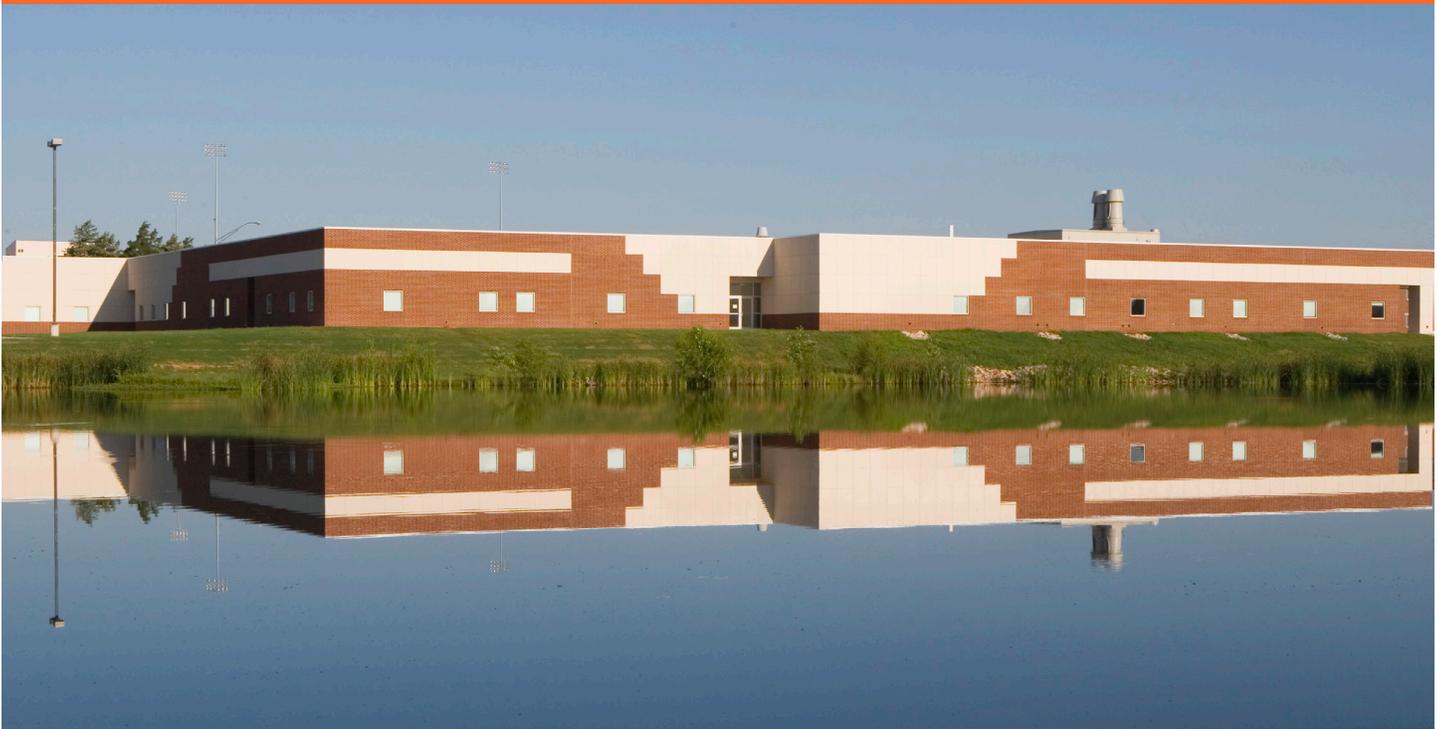


SCHOOL OF AGRICULTURE AND APPLIED SCIENCES



STRATEGIC PLAN
2017 - 2022

DEAN'S MESSAGE

I am delighted to present the 2017–2022 Langston University School of Agriculture and Applied Sciences Strategic (SAAS) Plan. Building on a solid foundation and the University's Land Grant mission, the plan provides a road map of goals, initiatives and creative actions that will be used to achieve those goals. In creating the plan, the committee looked at our current state of growth, asked leading questions, assessed dynamic changes in our communities, and then identified priorities that will drive our success over the next five years. The plan addresses current and emerging issues in agriculture and applied sciences through the lens of academe, discovery, community engagement, collaboration and infrastructure.

