'The future belongs to those institutions that have the foresight, energy, creativity, wisdom and the courage to understand that destiny is not a matter of chance, but a matter of choice and the will to achieve.'

— Chancellor James C. Renick

SCHOOL OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

2005 - 2010
Agriculture is a significant part of North Carolina A&T State University’s heritage—and its future.

The 11 themes that form the matrix for the SAES strategic plan are:

- Maintain a responsive learning environment
- Attract, retain and graduate outstanding students
- Improve minority and environmental health
- Ensure a nutritious, safe and secure food supply
- Empower individuals, families and communities
- Advance biotechnology and biodiversity
- Ensure the viability of small-scale agriculture
- Protect the environment and natural resources
- Promote international trade and economic development
- Use innovative technologies
- Expand the SAES resource base and maximize relationships
Introduction

Agriculture and agribusiness have guided the economy of North Carolina since its beginnings. Even our state seal, which features a cornucopia, recognizes the importance of agriculture to our state. Agriculture and agribusiness remain the leading industries in North Carolina, contributing nearly $60 billion annually to the state's economy. This means that agriculture and agribusiness represent 20 percent of the state’s gross product, five times more than the second largest industry in the state (which is tourism, at $13 billion). Agriculture and agribusiness employ 18 percent of the state’s workforce, and account for about 75 percent of the state’s exports.

As a land-grant university, North Carolina A&T has an inherent responsibility to offer broad curricula with a blend of liberal and practical education; to conduct basic and applied research for the public interest; and to disseminate scientific and practical knowledge through Cooperative Extension and other outreach programs. When North Carolina A&T first opened its doors in 1891, the academic roots of what would later become the School of Agriculture and Environmental Sciences (SAES) were already forming. Today, more than 11 decades later, we are adhering to our land-grant roots of teaching, research and Extension while concurrently transforming the SAES into an interdisciplinary unit that is attracting a larger and more diverse student body. The SAES's portfolio is strengthened through partnerships and collaborations with other schools and colleges on campus, as well as with stakeholder organizations throughout the state, nation and world.

Our programs in the food, agricultural, family and environmental sciences have continued to grow in the breadth of curriculum and student enrollment since the first baccalaureate program was offered in 1918, and the first master’s program in agricultural education in 1940. Although there have been many shifts in the SAES’s guiding principles over the years, our core principles have always included a commitment to instilling a sense of value and purpose in our students, and to vigilantly seek out solutions for pressing social and scientific issues with our Extension activities and research projects.

The SAES will use this Strategic Plan to advance the land-grant mission of catalyzing positive change that improves the quality of life for North Carolinians. SAES faculty, staff and students share a common bond through their sincere desire to learn and serve others. We desire each individual to experience the SAES as a place to excel, think critically and creatively, communicate effectively and put knowledge to work. The SAES will forever be a place that inspires the spirit of scholarship, collaboration and excellence.

The “Strategic Plan for the School of Agriculture and Environmental Sciences” is a cohesive vision for our preferred future in the food, agricultural, family and environmental sciences. This plan has grown out of discussions and listening sessions from people around North Carolina and emanated from reviews of the national goals of the United States Department of Agriculture, the needs of the state, faculty expertise and interest. The themes were selected for their significant potential for establishing mutually beneficial partnerships with businesses, corporations, foundations, industry and governmental agencies. These themes were also identified to give SAES added guidance in the allocation of resources, and to provide a focus for ongoing efforts to assure public awareness of the SAES and North Carolina A&T.

The plan also recognizes that North Carolina A&T must be positioned to respond rapidly and effectively to emerging issues that affect the profitability and sustainability of North Carolina agriculture, now and in the years ahead. As such, SAES’s growth strategy will be to maintain current strengths while expanding into the new strategic areas.

While this plan is for SAES, this plan is also a blueprint for the University. SAES is taking the lead in developing interdisciplinary programs in the food, agricultural, family and environmental sciences. In the words of Dr. James C. Renick, Chancellor of North Carolina A&T State University, “…the future belongs to those institutions that have the foresight, energy, creativity, wisdom and the courage to understand that destiny is not a matter of chance, but a matter of choice and the will to achieve.”

