

## **Mission**

Improve humanity through modern agricultural research, education and extension.

## **Vision**

ACES will be the premier college of agriculture in the southwestern United States and will be an engine for economic, intellectual and community development within the region.

## **Values**

- Rigorous academic standards and superior education enabled by unique student experience
- A diverse faculty, committed to transformative research and a contemporary curriculum
- Student preparation for a dynamic global environment
- Applied and fundamental agricultural research that meets the challenges of our times
- Funded research is a vehicle for student recruitment, retention and success
- Faculty involvement in service activity
- Service the citizens of New Mexico

## **Goal 1 – ACES will lead technology and solutions development for grand challenges in food and fiber production**

### Strategies:

- Realize comprehensive understanding of human food consumption – from the environment and the manner in which food is produced, to the health and economic outcomes that result
- Tailor research, teaching, and extension programs around contemporary critical issues
- Establish interdisciplinary and integrated management approaches
- Emphasize the connectivity of food science, food technology, value-added products and international relationships
- Identify marketing opportunity for specific agricultural products

- Conduct research, teaching, and extension programs in molecular biology, nutritional toxicology, and microbiology
- Communicate the full spectrum of research results and extension impacts to the public, governmental and scientific communities

Accomplishments:

- Active, recognized plant science, soils and genetics program
- Engaged and effective extension team
- Effective response to pecan pest invasion in southeastern NM
- Supported economic development of northern NM small farms (RIAPAP program)
- Active, recognized crop, animal, and range management programs
- Active urban horticulture programs
- Research and extension activity for niche markets and products (e.g., medicinal plants, local foods, organic crops, community gardens, and farmers markets)
- Identified new rotational crops to save water and improve profitability
- Released improved crop varieties (chiles, onions, alfalfa, glandless cotton)
- Supported NM wine industry
- Reduced livestock losses with NM-ALIRT system
- Developed new hops varieties to support NM brewing industry
- Helped develop mechanization technology and crop varieties for NM chile industry

Vision 2020 Goal Alignment:

- 1 Academics and Graduation
- 2 Internationalization
- 3 Research and Creative Activity
- 4 Economic Development and Community Engagement

**Goal 2 – ACES will be a regional leader in water use and water conservation issues**

Strategies:

- A solid educational background equips young minds to formulate solutions to this complex issue – WRRI and Water Science and Management programs
- ACES interdisciplinary research teams are active in water- and water-related agricultural research
- Active research and extension programs address water quality issues and identify efficient use of existing water, including impaired and municipal waste water

- Regular departmental curricula updates that train students for careers in environmental science, natural resources management, and related disciplines

Accomplishments:

- Premier regional analytical instrumentation resources for water analysis have been established within ACES
- Multiple current ACES collaborations with national laboratories, agencies and industry in water-related research
- Participated in national programs for the development of effective microirrigation technology
- Established hydrologic, economic, and social value of aquifer recharge in acequia systems of Northern NM
- Developed drought-resistant turfgrass varieties
- Developed irrigation scheduling protocols that help producers save water

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**Goal 3 – ACES will be a driver for improved health among New Mexicans**

Strategies:

- Active research, teaching, and extension programs in contemporary family, consumer, and tourism issues that enhance the health and socioeconomic well-being of New Mexicans.
- Extension programs that address coping strategies, decision-making skills, communication skills, and consumer behavior
- Relate family resource management skills to the citizens of New Mexico through extension activity
- Communicate the full spectrum of research results and extension impacts to the public, governmental and scientific communities
- Regular departmental curricula updates to improve student training for careers in human nutrition, food science, family science, child development, consumer science, clothing, textiles, and fashion merchandising, tourism management, hotel management, and restaurant and food service management, and related disciplines

Accomplishments:

- Developed bedbug controls that do not rely on synthetic pesticides, which helps the NM hospitality industry
- Significant food safety training and interaction with NM producers
- Developed and produced effective food education training videos
- Provide financial/debt training
- Provide diabetes education and prevention programs

Vision 2020 Goal Alignment:

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- 2 Internationalization
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**Goal 4 – ACES will be a regional leader for environmental stewardship**

Strategies:

- Interdisciplinary and cross-unit synergy between ACES components that include academic departments, research centers, the USDA Jornada Experimental Range and the USGS Fish and Wildlife Cooperative Research Unit
- Train natural resource students (graduate and undergraduate) to become future land managers

Research, teaching, and extension programs on:

- the conservation of endangered and threatened wildlife in New Mexico
- the impact of humans on wildlife and aquatic resources
- sustainable use of natural resources
- the impact of urbanization on rural environments
- cultural and social issues related to demographic shifts and agricultural transformation
- the information and technology needs of natural resources managers

Accomplishments:

- Established the Natural Resource Career Track Program
- Effective response to the Gold King Mine spill (Animas and San Juan rivers)
- Developed thinning practices that reduce forest fire danger

Active research and extension programs that:

- address multiple uses of land

- investigate alternative enterprises based on utilization of natural resources
- develop natural resource management practices to ensure that socially and environmentally optimal resource uses are achieved
- address soil and food contamination, waste management, watershed, and erosion problems
- address wildlife habitat needs, economic value of wildlife, and maintenance of biodiversity
- address the effectiveness of recreational and sustainable hospitality and tourism practices
- identify the physical and economic trade-offs that would result from modifying existing management practices
- address preparedness and response to natural disasters, such as drought and fire
- assist land management agencies in developing standards and guidelines for land use and conservation
- Broaden the scope of what and how we communicate the full spectrum of research results to the public and scientific communities.
- provide data and other information to the public, to government agencies, to private industry, and to legislators on environmental issues
- educate users of public lands about wildlife and land use standards and the monitoring of wildlife land condition

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**Goal 5 - Increase the level of support for ACES from the citizens of New Mexico, governments, private corporations, foundations, and alumni**

Strategies:

- Significant interaction with Mexican partners in agricultural research, extension, education and trade
- Implement cooperative ventures and coalition-building activities with stakeholders
- Implement systematic flexibility to leverage extramural research funding for the acquisition and retention of unique expertise within the College
- Utilize constituency groups to elicit assistance in the marketing and development of priority programs
- Expand and refine the College's legislative liaison initiative
- Develop alternative funding sources, personnel, organizations

- Increase cooperation and collaboration with industry
- Develop and implement a coordinated College recruitment and retention plan aimed at both traditional and nontraditional students.
- Prioritize classroom and educational facility upgrades
- develop effective, high-quality distance education processes

Accomplishments:

- Extension activity is the ultimate link between NMSU and the communities and citizens of New Mexico
- Significant interaction with foreign collaborators and institutions
- NM EDGE: a program designed to provide a comprehensive course of study to administrators, managers, elected officials, and staff in local, state, tribal, and national government, through which participants can acquire and apply the best practices and theory to their management behaviors and strategies using the highest professional standards
- Effective 4-H programs in all NM counties

Vision 2020 Goal Alignment:

2 Internationalization

4 Economic Development and Community Engagement

5 Resource Stewardship