**Condition Change: UC ANR contributes to increased diversity, inclusiveness, and cultural competency in California's workplaces.**

**Issue**

California is the most diverse state in the nation by many standards, including race/ethnicity, languages, and socio-economics. It is a minority-majority state, where no single ethnic group forms a majority of the population. However, more than half of the children in California are Latino. The median annual income for Latino, Native American, and African American households in California are well below the state median income. This income gap correlates to opportunity gaps, in critical areas like access to high-quality youth development programs and early preparation for college. California continues to be challenged by social, health, and economic inequities.

**Methods**

UC ANR builds cultural competency skills, implements community-centered programs, and develops proactive policies to increase diversity and inclusiveness. UC ANR engages in intentional efforts to ensure that all members of the public have equitable access to UC ANR resources. UC ANR academics live and work in communities building trust and credibility to solve local problems together through research, outreach, and education.

A UC Agricultural Experiment Station scientist at the UC Davis location is developing an index of insurance contracts for low-wealth, rural households. This research has application in a wide range of contexts from helping California farmers manage drought risks to being bundled with improved crop technology to help lift rural households in several African countries out of risk-induced poverty traps. The communities who produce food often get overlooked in discussions of food access and consumer diversity. Many in those communities are often trapped in low-income conditions by an inability to buffer themselves against risks involved in changing behavior. This work has the potential for local and global impact (Michael Carter).

The 3-year UC ANR 4-H Latino Initiative pilot program ended in 2019. However, the programmatic and academic efforts will continue in many of the seven pilot counties. The goal was to expand programmatic reach to Latinos by hiring bilingual and bicultural staff that represent the communities they were serving; focusing on forming new strategic partnerships; adapting models to be culturally relevant; and building trust with new families. In addition, the program worked internally to improve intercultural competence by training six UC Cooperative Extension (UCCE) 4-H youth development advisors to implement the Intercultural Development Inventory (IDI) to 4-H staff, academics and specialists. Lessons learned were shared in the form of handbooks, scholarly journal articles, and conference presentations (4-H Youth Development Statewide Program).

Another 4-H project called From the Ground Up is a statewide, collaborative research and extension effort. It identified promising practices to recruit, engage, and sustain the participation of Latinx youth. New asset-based community mapping and engagement tools were developed. The research findings were incorporated into a technical guide aimed at 4-H professionals and volunteers to promote social justice youth development. The research was disseminated locally, statewide, and at national conferences, and was recognized by the NIFA’s Children, Youth, Families and Youth at Risk program. UCCE advisors and staff from Riverside, Merced, and Santa Clara counties adopted these practices in their programs. Additionally, short workshops on intercultural conflict resolution were delivered to 4-H volunteers, along with consultations (Fe Moncloa).

UCCE efforts in San Luis Obispo County supported other institutions in adopting improved policies, systems, and environments to improve inclusion and affirmation of marginalized populations in the workplace. A popular article assisted clientele compliance with AB 1976 that supports lactating employees who work in the field, and Family Friendly Environment guidelines were developed. Training and resources were provided to support regulatory compliance with the state law requiring gender inclusive restroom signage. Also in San Luis and Santa Barbara Counties, 4-H Student Nutrition Advisory Councils (4-H SNAC Clubs) engaged 200 student leaders, who are 92% Latino youth, in health advocacy programs, to develop youth’s skills in teaching nutrition and physical activity lessons, increasing salad bar participation in their schools, and leading community wellness activities. These predominantly Latino student leaders provided direct education to 1,414 of these peers, and indirect education to an additional 3,169 students (Katherine Soule).

A UCCE program in the San Francisco-Bay Area region focuses on culturally responsive research, outreach, and education to small, limited-resource, socially-disadvantaged Asian farmers. These farmers face significant language and cultural barriers, including obtaining and maintaining permits.

* Research was conducted on culturally relevant crops, specifically evaluating nitrogen uptake and applied irrigation water in Asian vegetables bok choy, edible chrysanthemum, garlic chives, moringa, and lemongrass. A water and nitrogen management decision support tool for Asian vegetables was developed.
* Nine food safety recordkeeping templates and a food safety plan template for small-scale farms were translated into Chinese. A sign for posting on farm and three food safety standard operating procedures were developed and translated. Two extension meetings in Chinese were conducted that included presentations and hands-on demonstrations on FSMA compliance and good agricultural practices.
* Outreach and technical assistance was provided on the topic of reducing pollutant source loads, through a funded partnership contract with the Loma Prieta Resource Conservation District. Factsheets on soil testing were developed and translated into Chinese. In addition, a policy paper was published: “Comments on the Eastern San Joaquin River Watershed Agricultural Order: identifying unique needs and challenges for diversified, socially disadvantaged farmers.” One-on-one training was provided on total nitrogen applied reporting required by Central Coast Regional Water Quality Control Board.
* In collaboration with the Santa Clara County Agricultural Division, UCCE coordinates an annual workshop for this audience on topics related to pesticide safety, laws and regulations, and integrated pest management, and continuing education credits are offered. (Aparna Gazula)

