



1890 Land Grant University 125th Anniversary Centers of Excellence

Center for Innovative and Sustainable Small Farms, Ranches and Forest Lands (CISFRL)

An integrated research, extension and education center focused on increasing profitability for small farmers, including socially disadvantaged/underserved farmers, ranchers and forest landowners and impacting jobs, economic development and natural resources management in strike force areas. The nineteen 1890 universities propose to work with clusters/cooperatives of socially disadvantaged and underserved farmers and ranchers (SDUFRs) to focus on substantially increasing fruit, vegetable, timber, and cattle production, marketing and profitability in persistent poverty/strike force counties in the southern region.

The goal of the CISFRF is to create small farm clusters and thereby increase the sustainability and profitability of farms in persistent poverty areas. When hooked up with appropriate marketing partners such as grocery chains, packing plants, school systems, or restaurant distributors, these farm clusters have sufficient volume, collective clout and reliability to become vendors of choice for the marketing partners. In connecting these farm clusters with the appropriate marketing partners, it is anticipated that access to healthy and nutritious foods will be increased for the surrounding rural communities as well.

Specific Objectives

1. Stakeholder Engagement. Identify target SDUFRLs/SDUFRL clusters in each state and develop an engagement plan(s) based on current market opportunities and simultaneously identify and work with marketing partners that will facilitate fresh and nutritious foods to underserved populations.
2. Partnerships. Build upon existing successful marketing and supplier partnerships and support and proactively facilitate integrated USDA agency partnering with regard to small farmers and ranchers and SDUFRLs and SDUFRL clusters.
3. Implement Integrative Research and Extension that assesses and demonstrates the Social, Economic, and Environmental Acceptability and profitability of the Integrated Crop-Livestock Agro-ecosystems.
4. Development of the next generation of the agricultural workforce: Enhance Educational Delivery for Students at Minority Institutions in Agricultural and Related Studies to Increase Experiential Learning, Internship Opportunities, Recruitment and Retention.
5. Local Nutrition and Health. Focus on the development of production strategies that increase availability and affordability of foods that contribute to the health and wellness of local populations.

Potential Impact and Expected Outcomes.

A near-term outcome is enhanced profitability of our participating farmers, ranchers and land owners. Longer-term outcomes include healthier families, enhanced quality of life in rural communities, and increased opportunities for the sustainability of small farms.



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*Virtual Center to **Motivate and Educate for Achievement** –1890 **MEA** Center*

According to the U.S. Census Bureau, U.S. minority populations will outnumber white, non-Hispanic populations about four years earlier than previous predictions. If enhancing the educational opportunities of these burgeoning populations is not addressed, national prosperity and the U.S. world standing will continually be diminished. The 1890s collectively and with partners from government, private and philanthropic sectors could readily address some of the associated workforce pipeline issues. Irrespective of race and ethnicity, the workforce demand for graduates in the food and agricultural sciences is overwhelming. The USDA is as deeply concerned about pipeline development as is the private sector and both recognize the need to not only expand but significantly increase the diversity of the pipeline as well. The **1890 Virtual Center to Motivate and Educate for Achievement (The MEA Center)** would serve as an expansive resource center for developing and sustaining a diverse and talented STEAM workforce pipeline by working collaboratively with the government and private sectors.

Goals of the Virtual MEA Center

Under the consortium, the 1890s would work *collaboratively*, to employ a variety of programs to “*Motivate and Educate for Achievement.*” Coalitions/Alliances would be essential to make significant impacts, and public, private and government entities would be critical to implementing the programmatic objectives. The Center would serve as a national source of talented career candidates because of the 19-campus network and would develop an expansive database of performance indicators related to student participants and program initiatives so that evaluations and tracking of the students from start to program completion would demonstrate what is successful and could be used as a model for the nation.

Primary objectives of MEA:

- To leverage resources that aim to strengthen workforce pipeline diversity in the food and agricultural sciences
- To collaborate with government and private sectors in educating students with both disciplinary competencies and job-ready soft skills

Examples of programs and activities that would be funded under the MEA Center:

First Generation to College
Workforce Pipeline Centers
STEAM Academies
4-H STEM Programs
Leadership Academies

Working together and with the varied government and private sector partners, the 1890s, through the MEA Center, will be able to generate new insights or perspectives and be continuously innovative and strengthened by the results of the collaborations. Finally, the current 1890 MEA-type programs are run on shoestring budgets at the 1890s. With more equitable funding, invigorated, broader and diverse partnerships, and hundreds of students participating, these collaborative programs will lead to greater recruitment and retention at our institutions and a stronger, more competent and diverse workforce pool for government and non-government sectors to employ. Through participation on advisory boards, and assisting in curriculum development and as mentors and supervisors of the student participants, the partners will assist in making the programs under the *MEA* Center innovative and dynamic.



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Center of Excellence for International Engagement and Development

1890 universities have a long history of engagement in international activities. However, the small size of individual program has been a challenge in terms of developing large global initiatives. The purpose of a Center of Excellence and Innovation in International development will be to ensure that 1890 Universities are effective in delivery of their mission in an increasingly interconnected, interdependent and highly competitive world.