I invite you to join SAES as we move forward to implement this bold vision — a vision filled with promise and opportunity.
North Carolina A&T State University is learner-centered community that develops and preserves intellectual capital through learning, discovery, engagement and operational excellence. All members of the School of Agriculture and Environmental Sciences, and all members of the University community, are called upon to act in harmony with our core values:

**Land-Grant Values:** Reflecting our heritage and status as a land-grant university, SAES embraces and practices our land-grant values of access to education and learning (liberal and practical education), discovery (basic and applied research) and engagement (Extension programs and outreach).

**Excellence:** SAES values the positive and professional contributions of all employees. SAES provides opportunities for training and supports career development to empower all employees to maximize the contributions their talents, creativity and innovations make to the success of SAES programs and endeavors.

**Shared Leadership:** SAES values shared governance, responsibilities and decision-making.

**Integrity/Honesty:** SAES values trust, trustworthiness, honesty and ethical behavior. SAES deeds will be consistent with our words.

**Respect for Individual:** SAES values civility among individuals and fosters diverse viewpoints and opinions. Employees strive for daily interpersonal relations that demonstrate SAES’s commitment to treating all persons with fairness, dignity, caring quality and compassion.

**Collaboration:** SAES values working with a broad range of constituencies to bring synergy and diverse viewpoints to the University. SAES works hard to forge alliances and equitable partnerships across public and private sectors in pursuit of preparing, finding and implementing solutions.

**Diversity:** SAES values and respects diversity, and works to empower all employees and students to function inclusively and effectively in a multicultural world. SAES is committed to protecting and advancing the interest of diverse populations and cultures and acceptance of others without biases based on differences of any kind.

**Innovation/Creativity:** SAES values and uses science and technology to strengthen and advance the food, agricultural, family and environmental sciences. Critical thinking, inquiry-based learning, scientific knowledge and practical application are hallmarks of SAES’s work and programs. SAES encourages and challenges employees and students to prepare, find and implement solutions to existing problems and create new economic opportunities.

**Global Awareness:** SAES values globalization and encourages employees and students to think globally to better prepare them for today’s fast-moving and ever-changing world and to better serve our constituencies.
THE 11 THEMES THAT FORM THE MATRIX FOR THE SAES STRATEGIC PLAN ARE:

- Maintain a responsive learning environment
- Attract, retain and graduate outstanding students
- Improve minority and environmental health
- Ensure a nutritious, safe and secure food supply
- Empower individuals, families and communities
- Advance biotechnology and biodiversity
- Ensure the viability of small-scale agriculture
- Protect the environment and natural resources
- Promote international trade and economic development
- Use innovative technologies
- Expand the SAES resource base and maximize relationships

The first nine themes are content strategies, while the last two are procedural strategies for realizing the content goals.

In the document that follows, there is a brief descriptive statement, followed by goals, action strategies and success indicators. The strategies will guide how each goal will be achieved. Success indicators provide ways of measuring progress on how well the SAES is meeting its strategies and goals.

The SAES must strive for excellence in all its programs. It is particularly important that the SAES maintain its collaborative culture of partnerships among academic, research and Extension programs, across disciplines, across the University and with communities, businesses and governmental agencies. The SAES Strategic Plan includes the full spectrum of SAES programs that is needed to address these issues. Because of the complex nature and magnitude of issues facing the food, agricultural, family and environmental sciences, interdisciplinary approaches also must be an important part of the SAES’s learning, discovery and engagement portfolios. As reflected in this plan, an integral part of the land-grant mission is to achieve excellence in research as the underpinning to education and Extension.

SAES faculty and staff are committed to carrying out this plan, and they are committed to the University’s vision of preeminence in its mission of learning, discovery and engagement. SAES faculty and staff have, and will continue to prepare, find and implement solutions.