In addition to the mission and vision statements, the strategic plan also includes a list of values that will drive the School's results-oriented effort. In the area of academics, the SAAS will place special emphasis on student recruitment and customer service. The School will also be proactive in extension and research as it implements the new Strategic Plan. Many outcomes and measures of success will be established during the course of implementing the plan; others will be tracked during the five-year time frame.

I thank the committee chair, and other members of the planning committee as well as our clientele and stakeholders who contributed time and effort to formulate this plan. Their contributions are highly valued and appreciated. I look forward to working with everyone to carry out this bold road map to take the SAAS to higher levels of excellence over the next five years.

Wesley L. Whittaker, Ph.D.

Dean, School of Agriculture and Applied Sciences
Langston University

Mission

As a component of Langston University, a Historically Black Land Grant University, the School of Agriculture and Applied Sciences prepares students to make a difference in a rapidly changing world. The School conducts research, discovery, and community engagement activities that address agriculture, human, and community development issues that ultimately impact lives of people in Oklahoma and beyond.

Vision

To embody the Land Grant mission of Langston University through excellence in academics, innovative research, and supportive, forward-looking extension and outreach activities that will have a positive impact on the quality of lives of clientele in Oklahoma, the nation, and the world.

Values

- Work with passion for the students we educate, for the stakeholders we serve, for the work we do, and for the places within which we work and study.
- Strive for excellence in our academic, research, and community engagement activities.
- Be fully engaged with our stakeholders and to do so with purpose and in an impactful manner.
- Be bold decision-makers and be creative in expanding opportunities and solving problems.
- Encourage teamwork, nurture personal growth, and help develop the next generation of leaders.
- Foster a diverse learning and working environment that is multicultural, caring, respectful, and supports the creative potential of students, faculty, and staff.

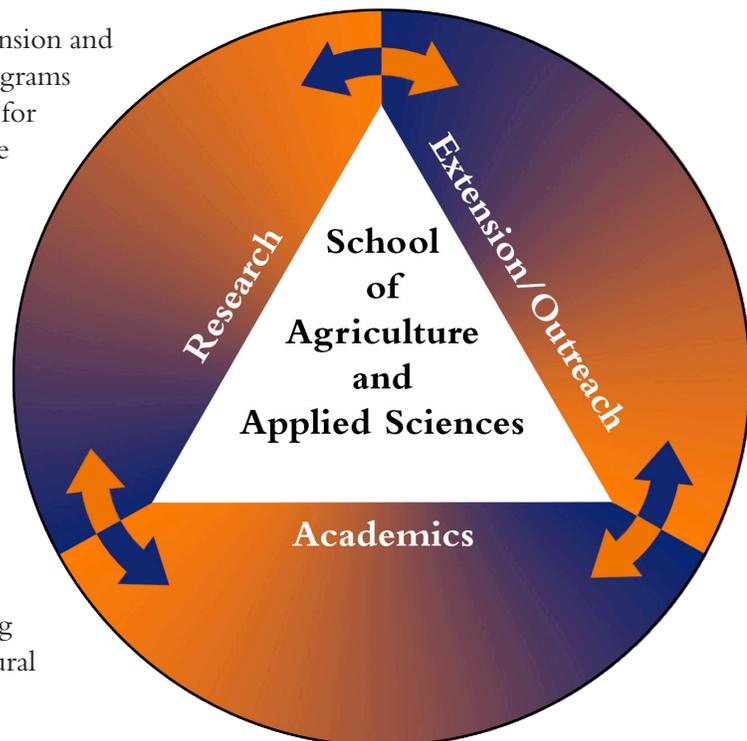
THE SCHOOL OF AGRICULTURE AND APPLIED SCIENCES

Langston University was officially founded as a land-grant institution in 1897 through the Morrill Act of 1890. Agriculture was a founding tenet of the University and remains so today through the work of the School of Agriculture and Applied Sciences (SAAS). True to the land-grant mission, SAAS carries out academic, research, and extension/outreach programs through a variety of disciplines. The three mission areas are interrelated and provide input to one another. These connections, coupled with stakeholder input and feedback, ensure that the School remains abreast of current developments and responsive to the needs of its clientele.

