Clemson University
College of Agriculture, Forestry, and Life Sciences (CAFLS)
Strategic Plan 2016-2026

Mission
The College of Agriculture, Forestry and Life Sciences provides integrated education, research, extension and public service to address challenges related to sustainable agriculture and natural resources in support of Clemson’s goal to be a top 20 university.

Vision
To be a national leader in education, research, outreach and extension programs that provide integrated and sustainable solutions for agriculture and natural resources.

STRATEGIC PRIORITIES AND CORE STRATEGIES FOR SUCCESS

STRATEGIC PRIORITY: Develop a unified plan for CAFLS and PSA.
Core Strategies:
- Develop a CAFLS/PSA research, extension and academic plan that includes joint priorities.
- Establish an administrative structure to ensure a smooth integration, equal representation, and accountability to state and federal funding sources.
- Improve efficiency of business processes to ensure effective operations.
- Resolve cultural issues that may affect unification.

Performance Measures: Development and implementation of plan; identification and resolution of administrative, business and cultural issues resulting from unification.

STRATEGIC PRIORITY: Provide undergraduate education that prepares CAFLS graduates for success.
Core Strategies:
- Regularly assess and revise undergraduate curricula to strengthen core competencies and maximize student preparation for diverse careers.
- Promote current academic engagement and develop new initiatives to enhance student educational experiences.
- Increase experiential learning and undergraduate research opportunities for students.
- Strengthen programs that support undergraduate student success.

Performance Measures: Increased student participation in academic engagement, experiential learning undergraduate research, and global engagement; improvements in retention and graduation rates.
STRATEGIC PRIORITY: Strengthen CAFLS graduate student programs.

Core Strategies:
- Strengthen courses and programs that support graduate student success.
- Enhance national recognition of graduate student programs through proactive marketing.
- Develop and implement graduate student recruitment and incentive plans to attract high quality applicants and increase enrollment.
- Increase the number of professional development opportunities for graduate students.

Performance Measures: Increase in graduate school enrollment; increase in the number of professional development opportunities for graduate students; graduate program awards and recognition; increase in doctoral degrees awarded.

STRATEGIC PRIORITY: Strengthen research quality and impact.

Core Strategies:
- Develop an action plan to build a national reputation for excellence in research and scholarship.
- Increase research and scholarship productivity.
- Improve, upgrade, and expand research infrastructure and support.

Performance Measures: Development of 10-year research facilities plan; development of joint CAFLS/PSA research plan; increase in annual production of nationally recognized forms of scholarship; increase in annual submission of research proposals and externally funded research expenditures; research awards and recognition.

STRATEGIC PRIORITY: Deliver knowledge to communities and industries through relevant extension, service and outreach activity.

Core Strategies:
- Rebuild extension capacity in academic departments and develop mechanisms to ensure accountability.
- Promote CAFLS faculty involvement in PSA programs that support S.C. agriculture, forestry, natural resources and community and economic development.
- Develop and implement an equitable model to recognize and define responsibilities of extension/outreach and industry service.

Performance Measures: Increase in CAFLS extension faculty; development of CAFLS/PSA joint extension plan; development of model to recognize extension and industry service.

STRATEGIC PRIORITY: Create a more diverse and inclusive college community.

Core Strategies:
- Develop and implement a college diversity and inclusion plan to increase faculty, staff, and student diversity and improve inclusion efforts.
- Coordinate with University diversity and inclusion initiatives.
- Enhance workplace quality of life and recognize faculty and staff contributions.

Performance Measures: Development of college diversity and inclusion plan; increase in percentage of underrepresented student population; increase in the number of underrepresented instructional faculty members; improving campus climate and COACHE survey results; faculty and staff recognition and awards.

STRATEGIC PRIORITY: Address regional and global challenges through interdisciplinary and multi-institutional collaborations.

Core Strategies:
- Enhance interdisciplinary and multi-institutional activity.
- Increase teaching, research, extension and outreach collaborations.

Performance Measures and Outcomes: Increase in the number of interdisciplinary and/or multi-institutional research proposals submitted and funded; increase in the number of teaching, research, and extension collaborations.
Mission
AS will provide exemplary teaching, research, and extension/outreach programs in agricultural, natural resources, and environmental sciences.