Organization

The SAES Strategic Plan was formulated in response to opportunities and challenges facing the School and the food, agricultural and environmental systems. Eleven themes were captured at faculty summits and information gathering sessions held around the state — involving many external and internal stakeholders — and subsequent discussions. The national goals of the United States Department of Agriculture were reviewed, North Carolina’s particular needs were assessed and they too were incorporated into the SAES Strategic Plan. Issues identified by all these sources were selected for their significant potential for reciprocating alliances with institutions of higher learning, communities, businesses, foundations, and governmental agencies.
Goal 1: Producers of graduates who are competent, prepared to perform in the workplace and prepared to become outstanding leaders in an increasingly diverse society

Action Strategies
- Provide support for faculty to develop innovative and integrative instructional methods
- Ensure that programs and activities meet state and national accreditation standards
- Promote student participation in value-added certificate programs and other activities
- Provide more inquiry-based, interdisciplinary and experiential learning opportunities
- Encourage and motivate students to continue with lifelong learning
- Prepare students with opportunities to apply knowledge to the solution of real-world problems and be of service to their communities
- Strengthen student support services

Success Indicators
- Ten percent annual increase in refereed publications and participation in symposia, lecture series and national and international meetings
- Five percent annual increase in the number of students maintaining an electronic portfolio and participating in experiential learning opportunities
- Ten percent annual increase in the number of students with interdisciplinary certificates and participation in lectures, seminars and other programs

Goal 2: Enhance an academic culture that is challenging, supportive and fosters achievement and intellectual interaction

Action Strategies
- Recruit and retain a high quality faculty and staff
- Improve and implement an SAES performance evaluation system
- Develop a reward and recognition system
- Routinely review all policies and procedures
- Communicate adequately with faculty, staff and students
- Encourage and support infrastructure for professional growth and development for faculty and staff

Success Indicators
- Continue to review and improve evaluation and coaching procedures, with appropriate rewards that match performance expectations for all employees
- Performance and evaluation system implemented
- Continue to review and improve strategies for professional development and mentoring of new and junior faculty and staff
- Policies and procedures updated
- Improved personnel performance
- Number, type and medium of communications directed toward students
- Results of SAES graduating seniors exit interviews
- Recognize and reward superior achievement and scholarship by faculty, staff and students

Theme 1: Maintain a Responsive Learning Environment

Learning is what the University is all about. Consistent and effective learning takes place only in a nurturing, supportive and responsive environment. SAES must continue to take those necessary steps to build a foundation for learning so that teaching, research, Extension, creative activity and service will flourish. The SAES must provide interdisciplinary learning experiences to our students by offering high quality programs to make them competitive in the global job market and to instill good citizenship that embodies work ethic and perseverance.
Goal 1: Develop and implement innovative strategies to recruit outstanding students

Action Strategies
- Strengthen and enhance a learning environment that supports student success
- Secure additional support for scholarships and recruitment programs
- Develop an SAES recruitment marketing strategy
- Develop an alumni base to assist in student recruitment

Success Indicators
- Seven percent annual increase in number of students, undergraduate and graduate
- Increase scholarship funding awarded by 20 percent
- Implementation of SAES recruitment marketing plan
- Five percent annual increase in the number of alumni volunteers working on recruitment

Goal 2: Increase graduation and retention rates

Action Strategies
- Provide the best possible curriculum opportunities supported by a faculty of dedicated and skilled instructors and advisors
- Foster student participation in personal and professional development opportunities beyond the classroom, including student research and professional organization memberships and internships
- Develop a retention plan
- Monitor the success of graduates and use those findings as a part of the process driving curriculum changes
- Monitor curriculum offerings for contemporary relevance, ensuring that students are both fully engaged and performing at optimal levels
- Offer a full scope of learning opportunities for all disciplines in SAES with access to graduate and professional studies, distance learning and continuing education
- Establish a network of partnerships with community colleges for the recruitment of students

Success Indicators
- Retention plan developed
- Three percent annual increase in retention rates
- Five percent annual increase in graduation rates
- Five percent annual increase in the number of students with community college degrees who enroll in SAES
- Bi-annual curriculum review to reflect student, alumni, contemporary relevance
- Five percent annual increase in students participating in personal and professional development opportunities
- Demonstrated improvement on indicators of quality education and success of graduates
- Increased opportunities for graduate and professional studies, distance learning and continuing education

Theme 2: Attract, Retain & Graduate Outstanding Students

Educating students was the earliest mission of the SAES and remains the most important way that we enhance the future of this state. Instruction is fully integrated with our other missions — research and Extension. The SAES expects its graduates to become leaders in their professions and their communities. To this end, SAES must attract and graduate outstanding students with diverse backgrounds and equip them with the knowledge and skills appropriate for multiple career paths and to meet the challenges of the future.

