TESTIMONY OF DR. JULIETTE B. BELL BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES AGRICULTURE COMMITTEE

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Meeting 21st Century Challenges for Innovation in Agriculture, Science, Engineering and Technology

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To each of you, the members of the United States House of Representatives, good morning/afternoon.

My name is Dr. Juliette B. Bell and I am honored to bring you greetings not only as president of the University of Maryland Eastern Shore, but also as the Chair of the Council of 1890 Universities of the Association of Public and Land Grant Universities, and as Co-chair of the USDA/1890 Taskforce, established by the U.S. Secretary of Agriculture.

Congressman Justin Morrill, one of the founders of the Republican Party, authored the Land Grant College Act of 1862, in order that colleges be established for the endowment and support of the education of the "sons of toil;" that they should be educated not only in classical studies and military drill, but also in the mechanical arts, and agriculture, which Morrill described as "the foundation of all present and future prosperity."

Enacted in the midst of the Civil War, The Morrill Act, as this legislation would become known, did not provide for the education of the African-American citizenry, as segregation of races prohibited the admission of African-Americans to these land grant colleges.

Following the Civil War, in the years of reconstruction, Senator Morrill continued his advocacy for the "sons of toil", this time seeking to include those citizens of color who were not provided for under the original Act.

Thus, in 1890, with the enactment of the Second Morrill Act, funds from the sale of public lands were set aside for "the more complete endowment and maintenance" of land grant colleges except that no funds would be distributed to states where there was a "distinction of race or color" in admissions. However, the Act did stipulate that "the establishment and maintenance of such colleges separately for white and colored students" would be considered compliant with the Act provided the State "equitably divided" those funds between the institutions.

And so, in Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Ohio, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia, 19 universities, founded primarily for the education of African-American "sons and daughters of toil", were designated land-grant institutions, with the notion that educational opportunity was not reserved for an elite few, but available to all, regardless of race or class.

Today, these 19 universities celebrate the 125th anniversary of the Second Morrill Act, which made it possible for each of these universities to fulfill Senator Morrill's mission.

Indeed, the land-grant mission, established more than a century ago, remains as relevant today as it was in 1890. Today, the 1890 universities continue to focus on the teaching of practical agriculture, science and mechanical arts to improve and uplift our communities in a time when race and class remain obstacles for so many.

Collectively, the 1890s, as these universities are called, have led the way for innovation, discovery, and outreach and have provided access to education and opportunities for countless thousands of students across the country.

Founded in 1886 as the Delaware Conference Academy with a mission focused on educational opportunity for former slaves and freemen, the University of Maryland Eastern Shore was designated as Maryland's "1890" university.

For more than a century, the University of Maryland Eastern Shore has embraced and advanced the land grant mission.

At this time, I would like to take a few moments to introduce you to the University of Maryland Eastern Shore, our programs and our accomplishments as a result of the funding we receive to advance the land grant mission.

STATISTICAL INFORMATION

- Located on more than 1,100 acres on Maryland's Delmarva Peninsula
- Over 4,200 students
- 270 full and part-time faculty
- 14:1 student to faculty ratio
- 78% of our students are Maryland residents, with a significant number from others states and some 30 nations
- 67% African American, 33% other race students

OUR PROGRAMS

- 38 undergraduate majors including: Agriculture and Agribusiness
- 22 graduate programs including masters and doctoral degree programs in Food and Agricultural Sciences, Food Science and Technology and Marine and Estuarine Sciences, Natural Resource Sciences and Quantitative Fisheries and Resources Economics

FUNDING

The university's annual operating budget is approximately $141 million.

For FY 2015, UMES received $3,861,253 in federal capacity support for research, extension, facilities and forestry while our sister institution received $6,867,792 for its capacity programs.

IMPACT OF FUNDING

The funding we receive has enhanced the university's capacity to deliver practical education and training for students, particularly in areas of innovation in science, engineering and technology. But, perhaps most critical have been the developments in agriculture, food and natural resources sciences.

In the next few minutes I would like to address three critical areas where the funding has had the greatest impact. These areas are:

- Workforce Development
- Research and Innovation
- Engagement and Outreach

Workforce Development:

Clearly the nation's emphasis on the development of human capital has been the most essential ingredient in ensuring continued growth. Today, the challenge of developing an educated, diverse, highly skilled, and innovative workforce remains a top priority. The foresight of Senator Morrill was truly inspired.

