

Department Strategic Plan

Extension Plant Sciences Department | <https://eps.nmsu.edu>

Departmental Mission

The Extension Plant Sciences (EPS) Department will provide research-based knowledge and technology that enable our clientele to improve the quality of their lives and enhance the agricultural, economic, environmental, and social well-being of the state. In fulfilling this mission, EPS faculty deliver Extension education programs in plant science-related areas and conduct applied research.

Our faculty collaborate in regional, national, and international research efforts, and are often asked to bring their expertise to colleagues and clientele across the U.S. and in foreign countries. It is our goal to be the premier institution for plant science-related Extension and research in the Southwestern U.S., and to be a worldwide leader in plant science-related information in arid and semi-arid climates.

Strategic Priorities

GOAL 1: ENHANCE STUDENT SUCCESS AND SOCIAL MOBILITY

Create plant sciences programs that effectively grow and shape diverse enrollment, support program demand, student retention and timely graduation, and produce highly qualified graduates with value-added career outcomes.

Objective 1.1: Maintain and enhance existing structure that supports student success.

Actions:

- Provide leadership and direction for graduate students conducting applied agricultural research.
- Continue to identify and develop areas of excellence to attract exemplary students to ACES.
- Pursue extramural grants and fellowships that target research and Extension opportunities, workshops, community projects, and professional training for students.
- Establish stakeholder advisory committees at the department level to align Extension, research, and activities that meet student needs and enhance recruitment.
- Provide immersion-based learning, and internship/job-placement opportunities for students.

Objective 1.2: Increase recruitment and retention as well as graduation rates of students in ACES programs.

Actions:

- Implement a coordinated ACES graduate recruitment and retention plan aimed at traditional, nontraditional, as well international students that includes scholarships
- Maintain extension programs for K-12 to enhance youth outreach



GOAL 1 Key Performance Indicators (KPIs)

- Retention rates.
- Graduation rates.
- Student satisfaction.
- Student internships (Target Date: December 31, 2022): increase the number of internships in the department through individual specialist efforts and such programs as the Plant Diagnostic Clinic and the Master Gardeners by three*
- Graduate employment rate, income, upward mobility rank.

Leading Indicators

- Job, fellowship and internship placement rates.
- Enrollment of domestic, international, and underrepresented students.
- Student involvement in local, regional, national, and international meetings and competitions.
- Number of faculty participating in training programs for teaching improvement.
- Student satisfaction ratings from exit surveys.

GOAL 2: ELEVATE RESEARCH AND CREATIVITY

Identify creative strengths, engage graduate students, and build applied research capacity, funding, and reputation as defined by the four pillars of ACES.

Objective 2.1: Conduct applied research, teaching, and Extension programs to address ongoing and emerging plant science-related issues.

Actions:

- Develop management and mitigation strategies to combat pesticide resistance.
- Build value-added programs in crop science.
- Emphasize genetic improvement of crop plants for New Mexico.
- Develop horticulture programs that assist small farm/urban agricultural industries.
- Support research on developing cropping systems that are more resilient to water scarcity and pests.
- Increase interdisciplinary initiatives for production of alternative and specialty crops.
- Hire additional Extension faculty in irrigation and environmental water management.
- Cultivate interdepartmental and interdisciplinary partnerships to find solutions to plant and environmental issues.

Objective 2.2: Address critical environmental issues.

Actions:

- Discover and develop methods for identification of emerging environmental concerns.
- Investigate land use options for enhancing ecosystem services in rural communities.
- Capitalize on grant funding opportunities requiring a formal Extension component that affords increased faculty research opportunities.
- Continue to develop research and Extension partnerships through consortia and international programs.
- Develop/enhance partnerships with other universities and federal agencies in environmental research.

GOAL 2 Key Performance Indicators (KPIs)

- Externally-funded research and creative activities (Target Date: December 31, 2024): increase grant dollars awarded to the department by 25%*.
- Research productivity.

Leading Indicators

- Hold a grant-writing workshop every other year (2021, 2023, 2025).
- Number of peer-reviewed publications, manuals, and technical reports.
- Number of presentations at professional meetings.
- Number of graduate student research projects.
- Number of proposals submitted.
- Contributions to intellectual property and technology innovation.
- Amount of research grant funding and gifts.
- Number of new partnerships created.

GOAL 3: AMPLIFY EXTENSION, OUTREACH, AND ECONOMIC AND COMMUNITY DEVELOPMENT

Carry out programmatic activities for transferring scientific knowledge and advancements to relevant external audiences through open-access information resources, presentations, events training programs, and individual consultations.

Objective 3.1: Develop innovative, multidisciplinary educational programming addressing plant-related issues that are relevant to New Mexico.

Actions:

- Increase the department's recognition as the authoritative source for quality plant science-related information.
- Partner with county Extension agents to provide timely assistance to clientele.
- Use social/mass media, electronic distance presentation delivery (e.g., webinars), and print media to reach more people, especially in rural communities.
- Use our expertise to enhance the sustainability of plant-related interests.

Objective 3.2: Connect current plant-related research with communities.

