Agricultural Science Center at Farmington

The Farmington Agricultural Science Center (ASC) was uniquely established at the invitation of the Navajo Nation and San Juan County residents on 254 acres to meet the needs of the San Juan Valley and Four Corners region. The Farmington ASC is one of the only 1862 Land-grant university research center located directly on sovereign First Nations land. It is also the only agricultural research facility in the state of New Mexico that is on the western side of the Continental Divide. Research at the ASC has supported fundamental and applied science to benefit northwest New Mexico for over 50 years, with a specific focus on working with the Navajo Indian Irrigation Project (NIIP), Navajo Agricultural Products Industry (NAPI), hundreds of local landowners around the La Plata, Animas and San Juan Rivers, backyard growers and urban stakeholders across the Four Corners Region.

Scan the QR code to visit our website farmingtonsc.nmsu.edu

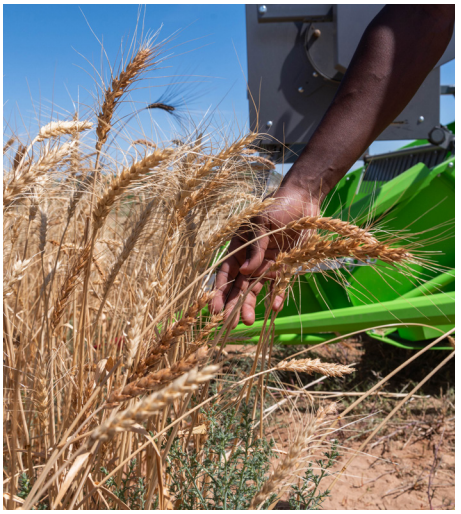
MISSION

The mission of the New Mexico State University Agricultural Science Center at Farmington is to conduct research, demonstration and educational programs that will best fill the needs of the agricultural community of San Juan County and the Navajo Nation in particular and the state of New Mexico, Four Corners Region and United States in general. -1968 Charter

VISION

Building agricultural and community resilience with innovative science that respects regional cultural values in the Four Corners Region (Navajo Nation and beyond).

Research Focus



Research at the Farmington ASC is enhancing and expanding rigorous scientific evaluation of controlled environment agriculture (including agricultural photovoltaics), high-value specialty crop research, precision-based agriculture and cropping systems to reduce water and nutrient inputs and conservation plantings for soil health to help the agricultural community make informed decisions. Research projects are guided by a community advisory committee. These projects are multi-disciplinary and extend well beyond agricultural science disciplines. Research results are disseminated in collaboration with NMSU and adjoining Four Corners Cooperative Extension Service (CES) and through field days and print and digital media.

We have a strong record of accomplishment involving students in our research projects. The center has a longstanding history of hosting interns who are funded through grants from the National Cancer Institute, National Institutes of Health (NMSU/Fred Hutch Cancer Center U-54 Partnership for the Advancement of Cancer Research and Bridges to the Baccalaureate programs), National Indian Youth Council, NMSU Indian Resources Development (IRD) and National Science Foundation. Most student interns are Diné who call northwest New Mexico their home.

The College of Agricultural, Consumer and Environmental Sciences (ACES) is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through research, teaching and extension.

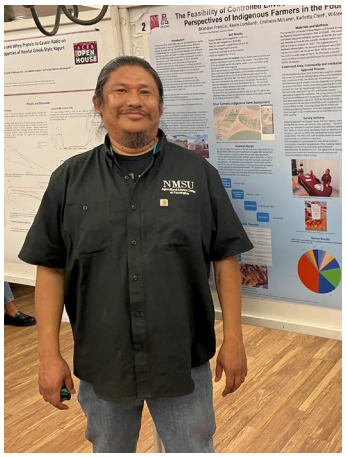
Recent Impacts

- **Transformation Network:** Funded through the National Science Foundation, the Transformation Network (TN) represents a partnership between eight Western U.S. universities with over 50 partner organizations representing Tribal partners, governmental and non-governmental organizations, public utilities, conservation districts, irrigation districts and municipalities. Through the Indigenous Farmers Needs Assessment, approved through the Navajo Nation Human Research Review Board, ASC Farmington staff surveyed over 124 farmers located along the San Juan River. The survey results are now supporting tailored, purposeful, outreach efforts and interventions (especially in controlled environment agriculture, agrivoltaics and soil health) aligned with the priorities of Navajo farmers and other agricultural stakeholders in the region.

VALUE ADDED TO NEW MEXICO

- Located on the Navajo Nation
- Center pivots and drip irrigation
- Specialty, commodity, cover crop and transitioning into certified organic crop production
- Agroforestry, environmental and agricultural soil quality monitoring
- Use of robotics in data collection for farm management decisions.

- **Field Crop Evaluations:** Unique research taking place at the ASC Farmington includes chile pepper, potatoes, corn, alfalfa, beans, small grains, viticulture, medicinal herbs, agroforestry and other specialty and alternative crops and cropping systems under conventional and transitional certified organic production systems. Faculty at the ASC Farmington are engaging in water and input reduction crop system modeling that includes the use of soil moisture probes, precision agricultural systems and weather monitoring decision-based tools. Cropping system research is at multiple scales from pivot-based (to support Navajo Agricultural Products Industry and other pivot irrigators in San Juan County) all the way down to back-yard garden scale (e.g. grow-boxes).



- **Potato:** The Four Corners region has a very favorable climate and sandy to sandy loam soils for potato production. The present study selects high yielding and adapted potato cultivars with great post-harvest quality to growers to improve their production system profitability.

COMMUNITY ENGAGEMENT

- Every year, the ASC Farmington hosts hundreds of visitors who attend a spring open house, summer field day and tailored workshop events often in a family friendly, festive environment. These events serve to showcase and disseminate research findings. In the fall of 2025, over 400 third through fifth graders attended our third annual Kids Farm Day and Pumpkin giveaway.
- Gold King Mine spill of 2015 10th anniversary and Northwest NM Agricultural Restoration Project.

Current work is in collaboration with San Juan County Cooperative Extension Service and the ASC Farmington as part of the Northwest New Mexico Agricultural Restoration Project to conduct trainings within the community and support agricultural resilience following the August 5, 2015 Gold King Mine spill event. A documentary highlighting farmer resilience is raising awareness of northwest New Mexico's longstanding agricultural heritage.