THE SAES EXPECTS ITS GRADUATES TO BECOME LEADERS IN THEIR PROFESSIONS AND THEIR COMMUNITIES.
Goal 1: Enhance the health and well-being of people — particularly minorities — and the environment in which they live

**Action Strategies**
- Foster inter- and multidisciplinary faculty teams in securing resources within SAES, across the University and with other universities and external organizations
- Pursue increased resources and funding for high quality research, instructional and outreach programs
- Create sound educational programs and initiatives that promote the health and safety of underserved populations
- Engage underserved communities in identifying research and Extension priorities in health and the environment

**Success Indicators**
- The number and caliber of interdisciplinary collaborations
- Marked increase in external funding for research, instructional and outreach programs
- Amount of research and Extension outputs in the area of minority and environmental health
- Community involvement in identifying research and outreach priorities

Goal 2: Establish and enhance partnerships to promote minority health

**Action Strategies**
- Initiate and lead an agromedicine alliance among 1890 land-grant universities
- Increase SAES involvement and participation in the North Carolina Agromedicine Institute
- Strengthen and expand existing partnerships with state, regional and national minority health organizations
- Promote linkages and collaboration between SAES and the University’s Public Health Institute

**Success Indicators**
- Number of strategic partnerships established
- Number of North Carolina Agromedicine Institute events and increased funding
- Number of research, education and outreach activities
- Organization of an 1890 Agromedicine Alliance
- The extent to which SAES faculty participate in projects, activities and programs associated with the University’s Public Health Institute

Goal 3: Provide educational opportunities in minority health and environmental health

**Action Strategies**
- Develop new courses, enhance existing courses and an undergraduate certificate program
- Conduct symposia, workshops and seminars
- Secure additional funds for scholarships, assistantships and internships

**Success Indicators**
- Certificate and courses approved
- Number of symposia, workshops and seminars conducted
- Increased number of scholarships, assistantships and internships

**Theme 3:** Improve Minority & Environmental Health

Disparities in health status and access to health care among minority populations are ongoing public health concerns. Nationally, minority populations, particularly African Americans, suffer higher rates of morbidity and mortality. Changes in medical technology, lifestyle adjustments and environmental protections have not produced equal benefits in racial and ethnic populations. Differences among socioeconomic classes in environmental and occupational exposures are thought to play a key role in health disparities. There is also a disproportionate placement of pollution-intensive industries and hazardous waste sites in low-income and minority communities.

**Changes in Medical Technology, Lifestyle Adjustments and Environmental Protections Have Not Produced Equal Benefits in Racial and Ethnic Populations.**
Goal 1: Enhance educational opportunities in nutrition-related health issues

Action Strategies
• Review and modify undergraduate and graduate programs in food and nutritional sciences
• Develop a Registered Dietitians certification program
• Incorporate nutrition into the University Studies core
• Effectively use industry/agency partnerships to enhance learning opportunities

Success Indicators
• Curriculum audit and upgrade completed
• Registered Dietitians certification program established and approved
• Nutrition courses added to the University Studies core
• Increase number of scholarships, assistantships and internships by 10 percent
• Student participation in local and national meetings
• Evidence of industry involvement in educational opportunity development

Goal 2: Expand research and strengthen Extension programs in nutrition-related health issues

Action Strategies
• Develop interdisciplinary proposals in nutrition, nutraceuticals and functional foods
• Establish a Food Products and Technology Center
• Promote interdisciplinary faculty collaboration, particularly with the University’s Public Health Institute
• Develop collaborative research partnerships with business and industry

Success Indicators
• The number of interdisciplinary proposals developed and funded
• Food Products and Technology Center established
• Extent of interdisciplinary collaboration

Goal 3: Expand innovative research, education and outreach efforts in food safety and security

Action Strategies
• Seek additional funding in food safety and security
• Establish interdisciplinary collaboration with the nation’s leading universities working to protect the food supply
• Develop collaborative research partnerships with business and industry

Success Indicators
• The number of interdisciplinary proposals developed and funded
• Increase funding for research by 10 percent
• Amount of and extent of collaboration with nation’s leading food safety universities
• Amount and extent of collaboration with business and industry