Vision
AS will lead in delivering Clemson University's land grant mission of teaching, research, and engagement/outreach to the citizens of South Carolina, the region, the nation and across the world by contributing to a global economy that values the environmental, economic, and social benefits of sustainable agriculture and our natural resources.

STRATEGIC PRIORITIES AND CORE STRATEGIES FOR SUCCESS

STRATEGIC PRIORITY: Excellence in Teaching and Education of Students
Core Strategies:
- Educate students through nationally recognized curricula that prepares them for successful careers.
- Establish M.S. and Ph.D. graduate degree program in AS.
- Strengthen linkages with agribusiness and natural resource industries, educational institutions, governmental and non-governmental organizations through the use of class-based student research projects conducted for stakeholders, student internships, and graduate student research.
- Encourage a basic understanding of various cultures for successful engagement in a global market.
- Increase enrollment for both the undergraduate programs and graduate programs.

Performance Measures: Career placement; exit interviews; graduation rates; number of students enrolled in MS and PhD programs; number of undergraduates participating in Study Abroad; student enrollment.

STRATEGIC PRIORITY: Excellence in Research and Scholarly Achievement
Core Strategies:
- Establish a nationally-recognized research program.
- Increase external funding to support and continue to build the department’s research and graduate program with a goal of a 50% increase in external funded research over the 10 year period of the Clemson Forward plan.
- Increase involvement of undergraduate students in research.
- Produce publications to promote the research and other scholarly work being conducted by the department faculty with a goal of a 50% increase in production over the 10 year period of the Clemson Forward plan.
Performance Measures: Increase in number and value of grant proposals submitted; increase in number of grants awarded; increase in number of AS students participating in Creative Inquiry; increase in number of publications and other scholarly works.

STRATEGIC PRIORITY: Excellence in Outreach, Extension and Public Service
Core Strategies:
• To provide practical research-based information to the citizens of South Carolina and the nation.
• Provide leadership and expertise to extension education and related applied research.
• Increase public visibility of Extension/Public Service Activities.
• Increase departmental Extension/Public Service Revenue.

Performance Measures: Increase in number of extension programs and publications documented by CUMIS; increase in number of program participants and generated revenue from programs.

STRATEGIC PRIORITY: Recruit, develop and retain exceptional and diverse faculty and staff.
Core Strategies:
• Work with the Office of Inclusion and Equity to develop a comprehensive diversity plan.
• Work to increase employee satisfaction and retention.
• Support professional development.
• Ensure a fair, respectful and collegial work environment.

Performance Measures: Increase the number and diversity of tenured/tenure track faculty and provide funding for faculty/staff professional development.

STRATEGIC PRIORITY: Nationally Recognized Programs and Faculty
Core Strategies:
• Promote and enhance the national and international visibility of AS faculty, students and academic programs.

Performance Measures: Faculty and student awards and publications.

STRATEGIC PRIORITY: Physical and Fiscal Infrastructure
Core Strategies:
• Upgrade and enhance existing facilities and equipment.
• Increase endowment support from alumni, advisory council, and key stakeholders.
• Obtain additional funds through lab improvement grants.

Performance Measures: Upgrade and renovate existing teaching and laboratory facilities including equipment upgrades; increase in endowment funds and other funding support.
Clemson University College of Agriculture, Forestry, and Life Sciences
Department of Animal & Veterinary Science (AVS)
Strategic Plan 2016-2026

Mission
Advancing animal agriculture for the betterment of society through science-based learning, outreach and research.

Vision
AVS will be the preeminent animal and veterinary sciences program in the Southeast recognized for the positive impact on society by our students, research and outreach.

STRATEGIC PRIORITIES AND CORE STRATEGIES FOR SUCCESS

STRATEGIC PRIORITY: Educate students to think critically, communicate and apply scientific knowledge in the field of animal science.

Core Strategies:
• Provide a rigorous science-based curriculum to prepare AVS students for diverse career opportunities.
• Ensure appropriate class sizes (15-20 for labs; 30-35 for junior/senior level classes) so that scientific knowledge can be taught effectively and questions/concerns can be addressed for each student.
• Strengthen and grow the graduate program.
• Enhance undergraduate and graduate experiential learning opportunities.
• Enhance diversity and inclusivity of the faculty and students of AVS to encourage discussion of differing perspectives.
• Provide cutting edge/hands on teaching facilities for AVS students.

