/challenge/critical issue. Who cares and why?
 - What was done to address the problem?
 - Describe change in knowledge, actions, or conditions as a result of this project or program to address the problem/challenge/critical issue.
 So what? Provide quantitative date, if possible.
 - Economic (profitability)
 - Environment (land use, water quality, soil health, etc.)
 - Health and well-being (improved health, quality of life, etc.)

How Impacts (Success Stories) are Used:

- Planning and defending the NIFA budget
- Evaluating NIFA programs
- Communicating accomplishments and impacts:
 - Congress
 - USDA Administration (REE and Secretary of Agriculture)
 - Stakeholders
 - Advocates for NIFA
 - Reporters/News Media
 - Public

Multistate Research Fund Impacts

https://www.mrfimpacts.org/impact-writing-workshops



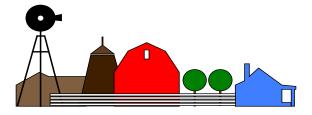
Non-Discrimination Statement

https://www.usda.gov/non-discrimination-statement

- In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs, are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.
- Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.
 Additionally, program information may be made available in languages other than English.
- To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax (202) 690-7442; or (3) email: program.intake@usda.gov.
- USDA is an equal opportunity provider, employer and lender.

Questions?

Deb Hamernik
Debora.Hamernik@USDA.gov

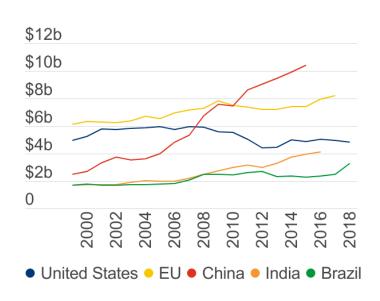


Research Capacity Funds

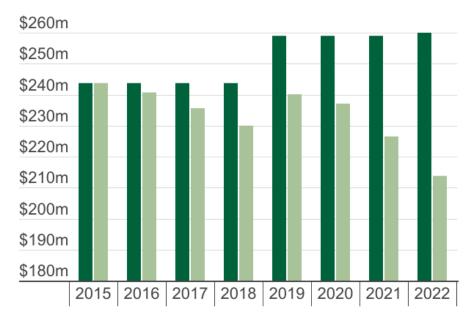
- ☐ Hatch Regular
- ☐ Hatch Multistate
- Evans-Allen
- ☐ Animal Health and Disease
- McIntire-Stennis

Program Description and History

Public Investment in Ag R&D



Hatch Funding History



Nominal \$ Inflation Adjusted

Since 2004, funding declines led to:

Scientist FTEs

Research projects

Annual hours of ag research





12.37 million

-21% -20%

-32%

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Thank You For Your Time!

Please watch for follow up messages with "LGU2U" in the subject line.

For updates:

https://www.ncra-saes.org/nc-lgu2u-initiative