Academics is espoused through a baccalaureate degree in Agricultural Science awarded through the Department of Agriculture and Natural Resources with an option in Agribusiness, Animal Science, Crop and Soil Science, or Natural Resources Management; and through Family and Consumer Sciences offering degrees in Early Childhood Education and Child Development. The School houses the nationally-accredited Early Childhood Development Laboratory that allows students to interact with children and gain real world experience while developing needed communications and career skills.

The School is home to the American Institute for Goat Research, an internationally recognized leader in goat research. Recently, the Institute has added hair sheep to its research program to serve a new and growing clientele. Research is also conducted in the area of Biotechnology along with Aquaculture and Aquaponics, another area of growing interest.

The third land-grant mission area of extension and outreach is served through several programs of the School. The American Institute for Goat Research reaches out to clientele through producer contact, workshops, field days, and the numerous resources of its website. The 4-H Youth Development program conducts activities to empower youth through science and learning activities. The Expanded Food and Nutrition Education Program (EFNEP) assists families through nutrition and lifestyle education building healthier, happier families. The Aquaculture/Aquaponics program works with farmers to intensify production with the aim of increasing household income and conserving natural resources.



ACADEMICS

GOAL: CREATE A HIGH QUALITY ACADEMIC ENVIRONMENT ATTRACTIVE TO A DIVERSE STUDENT POPULATION AND PROVIDE THEM WITH THE KNOWLEDGE, EXPERIENTIAL EXPOSURE, AND ENRICHING ACADEMIC EXPERIENCE NEEDED FOR LIFELONG CAREER PATHS IN FOOD, AGRICULTURE, AND HUMAN SCIENCES IN A RAPIDLY CHANGING GLOBAL MARKETPLACE.

INITIATIVES

1. Support the educational mission of the SAAS by aggressive recruiting and retaining students from diverse backgrounds and socioeconomic circumstances.
2. Enhance the success and outcomes of SAAS academic programs by strengthening the cadre of instructors, advisors, mentors, teaching facilities and support personnel.
3. Bolster the intellectual and social growth of students within and beyond the classroom through undergraduate research opportunities, study abroad programs, service learning, experiential learning opportunities, leadership opportunities and other scholastic programing.
4. Expand the SAAS portfolio of subject matter areas, revise current courses, and develop additional courses that present the most updated knowledge in the various disciplines.
5. Enhance student learning through meaningful and impactful co-curricular activities.
6. Introduce an Adopt-a-School Program with neighboring rural and urban high schools, as well as with selected community colleges that offer agriculture programs.
7. Institute a structured “Mentoring Program” for all students in SAAS to promote positive interactions among students, faculty and staff.
8. Establish a Master of Science program in Sustainable Agriculture.

ACTIONS

The SAAS academic program is dedicated to preparing students with the skills, knowledge, and abilities needed for them to prosper in their chosen career. This includes not only basic scientific knowledge given through established coursework, but also designing and offering new courses in both agriculture and family and consumer sciences to reflect the latest priority areas of the USDA-NIFA, and the changing needs of public institutions and the private sector. Increasingly, employers desire students with strong research, technology, and communications skills; this will be addressed through expanding undergraduate research and co-curricular experiences. Maintaining faculty with knowledge of the latest developments in their field will be accomplished through university-supported training and research opportunities.