Actions:

- Maintain a strong statewide presence and grassroots connections to both rural and urban communities.
- Foster departmental relationships with plant-related industries to support Extension education delivery with measurable and beneficial impacts.
- Provide flexible and timely responses to urgent situations (e.g., pest outbreaks) that impact plant-related industries in the state.
- Develop and support grant proposal submissions, based on stakeholder input, including proposals for on-farm projects.

Objective 3.3: Seize new opportunities to effectively raise awareness of Extension resources, programs, and successes related to plant sciences.

Actions:

- Increase understanding within our state and our institution on the roles of the Land Grant University, the Cooperative Extension Service, and the Agricultural Experiment Station.
- Increase recruitment of youth involved in Extension programs to broaden access to the NMSU experience.
- Collaborate with industry, tribal communities, and community organizations to address issues related to agricultural production, water use and conservation, and environmental stewardship.

Objective 3.4: Support faculty, staff, and students from various colleges and departments across the university in plant-based community and economic development research, educational activities, and international development programs.

Actions:

- Provide leadership in collaborative efforts between Extension and research agencies and institutions internationally, nationally, and in New Mexico including other NMSU colleges and departments.

GOAL 3 Key Performance Indicators (KPIs)

- Extension programs related to community and economic development.
- Extension clientele contacts, workshops, courses, and publications.
- Enhance efficiency of presentations (e.g., for Master Gardener programs) by leveraging electronic distance delivery technologies (Target Date: December 31, 2022): reduce annual in-state mileage of EPS Specialists by 5%*.
- Evaluation of measurable/quantifiable program impacts (Target Date: December 31, 2020): faculty and program staff will meet individually with the ACES Program Development Evaluation Specialist to improve evaluation techniques and reporting*.
- Financial investment in and expenditures by Extension programs.

Leading Indicators

- Number/diversity of businesses, individuals, or communities assisted.
- Number of educational and certificate training programs.
- Number of publications and media releases.
- Number of collaborative activities.
- Student, faculty, and staff service to communities.
- Number of youth and students engaged.
- Faculty and staff numbers.
- Amount of federal, state and county appropriations Number and dollar amount of Extension proposals submitted/funded.

GOAL 4: BUILD A ROBUST UNIVERSITY BY IMPLEMENTING COLLEGE-WIDE, MISSION-SUPPORTING STRATEGIC INITIATIVES

Promote learning, inquiry, diversity and social mobility with an Extension focus to integrate NMSU disciplines, for K-12 and life-long learners, locally and internationally; support ACES initiatives to provide a diverse Extension environment for a global society.

Objective 4.1: Globally/locally recruit students, faculty and underrepresented groups and expand K-20 outreach.

Actions:

- Define and identify underrepresented groups to better serve and recruit them.
- Work actively with ACES programs directed to youth, seniors, and underrepresented students.
- Recruit students to attend/assist at workshops, field days and short courses.
- Encourage county agents and teachers to utilize EPS resources and media.
- Work with community colleges to develop workforce opportunities.

Objective 4.2: Promote EPS impacts and visibility and increase support for EPS via local, state, tribal and federal governments and agencies, corporations, foundations, and alumni.

Actions:

- Enlist stakeholders to compose and publicize EPS impact stories.
- Collaborate with county agents and industry to execute effective events to gain Extension program support from NM citizens not directly involved in agriculture.
- Inform legislators of how EPS can solve problems for constituents.
- Pursue resources for improving infrastructure of ACES and statewide Agricultural Science Centers.

Objective 4.3: Encourage and support faculty and staff training, development, and recognition to cultivate excellence.

Actions:

- Increase number of chairs, fellows, professorships, post docs and centers of excellence.
- Provide faculty and staff with training and professional development opportunities.
- Provide training and materials for Extension agents to deliver EPS programs and reduce specialists' travel.

GOAL 4 Key Performance Indicators (KPIs)

- Number of collaborative outreach efforts with county agents, industry, stakeholders, community groups, and tribal/governmental agencies.
- Number of public media and impact stories on research and Extension (Target Date: December 31, 2022): increase the number of print, online, and broadcast media features of EPS program activities and accomplishments by 25%*.
- Number of research collaborations between specialists, other NMSU departments, in-state institutions and regional, national and international organizations.
- Number of students, endowed chairs, fellows, professorships, and post docs.

Leading Indicators

- Number of collaborative research and Extension efforts.
- Number of EPS impact stories, accomplishments, and areas of excellence presented to New Mexico legislators and citizens.

Key Performance Indicators (KPIs) identified as priorities by the EPS department:

		Metrics		
		Year 1 (Dec. 31, 2020)	Year 3 (Dec. 31, 2022)	Year 5 (Dec. 31, 2024)
Goal 1	Student internships		Increase the number of internships in the department through individual specialist efforts and programs by three.	
Goal 2	Externally funding			Increase grant dollars awarded to the department by 25%.
Goal 3	Efficiency of presentations		Reduce annual in-state mileage of EPS Specialists by 5%.	
Goal 3	Program impact evaluation		Faculty and program staff will meet individually with the ACES Program Development Evaluation Specialist to improve evaluation techniques and reporting.	
Goal 4	Media and impact stories		Increase the number of print, online, and broadcast media features of EPS program activities and accomplishments by 25%.	

*KPI's identified as priorities by the EPS department

The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs. New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.