Theme 4: Ensure a Nutritious, Safe & Secure Food Supply

Nutrition-related health problems (e.g., obesity, diabetes, cardiovascular diseases, and nutritional deficiencies) are major public health concerns at the local, state and national levels. Obesity has reached epidemic proportions and remains the leading cause of preventable diseases including diet-related diabetes, heart disease, osteoarthritis, cancer and hypertension. In addition, foodborne illnesses affect thousands of consumers annually and represent a significant public health problem. SAES must help the state’s residents produce and consume safe and nutritious foods, adopt healthy eating habits and safeguard the food supply.
Empower Individuals, Families & Communities

Empowering individuals, families and communities involves increasing the knowledge and the skill base, and developing behaviors to address the daily quality of life issues. These issues relate to financial management, parenting and child development, aging, health, adequate nutrition, leadership development, personal safety and changing employment prospects. It also involves the strengthening of the community infrastructure including housing and effective leadership.

Goal 1: Strengthen the economic, social and physical well-being of individuals and families through educational programs

Action Strategies
- Promote research in individual and family issues
- Design and develop sound educational programs to increase knowledge transfer to families
- Expand and broaden the scope of the financial literacy/planning program
- Establish a family resource center that includes family counseling, housing counseling, resource management, consumer trends, financial planning, self-esteem seminars, etc.

Success Indicators
- Increase the number of programs developed and implemented that address family issues
- Ten percent annual increase in external funding that addresses research related to individual and family issues
- The number and quality of educational programs related to family issues
- Add to the number of financial literacy programs/planning, specifically those targeting minorities and families financially at-risk

- Year-round, state of the art Child Development Laboratory established
- Family Resource Center established
- Marked increase in external funding that addresses child development issues

Goal 2: Improve the capacity of communities to address critical issues through programs in leadership development and civic engagement

Action Strategies
- Develop and strengthen partnerships with community-based organizations
- Expand community-based leadership and volunteer development training

Success Indicators
- Number and quality of partnerships formed with community-based organizations
- Type and quality of community-based leadership and volunteer development training

- The number of workshops developed and number of people attending sessions on entrepreneurship and business development
- The number of businesses started
- The number of people engaged in activities to improve the community infrastructure
- Ten percent annual increase in funding for economic development and rural policy research

Goal 3: Stimulate entrepreneurship and economic development in rural communities

Action Strategies
- Promote business development assistance to rural communities
- Engage communities in identifying community infrastructure needs that stimulate community development
- Enhance economic development and rural policy research

Success Indicators:
- The number of workshops developed and number of people attending sessions on entrepreneurship and business development
- The number of businesses started
- The number of people engaged in activities to improve the community infrastructure
- Ten percent annual increase in funding for economic development and rural policy research

Theme 5: Empowering Individuals, Families & Communities

Empowering individuals, families and communities involves addressing daily quality of life issues. Empowering individuals, families and communities involves addressing daily quality of life issues.
THE STATE'S BIOTECHNOLOGY INDUSTRY IS AMONG THE NATION'S FIVE LARGEST

Goal 1: Strengthen research competitiveness in biotechnology and biodiversity

Action Strategies
• Aggressive extramural funding and collaboration
• Develop collaborative partnerships with private industry, educational institutions, state and federal laboratories, including the North Carolina Biotechnology Center
• Stimulate research and development in biotechnology and biodiversity techniques
• Review and implement selected strategies identified in North Carolina's biotechnology roadmap
• Develop SAES centers of excellence — edible and medicinal mushrooms, medicinal herbs, genomic diversity, biotechnology and biodiversity
• Promote development and commercialization of intellectual property

Success Indicators
• Number of extramurally funded projects, and total amount of extramural funding
• Number of partnerships
• Number of papers published, presentations, and professional activities involved
• Number of filings for intellectual property
• Center of excellence established
• Number of biotechnology laboratories established or upgraded
• Number of strategies in the North Carolina biotechnology roadmap reviewed and implemented

Goal 2: Provide new educational experiences in biotechnology and biodiversity

Action Strategies
• Develop new courses, and enhance existing courses and undergraduate certificate program
• Develop a graduate certificate program or an M.S. in Biotechnology
• Convene symposia, workshops, and seminars
• Attract and retain talented faculty, post-docs and graduate students
• Seek faculty and student internship opportunities and funding for scholarships, instrumentation and assistantships