Program growth relies on recruiting and retaining students, a SAAS priority. Student recruitment will build upon the established SAAS Student Ambassadors Program and High School Adoption Plan. Strong relationships will be built with high school counselors. A newly established mentoring program is designed to increase student retention, many of whom may be the first person in their family attending college. Retention is also increased through program quality, i.e., interactive instruction and learning, research engagement, and graduation with strong knowledge and skills for successful careers. In the context of a competitive academic landscape, the Langston University SAAS is committed to tripling the student population in the next five years. The School's viability and sustainability is dependent on high levels of enrollment and student retention.



Students who feel valued by the School and the University as a whole, will be more likely to matriculate in LU SAAS and persevere in their academic programs through graduation. Greater levels of faculty and staff involvement in student recruitment and retention in the SAAS will be encouraged. This is an important element of the SAAS innovative recruitment and retention paradigm. Langston University has one of the

lowest tuition rates among all regional universities and colleges. This can be a strong selling point when recruiting students from Oklahoma, other states, and international students.

All freshmen and sophomores majoring in SAAS programs will be introduced to professors as soon as their registrations are complete. This will help facilitate a smooth transition to campus life. The School will communicate to our matriculated students and prospective students, the extraordinary opportunities that are available both in terms of internships and full-time jobs. Adequate academic, social, and cultural support is critical for student success and retention. Department Chairs will ensure that students are receiving the best pedagogical experience and support from faculty and staff.

A new Master of Science program in Sustainable Agriculture program is in development. It encompasses two options, Animal Science and Agribusiness/Applied Economics. The mission of this graduate program will be to prepare students with the advanced knowledge and skills required to enter broad areas of research, education, extension, animal science, business, and economics. Students will be prepared to pursue terminal degrees in their areas interest. This endeavor has the support of several groups, including the Langston University community and the Langston University Agriculture Alumni Association.



RESEARCH

GOAL: CREATE GREATER SHORT-TERM AND LONG-TERM IMPACT TO PEOPLE AND COMMUNITIES BY STRENGTHENING AND EXPANDING RESEARCH IN FOOD, AGRICULTURE, AND CONSUMER ISSUES.

INITIATIVES

1. Enhance research activities by establishing new facilities and improving existing facilities. Create research spaces that are attractive to students and young budding research scientists.
2. Maintain the good research output of small ruminant scientists and encourage greater research production from scientists in other disciplines.
3. Encourage interdisciplinary research among faculty and staff within the SAAS, from other Langston University Departments (e.g. biology, chemistry, education, sociology, etc.), and other institutions.
4. With the creation of the Master of Science degree program in the SAAS, invest in high quality graduate training program that prepare students to be successful leaders in their unique fields.
5. Establish a structured system for proposal development and grantsmanship.
6. Increase internal funding of 1890 funded (Evans Allen) research to at least six uniquely different projects in each funding cycle.
7. Promote faculty/staff professional development and networking opportunities to increase grants developments, funding opportunity, international collaboration, and student/staff recruitment.
8. Elevate the quantity and quality of research conducted by building greater commitment and relationship with the communities with which SAAS personnel work.
9. Effectively monitor, evaluate, and encourage the dissemination of research findings for efficient resource utilization to improve people's quality of life and to promote economic development.

ACTIONS

Research is one of the pillars of SAAS. Research results feed into both the academic and extension/ outreach programs. To conduct research requires qualified, dedicated individuals with a desire to solve problems, ameliorate constraints, and discover the basic concepts and mechanisms of how systems work. A critical mass of research scientists in identified focus areas is necessary for most effective research programs. As new advances in relevant fields are made, existing research areas of emphasis will be evaluated for possible upgrading and others may be established or expanded if appropriate.



A salary and benefit program commensurate with other research-oriented universities in the region and nation is essential to recruit and retain qualified faculty and staff. An incentive program that rewards productivity and receipt of extramural research funding assists with personnel retention and in maintaining research creativity.

As SAAS faculty have duties outside of pure research, knowledgeable and trained laboratory and farm staff and animal technicians are essential in the proper conduct of experiments and data collection. Adequate pay and benefits along with opportunities to increase knowledge and skills through training at SAAS or other centers will help retain these individuals and enhance the School's research capacity and reputation among qualified personnel seeking employment.