Such a center will allow the 1890 system to:

- Satisfy the nation's needs for a diverse globally smart workforce. This is critical because nearly 30% of United States GDP is tied to global trade and investment and that more than 95% of the world's population and 80% of the purchasing power being outside the United States..
- Support critical global development needs. The economic, social and political development of the rest of the world is a high priority for the United States given the growing importance of trade as a component of the US economy. Furthermore, prosperity and stability of other countries has significant implications to US national security and the challenge for increasing global food production by 70% to feed 9 billion people by 2050 looms big.
- Address trans-boundary research and education challenges of interest to the US. A range of priority issues transcend boundaries such as phytosanitary concerns, the safety of food systems and broad ranging issues such climate change, and conservation and use of biodiversity.

Goal and Objectives

The overall goal of the Center is to facilitate a more effective response by 1890 institutions to the complex challenges of a globalized society. The specific objectives of the Center will be:

1. **International education and training:** The Center will promote and support the provision of comprehensive educational opportunities that will effectively prepare both domestic and international students for the global society. The primary outcome of this objective will be to increase the supply of well-trained graduates in the U.S. and abroad to satisfy the workforce needs of both public and private sector entities especially in critical need areas.
2. **International cooperation, trade and development:** The Center will support the growth of trade initiatives through targeted programs that increase the penetration of US products. It will also support programs that focus on the development needs of priority trade partners including institutional capacity building, poverty alleviation, food security and environmental sustainability.
3. **Coordination and delivery of international programs:** The third objective will be focused on development of effective mechanisms to ensure the efficient delivery of the center's programmatic activities.



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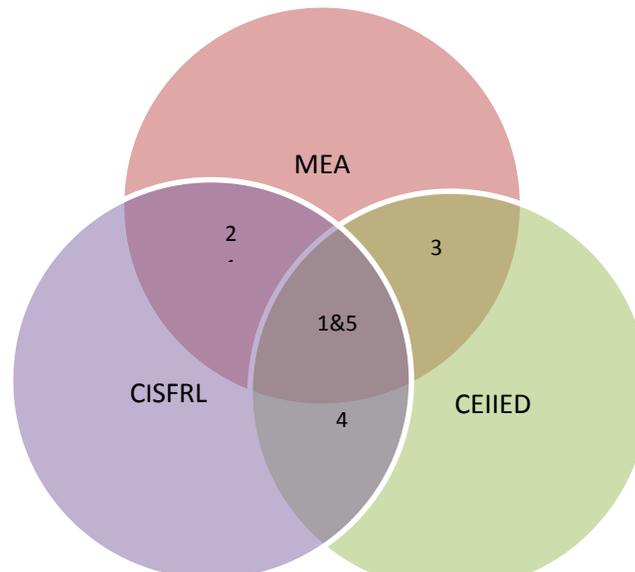
Overview of 1890 Land Grant 125th Anniversary Centers

Center Goals and Synergies

The goals of the 1890 125th Anniversary Centers are designed to substantially increase diversity in the STEAM pipeline, increase profitability and jobs in underserved farming communities and enhance talent preparation related to global food security. The institutions and organizations involved will work in an integrative fashion across multi-disciplines and in partnership with private sector, government and community based organizations to make a difference and obtain measurable impacts on the lives of underserved youth, farmers and developing communities who hold great potential but “just need an 1890 land-grant hand.”

CISFRL-Center for Innovative and Sustainable Small Farms, Ranches and Landowners

- Model Small Farmer Clusters/Coops focused on Fruits & Vegetables and Cattle **Profitability** & Related Rural Job Creation & Sustainability
- Develop Mutually Beneficial Marketing & Supplier Partnerships
- Integrative Research & Extension- Interdisciplinary, Participatory & Adaptive (Sciences, Engineering & Social Sciences)
- Student Education/training including High School, Community College, BS, MS and PhD levels focused on Small FRL technology, processing & marketing, profitability, cluster/cooperative leadership & internships



MEA- Virtual Center to Motivate and Educate for Achievement

- First Generation to College
- Workforce Pipeline Centers
- STEAM Academies
- 4-H STEM Programs
- Leadership Academies
- -Civic Entrepreneurial Academy
- Graduate Degree Programs

CEIIED- Center of Excellence for International Engagement and Development

- Satisfy the nation’s needs for a diverse globally smart workforce
- Support critical global development needs
- Address trans-boundary research and education challenges of interest to the US.

MEA-CISFRL-CEIIED Integratively Produces a Smart U.S. Based and International Workforce, Increases Profitability and Jobs on Small Farms & in Rural Communities and Addresses Priority Research and Education Challenges:

1. Develop Smart U.S based and international Workforce - Undergraduate and Graduate Students in STEAM Fields; Internships in the Private Sector, Government and Community Based Organizations, including Farmer Clusters & Participation in International Projects
2. Undergraduate and Graduate Students - Internships, Service Learning, Work Study and Class Projects with Farmers/Farmer Clusters
3. Undergraduate and Graduate Students Engaged in International Research and Development Projects
4. Farmer-to-Farmer and Farmer Cluster-to-Farmer Cluster (e.g. Cooperatives) Sharing of Best Practices
5. Science-based results will serve to inform policy; results will be published in archival journals; and best practices disseminated.