Success Indicators
• Number of new courses developed and existing courses enhanced and number of students interested in biotechnology and biodiversity
• Graduate certificate program or M.S. program in Biotechnology established
• Number of symposia, workshops and seminars conducted
• Number of new faculty, post-docs and graduate students in biotechnology
• Number of internships and scholarships and increased resources

Goal 3: Enhance outreach activity in biotechnology and biodiversity

Action Strategies
• Develop and disseminate outreach materials
• Conduct seminars, workshops, open houses and field days

Success Indicators
• Provide expertise to the community and stakeholders about biotechnology and biodiversity related concerns
• Number of educational materials developed and dispersed
• Number of seminars, workshops, open houses and field days conducted
• Number of communities and stakeholders receiving expertise and number of concerns received and addressed

Goal 4: Develop a plan for campus program centers of excellence for biotechnology and biodiversity

Action Strategies
• Update SAES's asset inventory
• Work collaboratively with the Colleges of Arts and Sciences and Engineering
• Encourage university-industry interactions
• Establish internal and external partnerships
• Establish a Center for Edible and Medicinal Mushrooms and Medicinal Herbs
• Establish a Center of Excellence for Studies in Genomic Diversity
• Develop an Interdisciplinary Biotechnology and Biodiversity Program
• Conduct campus asset inventory

Success Indicators
• A written proposal or proof of concept
• A campus asset inventory report
Goal 1: Enhance the sustainability and profitability of small-scale agriculture

Action Strategies
- Assist beginning and existing farmers in developing management and business practices to ensure farm survival and future success
- Develop techniques that add value to agriculture products
- Identify alternative enterprises
- Use the University Farm effectively to promote research and outreach activities

Success Indicators
- The extent to which farmers use best management and business practices
- The extent to which value-added products are explored and developed
- The extent to which farmers are engaged in alternative enterprises
- Increased use of farm for research and outreach activities

Goal 2: Develop alternative marketing channels for small-scale producers

Action Strategies
- Identify market outlets
- Engage farmers in identifying relevant marketing issues
- Involve farmers in the marketing process

Success Indicators
- Type and number of market outlets identified
- Type and number of marketing issues identified
- The extent to which farmers participate in marketing programs and activities

Goal 3: Assist farmers and small-scale landowners in managing assets, farm income, land, people and other resources

Action Strategies
- Develop estate planning, land and resource ownership and risk management programs
- Promote linkages and collaboration among SAES, non-governmental organizations, and government agencies such as the North Carolina Department of Agriculture and Consumer Services and the Risk Management Agency to strengthen farm management support to farmers and beginning farmers

Success Indicators
- Implement farm management plan
- Amount of funding for risk management
- Type and quality of linkages and collaboration developed

More than 90 percent of the farms in North Carolina are small (grossing less than $250,000 annually). Surviving as a small farmer comes with many perils. These include marketing, risk management, profitability, and technical knowledge, changes in public policy, technology advances, and accessing resources. Also adversely affecting small farm viability is the length and segmentation of the production processes and the forces of nature that affect short-term supply in the face of relatively constant demand. In-depth knowledge of, and research on, this population and issues they face are central to SAES.
Goal 1: Expand soil and water quality research and outreach

Action Strategies
- Increase funded research for soil and water quality, conservation tillage, and waste management technologies for small-scale farming operations
- Develop research and outreach partnerships with federal and state agencies
- Develop and implement Extension programs that disseminate research results and report impacts of research and Extension activities

Success Indicators
- Increased number of externally funded projects and total funding for research
- Increased number of jointly sponsored projects and activities with federal and state agencies
- Increased adoption of best management practices by farmers and associated positive environmental, economic and social impacts

Goal 2: Enhance SAES instructional, research and Extension programs to embrace the new partnership with USDA/Natural Resources Conservation Service (NRCS)

Action Strategies
- Collaborate with NRCS to develop a comprehensive plan that fosters research and Extension efforts that address the adoption of best management practices by a wide variety of producer groups
- Align SAES resources and seek additional resources to support the NRCS strategic plan
- Foster the exchange and interaction of SAES faculty, staff, students and NRCS specialists to facilitate the interchange of ideas and promote scientific discourse
- Conduct symposia, seminars, workshops and field days