Research in most academic disciplines is highly competitive. All effort will be made to encourage increased remuneration and incentives for funded proposals to scientists. In a similar regard, underrepresented minorities will be recruited to build the pool of available scientists and technicians. Research is of value only if findings of potential benefit are disseminated via carefully selected modes that match targeted clientele. The most efficient utilization of resources directed to research comes to fruition with close monitoring and evaluation so that future resources are allocated for enhanced impacts, output and outcomes.



EXTENSION/OUTREACH

GOAL: ENGAGE COMMUNITIES ACROSS OKLAHOMA AND BEYOND THROUGH VIBRANT EXTENSION AND OUTREACH PROGRAMS TO HELP INDIVIDUALS AND GROUPS IDENTIFY AND MEET LOCAL NEEDS THROUGH RESEARCH BASED EDUCATIONAL PROGRAMS THAT POSITIVELY IMPACT ECONOMIC WELLBEING AND COMMUNITY DEVELOPMENT.

INITIATIVES

1. Create multidisciplinary, innovative programs that address issues relevant to local residents and the broader Oklahoma population.
2. Utilize wide-ranging and appropriate communication and extension delivery systems tailored to specific audiences.
3. Locate small limited-resource households; conduct needs assessment; and empower them by providing necessary services that will help to improve their quality of life.
4. Empower small-scale producers to develop and practice economically efficient and sustainable farming and other business operations.
5. Inform and educate rural and urban consumers about the importance of modern agriculture and food production systems.
6. Promote and enhance health, wellness, and good nutritional practices in ways that embrace the holistic concept of human wellbeing.
7. Promote youth development programs, such as 4-H and other programs, that inculcate a sense of self-confidence empowering them to become the next generation of leaders.
8. Increase community engagement, expand rural-urban outreach and education, and cultivate civic, institutional, and corporate partnerships.
9. Develop activities designed to positively impact income, education, and life experiences of local communities.
10. Keep extension/outreach staff up to date on the use of new technology for more effective outreach and field activities.

ACTIONS

Extension and outreach programs in the SAAS synergistically link Langston University to communities throughout Oklahoma and beyond. A strong Cooperative Extension program is central to the mission of a Land Grant University. The aim of extension and outreach Programs is to disseminate research-based educational information in response to the needs of producers and consumers. The limited resource household/small-scale beginner farmers/ranchers and





small businesses are the School's natural base. All available resources will be devoted to ensuring that this base benefits from the work undertaken by the SAAS. Small-scale producers and businesses will be empowered to improve their production systems, accounting, record keeping, and marketing systems to increase profitability and economic sustainability. Partnerships will be built with local communities, producer groups, and other organizations to assist them in finding and applying for development grants and other means of support. The partnerships will also create backward and forward linkages that will foster further research, student recruitment, and more effective engagements with the SAAS. Youth, community and family

development will be streamlined to be efficient, impactful and reflect holistic programming that cuts across multiple disciplines.

New efforts will be made to raise the awareness of the LU SAAS Extension program and its resources as well as its impact and effectiveness. The School will utilize the breadth of media to communicate information and raise awareness (e.g., print, radio, TV, and web-based, including social media platforms).

As extension continues to be about people and communities, the SAAS is committed to continue to build a brand that is defined by compassion for people and the desire to improve livelihoods and empower people to succeed and strengthen socioeconomic conditions of communities.



COLLABORATION: RESEARCH AND EXTENSION

GOAL: DIVERSIFY AND EXPAND SAAS PORTFOLIO OF RESEARCH AND EXTENSION ENTERPRISES.

INITIATIVES

1. Introduce modern innovative horticultural practices and ensure that SAAS has a clear footprint in scientific crop production operations.
2. Strengthen agribusiness and economics to reflect application to small ruminant production, small farming, food insecurity issues as well as to small business development and sustainability.
3. Increase collaboration with other Universities and agencies to strengthen plant biotechnology.
4. Establish a product development center that will add enormous value to the American Institute for Goat Research, and be of service to local communities to promote “made in Oklahoma products.” It will also serve as an incubator for small business development and support.