Performance Measures: Career placement; exit interviews; undergraduate and graduate student graduation rates; study abroad student participation rates; broader coursework offerings (especially in the graduate program); new and/or improved teaching facilities (e.g., new meat/poultry processing lab); expanded access to quality research and internship opportunities.
STRATEGIC PRIORITY: Engage a community of scholars to innovate and seek discoveries in the field of animal science.

Core Strategies:

- Enhance the current departmental focal area (nutrition/physiology of forage animals) and develop a second complimentary focal area of research.
- Increase annual grant awards, research proposals, refereed publications and expenditures over the next 5 years.
- Expand capacity and quality of departmental research space.

Performance Measures: $320K in annual grant awards; $2.7 million in annual grant proposals; $540k in annual research expenditures; 30 refereed (or equivalent) publications (scholarly works) annually; build a new meat/poultry processing lab; increase research wet lab space to 20,000 sq. ft.; plans developed for improved and new research support space at the farms.

STRATEGIC PRIORITY: Translate and relay animal science information to society.

Core Strategies:

- Rebuild departmental extension capacity.

Performance Measures: Strategic/action plan developed for reestablishing an Extension (Outreach) function/presence in AVS.
Mission
FEC provides education, research, and outreach to benefit natural resource and environmental management and conservation for South Carolina, the nation, and the world.

Vision
To be a national leader in 1) generating and communicating science-based knowledge in sustainable management of natural resources and environmental conservation; and 2) graduating skilled students in the natural resources profession.

STRATEGIC PRIORITIES AND CORE STRATEGIES FOR SUCCESS

STRATEGIC PRIORITY - Enhance quality of undergraduate and graduate programs.

Core Strategies:

• Develop a 5-year hiring plan to support teaching that emphasizes diversity and excellence in courses, instructors, and students.
• Expand and intensify curricula review of degrees to modernize and strengthen undergraduate course offerings in ENR, FOR, and WFB.
• Utilize Baruch Institute for Coastal Ecology and Forest Science (BICEFS) faculty expertise in departmental undergraduate and graduate teaching.
• Build faculty capacity in wood science and wood products to support the Wood Utilization + Design Institute, the forest products minor and the forest products industry ($21 billion industry).
• Build departmental capacity to offer online courses.
• Review and revise the Department's assessment plans for degree programs.
• Increase undergraduate enrollment in Forest Resource Management (B.S.).
• Revise graduate curricula to build core of courses that reflect foundational knowledge and address emerging issues in the disciplines.
• Create professional development coursework for graduate students that offers quality teaching, grant-writing, and research publication experience.
• Improve program marketing, student recruitment, retention, and post-graduation data collection.

Performance Measures: 2017: Faculty and staff hiring plan developed; BICEFS collaborative teaching plan developed; online M.S. WFB degree program initiated; undergraduate curricula revised; professional development opportunities for graduate students increased; departmental alumni tracking system developed; departmental social media presence and newsletter created. 2018: Recognition of interdisciplinary, collaborative, and cross-college faculty work in formal evaluations; revision of department’s assessment plan for degree programs. 2019: Curriculum revisions to degree programs. 2021: Increase enrollment in the Forest Resource Management B.S. program to 100 students.
STRATEGIC PRIORITY: Increase research capacity and productivity.

Core Strategies:
- Build grant-making capacity by assisting faculty with all aspects of grant development and submission.
- Increase departmental research capacity by increasing FTE research faculty, number of Ph.D. students, and technical support staff.
- Increase endowed professorships, chairs, and centers of excellence.
- Leverage departmental, CAFLS, Institutes, Clemson, and partner strengths to build stronger research collaborations.
- Obtain consistent and meaningful investment from forest industry for our programs and students.
- Develop and implement a vision for research on the Clemson Experimental Forest.

Performance Measures: 2018: Development of research plans with forestry industry and the Clemson Experimental Forest; facilitate a 30% increase in large grant submissions within 5 years; increase the number of Ph.D. students by 30%. 2019: Renovation of building for Built Environment Laboratory to support wood products research.