Success Indicators
- Production and implementation of a comprehensive plan for research and Extension that promotes the adoption of best management practices
- Evidence of enhanced infrastructure, staffing, funding, and other SAES initiatives that support the NRCS strategic plan
- Increased student internships at NRCS and increased partnerships between NRCS and SAES faculty in academic, research and Extension activities
- Number of symposia, seminars, workshops and field days conducted

Goal 3: Develop a renewable energy and bioproducts center

Action Strategies
- Increase funded research for renewable energy and bioproducts research and outreach
- Identify and build collaborations with industry partners
- Identify and secure resources to support a renewable energy and bioproducts center

Success Indicators
- Increased number of externally funded projects and total funding for research and outreach
- Development of a renewable energy and bioproducts consortium that includes industry partners
- Evidence of infrastructure for a center, including funding, faculty positions and office and laboratory facilities

Theme 8: Protect the Environment & Natural Resources

Agriculture, beyond growing crops and producing food, also means conserving scarce natural resources and preserving the environment. Farmers and citizens of North Carolina are faced with issues like ground- and surface-water contamination, soil erosion, declining soil quality, and environmental degradation. The SAES must respond to the need for developing profitable agricultural systems that protect the environment, conserve the state’s natural resources, develop new ways to harness the state’s renewable resources, and enhance our rural communities.
Goal 1: Prepare faculty and students for life in a global society

Action Strategies
- Incorporate a global perspective into SAES’s teaching, research and Extension programs
- Enhance faculty and student participation in global interdisciplinary experiences
- Educate students—particularly minorities—in international trade/international markets
- Collaborate with the Office of International Programs
- Encourage students to earn a certificate in Global Studies
- Educate, prepare and mentor faculty and students to participate in international educational activities

Success Indicators
- The extent to which faculty and students participate in international opportunities
- Ten percent annual increase in the number of students graduating with a certificate in International Trade, Global Studies or the Master’s International Program
- The extent to which faculty incorporate a global perspective in their courses, research projects and Extension programs
- Increased funding for students/faculty international experiences
- The extent to which faculty and students participate in the programs and activities sponsored by the Office of International Programs

Goal 2: Conduct research and develop solutions to international issues and problems

Action Strategies
- Seek funding to support research in international trade and development
- Collaborate with international partners to identify food and agricultural research issues
- Design and implement research to find solutions to issues that affect economic growth and development

Success Indicators
- Increase the number of proposals developed and funded by 15 percent
- Develop international collaborations and partnerships

Goal 3: Assist small businesses and farmers in developing international markets

Action Strategies
- Identify and create business opportunities for small businesses and farmers
- Collaborate with USDA/Foreign Agricultural Service and other international partners in implementing technical assistance projects

Theme 9: Promote International Trade & Economic Development

International trade is increasingly important for the food and agricultural sectors. In recent years, agricultural exports and imports have each represented about 12 percent of our national income or gross national product. The inherent opportunities provided by the recent wave of globalization present important opportunities to harness the collective skills of SAES faculty in mitigating international development challenges in agriculture and related disciplines such as forestry, engineering, veterinary medicine, health and applied education.

INTERNATIONAL TRADE IS INCREASINGLY IMPORTANT FOR THE FOOD AND AGRICULTURAL SECTORS.
Theme 10: Use Innovative Technologies

The Internet, informational, instructional, spatial, environmental and biomedical technologies are essential to the advancement of science in the food, agricultural, family and environmental disciplines. These technologies also expand learning choices and methodologies in support of just-in-time learning and lifelong learning. SAES must continue to fully embrace these innovative technologies and assure that the use of these new technologies is relevant, appropriate and accessible.

THE INTERNET, INFORMATIONAL, INSTRUCTIONAL, SPATIAL, ENVIRONMENTAL, AND BIOMEDICAL TECHNOLOGIES ARE ESSENTIAL TO THE ADVANCEMENT OF SCIENCE IN THE FOOD, AGRICULTURAL, FAMILY AND ENVIRONMENTAL DISCIPLINES.