As an 1890 institution, UMES' role in providing access and opportunities for many who would otherwise not have had a college education is critical. Today, UMES is one of the most diverse campuses in the University System of Maryland, as we continue to focus on our core mission, while ensuring access to all. We offer 8 baccalaureate degrees, 4 master's, and 3 PhD degrees in critical Science, Technology, Engineering, Agriculture, and Mathematics (STEAM) areas.

In many ways institutions such as ours face even more hurdles in comparison to our 1862 counterparts in ensuring that we provide quality education to many students who are often underprepared for college. Such students often require greater attention and support – a challenge we have embraced by being innovative in our educational approaches.

Research and Innovation:

UMES has leveraged its annual federal research capacity appropriation of about $1.5 million to establish nationally recognized programs in key areas such as food security and safety, water security, obesity prevention, forestry, climate change mitigation, and conservation and use of coastal and marine living resources. Using our unique geographic location between the Atlantic Ocean and the Chesapeake Bay on the Delmarva Penninsula, we have positioned ourselves strategically to provide critical research and serve key constituents in our region.

Our scientists have continued to position themselves at the cutting edge of new innovations. For instance, given the importance of food and water security, our scientists are exploring how unmanned Aerial Vehicles (UAVs) can be used in precision agriculture to improve the efficiency of water use and application of nutrients to large commodities such as corn with very promising results.

Just over a decade ago we established a state of the art research facility with federal and state support. This facility and its nationally recognized faculty have become a nucleus for critical research on poultry and seafood safety and quality, Dr. Salina Parveen, one of our food safety specialists, serves on the Secretary of Agriculture's National Advisory Committee on Microbiological Criteria for Foods.

Given our geographic location on the Eastern Shore, in the heart of Maryland's $8.5 billion dollar poultry industry, our faculty and students have been invaluable in generating knowledge on food safety. Our extension faculty are working directly with the seafood industry, another important sector in Maryland to support the safety of seafood products. More recently and in collaboration with USDA ARS and FDA, UMES is at the heart of critical research on fresh produce safety, as well.

Our research enterprise extends to a number of other important areas, and the potential for growth is immense.

Engagement and Outreach

It is critical for us as a land grant university to address the many national challenges and one of these has to do with rural poverty and health. Through strong extension programs, we have over the years strengthened our services to small farms and rural communities as well as the underserved in urban areas.

Thus, recognizing the importance of providing a firm foundation for our children, our youth development programs provide a supportive setting for all youth to reach their fullest potential. Through 4-H and STEAM initiatives, youth learn beneficial cognitive and life skills through community-focused, research-based experiential educational programs.

UMES participates in the Expanded Food and Nutrition Education Program (EFNEP), with initiatives targeting both youth and adults and thus achieving the primary goal of

improving the diets of limited resource families and thus enabling them to enjoy better health, an improved quality of life, and increased productivity.

For many years, UMES has implemented a Small Farm Outreach Initiative for farmers in Southern Maryland and along the Delmarva Peninsula with the primary goal of improving the economic conditions of small-scale, limited-resource, and socially disadvantaged farmers by providing educational programs and training that improve their farm management skills and expedite their access to and participation in USDA farm programs.

THE FUTURE

We continue to seek ways to enhance our ability to deliver solutions in key areas. Indeed, this year we have initiated a process of consolidating our capacity in key areas where we can deliver meaningful outcomes. To this end we have recently launched four centers.

- Chesapeake Water Quality Center
- Center for Obesity Prevention
- Center for Agribusiness and Economic Development and,
- International Center for Personal Protective Equipment

These centers will allow us to form strong and enduring partnerships to deliver solutions for the people of Maryland, the nation and world.

Continued strategic investment in the 1890s at the state and federal levels will allow us to continue carrying on the mission that was envisioned by Senator Morrill. Greater investments will allow us to be even more competitive and effective at producing an educated and diverse workforce to address the many issues that face our world today. As we celebrate this momentous 125th Anniversary of the signing of the Second Morrill Act of 1890, we look back with pride on our accomplishments and we forward to the many challenges that our 1890 universities can and will address, with your continued support.

Strategic investment in the 1890s is investment in the future.

Again, thank you for your continued commitment and support of the University of Maryland Eastern Shore and all of 1890 universities..