STRATEGIC PRIORITY: Restore extension forestry and wildlife programs.

Core Strategies:
- Provide extension agents with quality knowledge based on relevant research in natural resources.
- Improve the integration of research and teaching programs with Extension activities.
- Encourage grant writing collaborations among faculty and Extension personnel.


STRATEGIC PRIORITY: Improve operations to create an inclusive, supportive, and diverse department.

Core Strategies:
- Develop a mentoring program for faculty.
- Reestablish an external advisory board composed of public and private sector partners/alumni and meet annually (or alternate years) with faculty and the department chair.
- Increase operational effectiveness and develop a lasting culture of shared achievement and excellence.
- Recruit and retain excellent and diverse faculty and staff.

Performance Measures: 2017: Implementation of faculty mentoring and faculty recognition incentive programs; development of new business model for department; funding to support faculty and staff professional development secured; development of plan to increase diversity in student enrollment and faculty hires and conduct annual reviews to track changes.
Clemson University College of Agriculture, Forestry, and Life Sciences
Department of Food, Nutrition, and Packaging Science (FNPS)
Strategic Plan 2016 - 2026

Mission

Our mission is to expand knowledge and provide solutions in the areas of food, nutrition, culinary, and packaging sciences for South Carolina and the world.

Vision

Build on our diverse expertise in food, nutrition, culinary, and packaging sciences to become the national leader in integrated solutions and education.

STRATEGIC PRIORITIES AND CORE STRATEGIES FOR SUCCESS

STRATEGIC PRIORITY: National leader in providing a quality undergraduate education across all program areas.

Core Strategies:
- Update and enhance undergraduate curriculum to add breadth and depth to course offerings and supporting labs.
- Provide undergraduates with experiential learning opportunities that can translate into real world application.
- Provide undergraduate engagement opportunities inside and outside the classroom.
- Strategically increase undergraduate enrollment in each program when resources allow.

Performance Measures: 6-year graduation rates that match Top-10 Public University (85 percent); freshman to sophomore retention rates that match Top-10 Public University (96 percent); curriculum revisions.

STRATEGIC PRIORITY: Strengthen departmental research capabilities in each of our program areas to foster innovation and discovery to solve the grand challenges of South Carolina and the world.

Core Strategies:
- Update each graduate curriculum to add breadth and depth to course offerings and increase scholarly productivity.
- Seek to imbricate areas where research, extension activities, and/or industry service can enhance research expenditures and graduate research.
- Provide the necessary resources (financial, equipment, and human) to increase research proposal submissions and maintain an innovative and applied research environment.

Performance Measures: Increase scholarly productivity (e.g., articles, books, citations, grants) by 50% within the ten-year period; increase research proposals and research expenditures by 50% (10-year period); increase doctoral degrees awarded annually by 50% (10-year period).
STRATEGIC PRIORITY: National leader in providing knowledge dissemination, economic development, and technical support to industries and/or regulatory agencies in each of our program areas.

Core Strategies:
- Develop and disseminate translated science-based knowledge, training, and innovation for the betterment of society.
- Provide world-class technical and revenue-generating service and training to our stakeholders and industry partners.
- Develop and implement an equitable model that recognizes and defines responsibilities of outreach/Extension and industry services.
- Leverage service and training efforts to support and enhance graduate and undergraduate research and teaching.

Performance Measures: Programs provide significant economic impact (these include metrics as new product sales, increased tax revenues, job creations) to the state and region; training programs provide certified food safety professionals for compliance with FMSA regulations; nutrition program participants gain increased knowledge in one or more nutrition practices; at least one Extension impact statement published per Extension staff member to convey relevant public service, achievements and scholarship.

STRATEGIC PRIORITY: Strengthen the department’s human capital by providing an inclusive environment.

Core Strategies:
- Create a more inclusive environment for faculty, staff, and student body.
- Provide opportunities for both intra-program and inter-program faculty interactions and collaborations on both professional and personal levels.