Goal 1: Position SAES to embrace relevant and appropriate technologies

Action Strategies
• Develop an innovative technologies plan
• Coordinate efforts with the Division of Information Technology and Telecommunications (ITT), and with the Academy of Teaching and Learning (ATL) and Center for Distance Learning (CDL)
• Develop capacity of faculty and staff to use innovative technologies
• Develop partnerships with private sector organizations
• Commit resources for the purchase, use and maintenance of state-of-the-art technology

Success Indicators
• Implementation of innovative technologies plan
• Degree of coordination with ITT, ATL and CDL
• Extent of faculty and staff use of technology
• Number of partnerships developed
• Development of technology budget

Goal 2: Integrate technology in the transfer of knowledge in teaching, research, outreach and Extension

Action Strategies
• Build staff capacity to participate in the national “eXtension” initiative
• Use technology to integrate program delivery from campus, to field to clients
• Provide 24-hour instruction to statewide clients
• Coordinate SAES efforts with internal and external clients

Success Strategies
• Number of faculty and staff participating in electronic program delivery training
• Creation of on-line courses, 24-hour access
Theme 11:
Expand Resource Base & Maximize Relationships

As the priorities of traditional funding sources shift, it’s critical that SAES seek new sources of funding to accommodate growth in critical programs and to recruit and retain top-quality employees and students. Tapping into these new funding streams requires targeted and effective marketing of SAES programs and accomplishments. Thus expanding the resource base, creating an aggressive marketing campaign and strengthening stakeholder relationships are necessary for SAES’s survival.

Goal 1: Strengthen and enhance SAES funding sources

Action Strategies
• Develop comprehensive solicitation strategies to attract contributions from alumni and other potential donors
• Develop SAES fundraising priorities
• Develop targeted strategies to increase extramural research funding from all sources, with particular emphasis on federal competitive programs

Success Indicators
• Increased number of new SAES donors and funded grants
• Attainment of SAES fundraising goals
• Identify and support targets of opportunity in research areas consistent with SAES major program initiatives

Goal 2: Promote SAES with key policy makers

Action Strategies
• Communicate impacts and economic benefits of SAES research and Extension programs
• Develop a comprehensive legislative strategy to ensure continued and additional funding for the Cooperative Extension and the Agricultural Research programs
• Engage key constituencies — particularly alumni — to help the SAES achieve its objectives

Success Indicators
• Creation and implementation of SAES marketing/communications plan
• National recognition of SAES and its varied people, programs and activities
• Development of SAES marketing budget

Goal 3: Increase SAES’s exposure and value by marketing to the general public

Action Strategies
• Develop a long-term aggressive SAES marketing plan
• Create media opportunities to highlight SAES accomplishments
• Seek and commit resources for marketing

Success Indicators
• Increase the number of and caliber of new partnerships developed and maintained
• Impacts garnered from new partnerships
• Type, number and caliber of interdisciplinary/multidisciplinary teams developed
• Type, number and extent to which problems and issues are identified and solved
• Participation and involvement of advisory board members

Goal 4: Develop partnerships and collaborations that promote the mission, vision, goals and objectives of SAES

Action Strategies
• Develop local, state, national and international partnerships to foster research, learning and outreach
• Through partnerships, apply SAES knowledge and expertise to address and solve local, state, national and international problems and issues
• Build and strengthen relationships with key constituency groups, including alumni and advisory boards
• Develop inter- and multidisciplinary teams (teaching, research and Extension) within SAES, across the University and with other universities and agencies

Success Indicators
• Additional funding for SAES programs and activities
• Develop impact statements and marketing products
• Meeting federal match requirements for Cooperative Extension and Agricultural Research programs
• Number of new state and national contacts made that lead to partnerships, collaborative efforts or increased external funding
• Type, number and extent to which problems and issues are identified and solved

TAPPING INTO NEW FUNDING STREAMS REQUIRES TARGETED AND EFFECTIVE MARKETING.
Note of Thanks

A special thanks go to all of those who generously contributed their knowledge and insights to this effort. SAES’s current tasks, more than ever before, are to think and act strategically, consult our colleagues and stakeholders earnestly and openly, and implement this plan that positions SAES strategically vis-à-vis a future that is aligned with our opportunities and resources.

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