ACTIONS



The SAAS American Institute for Goat Research (AIGR) has grown tremendously and is among the foremost goat research facilities in the world. As AIGR continues to grow, new avenues will be sought to diversify its expansion in order to maintain its competitive edge as well as increase its economic contribution to local communities. Also, the demand for value-added products from goats has increased; efforts will, therefore, be made to introduce a Product Development Center to complement the AIGR. Feasibility analysis will be done and bold steps will be taken to ensure that this concept becomes a reality.

The SAAS agriculture programs is currently devoid of a horticultural footprint and in an age of high demand for plant-based diets, this dearth will discontinue. High technology greenhouses, hoop houses, plasticulture, aquaponics, and other facilities will be introduced into research and extension offerings. A portion of the recently purchased 80-acre land unit (off Old Highway 33) will be used to create a modern and attractive crop research and extension unit. Collaboration will also be sought with the USDA and other agencies to reboot plant biotechnology research and extension programs and, indeed, create an integral link with the forthcoming horticulture program.

Understanding economic rationale and feasibility of all components of production agriculture and consumer decision-making is important. Efforts will be made to strengthen agribusiness and economic analyses in research and several areas of extension operations.



FACILITIES, INFRASTRUCTURE AND RESOURCES

GOAL: MAINTAIN AND ENHANCE A MODERN, WELL-KEPT, AESTHETICALLY ALIVE INFRASTRUCTURE THAT IS ATTRACTIVE TO THE PUBLIC, PROSPECTIVE STUDENTS, EMPLOYEES, PROSPECTIVE EMPLOYEES, AND THAT IS CONDUCIVE TO THE HIGHEST QUALITY TEACHING, RESEARCH AND EXTENSION PROGRAMS.

INITIATIVES

1. Develop and maintain attractive, user-friendly and updated SAAS website(s) and social media pages. Publications of all kinds that are disseminated by the school, will be of the highest quality.
2. All offices, buildings, and grounds that house SAAS programs and activities will be kept in the best operative conditions possible at all time.
3. The newly acquired 80 acres will be developed, fenced, attractively landscaped, and utilized for both crop and small ruminant research and extension programs.
4. Renovation and development of the aquaculture and aquaponics facilities will continue as additional staff resources are hired.
5. Continue to modernize farm research facilities, classrooms, offices and laboratories.

ACTIONS

Properly functioning infrastructure is the basis for effective research, academics, and extension/outreach program. Facilities ought not to be built and maintained only for today's needs but rather should be forward thinking; creating an environment that instills a sense of discovery leading to scientific advancements, better prepared students, and effective research and extension/outreach programs. Using modern technology in the laboratory and classroom must be the norm for SAAS faculty, staff, and students with frequent updates to computer equipment, buildings, classrooms, laboratories, and related facilities.

In addition to academic buildings, SAAS has research farmlands, livestock, ponds and land for aquaculture and aquaponics and the equipment needed to sustain allied research projects. To ensure growth of the research farm and its impact, additional lands for animal housing and generating feed will be needed. Along with additional land and animals comes the need for permanent structures and updated machinery. Diversification and growth in the School will drive changes to various components in SAAS research and teaching facilities. A prime example of this is the increasing interest in hair sheep. The SAAS American Institute for Goat Research and other units have the expertise and knowledge needed to support the growth of the overall research and extension agenda.

Infrastructure is also important in attracting new faculty, staff and students. Well-equipped laboratories and classrooms, attractive offices and meeting spaces, modern equipment and expansion for future endeavors all speak to the commitment of SAAS to drive a new agenda to grow and maintain its competitive edge in various aspects of agriculture research, academics and extension activities.

Information technology is essential to all areas of the SAAS mission. All effort will be made to expand the use of social media, establish internet access at all sites in the teaching and research facilities, provide training in computer and communications technology to faculty and staff.



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