Performance Measures: Strive to increase undergraduate diversity and increase underrepresented graduate students by 25% by 2021; double the number of underrepresented faculty members.
Mission
The Department of Plant and Environmental Sciences addresses the needs of our stakeholders through a systematic approach to the understanding of sustainable ecosystems while advancing education, scholarship, and outreach to the public.

Vision
The Department of Plant and Environmental Sciences will deliver nationally and internationally prominent programs with strengths in agronomy, biotechnology, entomology, horticulture, plant pathology, soil and water science, and turfgrass science.

STRATEGIC PRIORITIES AND CORE STRATEGIES FOR SUCCESS

STRATEGIC PRIORITY: Enhance prominence in research and scholarship.
Core Strategies:
- Enhance capacity for extramural research funding.
- Maintain a balanced research portfolio of applied and basic research.
- Increase extramural research funding.
- Enhance the visibility and reputation of our research programs.

Performance Measures (2016-2021):
1) Sponsored Funding Requests:
   - Increase submitted proposals to external granting agencies by 10%.
   - Increase the total sponsored funding request by 10%.
   - Increase the number of proposals that provide overhead by 15%.
   - Increase the number of large grants (>$1 million funding request) by 5%.
2) Grant Expenditures:
   - Increase the annual expenditures (direct/revenue/indirects/GAD) by 5%.
3) Scholarly Outputs:
   - Increase published peer-reviewed journal articles by 10%.
   - Increase peer-reviewed publications in journals with an impact factor of >5.0
   - Increase the number of published conference proceedings by 15%.

STRATEGIC PRIORITY: Deliver nationally and internationally recognized graduate education.
Core Strategies:
- Recruit and retain highly competitive and talented graduate students.
- Increase the reputation and visibility of the graduate programs.
• Enhance inter- and transdisciplinary graduate programs.
• Increase underrepresented student enrollment and promote inclusive excellence.

Performance Measures (2016-2021): Enhance recognition of faculty and staff on a statewide, national and international level by submitting annually 3 award nomination packages outside of the University for faculty and staff; by 2021, increase by 5% the number of graduate students enrolled from 2016-2017 with 30% of them underrepresented minorities, and obtain National Science Foundation Research Traineeship (NRT) Program.

STRATEGIC PRIORITY: Increase enrollment and improve quality of undergraduate degree programs.
Core Strategies:
• Develop a reputation for strong and meaningful support of students.
• Investigate student perspectives on departmental majors.
• Identify, strengthen and market undergraduate program strengths to a larger audience.
• Increase underrepresented student enrollment and promote inclusive excellence.

Performance Measures (2016-2021): Student surveys on departmental support and perspectives on majors; development of a cost-effective professional marketing campaign; increase enrollment of majors by 10%, of which 20% will be underrepresented minorities; obtain grant funding for pre-orientation retreats for freshmen and transfer students.

STRATEGIC PRIORITY: Strengthen collaborative outreach programs that contribute to economic development in South Carolina and the nation.
Core Strategies:
• Expand and diversify stakeholder involvement in program planning.
• Continue to be a focal point of expertise for current and emerging challenges in agriculture and the environment in South Carolina.
• Expand outreach efforts to deliver unbiased research-based information and education programs to stakeholders.
• Expand collaboration regionally and nationally.
• Develop departmental criteria to maintain Extension faculty expertise.

Performance Measures (2016-2021): Communicate nationally what we do as reflected by increasing the number of associated press releases; develop and implement stakeholder web-based platforms to convey Extension discoveries and news; increase contacts each year with stakeholders using general public publications, and existing and new electronic technology.

STRATEGIC PRIORITY: Create a supportive environment to recruit and retain diverse faculty and staff.
Core Strategies:
• Work with the Office of Inclusion and Equity to develop a comprehensive diversity plan.
• Create a committee to organize annual events and activities to build community.
• Support opportunities for employee professional development.

Performance Measures (2016-2021): Develop and implement a plan to increase and retain departmental diversity in student enrollment and faculty hires, and conduct an annual review to track the changes; faculty and staff participation and interaction at departmental events and activities; number of faculty and staff participating in professional development opportunities.

STRATEGIC PRIORITY: Communicate impacts and achievements to internal and external audiences.
Core Strategies:
• Develop and implement a communications plan for both internal and external audiences.