UCCE in Inyo and Mono Counties began a collaboration with Manzanar National Historic Site. UC Master Gardeners are conducting public education about orchard management in the historic pear/apple orchard, and research into 1940s Barracks Gardens, and on guayule (Parthenium argentatum) grown for rubber during Internment. UCCE in Inyo and Mono counties also works in partnership with Bishop Paiute Tribe. One project funded by USDA NIFA addresses food safety issues**.** UCCE is alsoadvising on the development of a commercial orchard on the Fort Independence reservation to increase access to fresh produce and provide economic opportunity by tribal members. (Dustin Blakey)

A collaborative UCCE effort in Southern California disseminates research-based pest management information to ethnic, limited resource farmers. During 2019 over 200 such growers were reached through workshops, research field days, and seminars focused on new or specialty crops, like pitahaya, and included information on the management of various pests impacting these crops. (Ramiro Lobo)

The UC Master Gardener Program has expanded Spanish-language efforts. A statewide team of academics funded through internal grant worked to develop Spanish language online resources, including key handouts and “how-to” videos on sustainable horticultural topics in Spanish, as well as select workshops in Spanish. (UC Master Gardener Program, Maggie Reiter)

The first bilingual and bicultural California Naturalist Certification Training course was adapted by local instructors and delivered to the Urban Conservation Corps of the Inland Empire (UCC). It became their framework for the new Los Naturalistas project. For over four months, 12 UCC Corpsmembers met every Saturday for training under the guidance of a UC ANR academic. The trainings were designed for Corpsmembers to be able to lead stewardship activities and educational tours in both English and Spanish. Recognizing that Corpsmembers learn in different ways, the trainings included a combination of readings, lectures, field trips, videos, and one-on-one tutoring. All of the trainers were Spanish-speakers who had cultural context for the training. (Claudia Diaz and the California Naturalist Program staff)

As a result of UC ANR’s multipronged efforts to better reach underserved audiences, program staff gained cultural competency skills and UC ANR increased engagement with diverse communities across California. Outcomes with specific indicators follow.

**Outcomes**

**UC ANR better engages underserved communities.**

* In 2019, the seven counties engaged in the 4-H Latino Initiative reached parity for Latino youth. Merced County has had a 744% increase in Latino 4-H youth enrollment since the initiative began in 2016, the largest of the participating counties. (4-H Youth Development Statewide Program and Russell Hill)
* Local UC Master Gardener efforts better engaged the Latino community. In 2019, the Fresno County Master Gardeners piloted a new workshop in Spanish at a public library, a new location that was more accessible to Spanish-speaking clientele. There were six attendees, and more such workshops are being planned. (UC Master Gardener Program and Maggie Reiter)
* Los Naturalistas have started changing the narrative in environmental education and interpretative services at the forests and monuments of Southern California. There are now tours in Spanish with a Latino cultural twist, filling a void in the availability of environmental literacy services for the Spanish-speaking population of San Bernardino and Riverside Counties. Thousands of Spanish-speaking community members who visit the San Bernardino National Forest will not be excluded from educational opportunities. (Claudia Diaz and the California Naturalist Program)
* Ethnic, limited resource farmers have increased awareness of Integrated Pest Management (IPM) practices and pesticide regulations. Using proper IPM practices, better understanding and use of product labels, use of proper protective equipment, and improved pesticide use safety benefits their businesses and reduces pesticide loads in the environment. (Ramiro Lobo)
* As a result of the collaboration with Manzanar National Historic Site the Japanese gardens are being restored and a demonstration project is available to educate the public about how guayule (*Parthenium argentatum*) was grown for rubber during Japanese Internment. (Dustin Blakey)
* As a result of the Chinese food safety workshop, 100% of the 11 small farmer participants stated that the workshop met their expectations, and nine reported that the workshop increased their knowledge on food safety and that they will recommend the workshop to others. (Qi Zhou and Aparna Gazula)
* 59 student leaders, predominantly Latino, completed pre-post paired assessments, which showed a statistically significant positive change in youth development outcomes from participation, including public speaking, program planning, and teaching others. This program was selected by USDA, NIFA for expansion and implementation through a multi-state 5-year grant award. (Shannon Klisch & Katherine Soule)

**UC ANR academics, staff, and volunteers learned skills to better engage diverse audiences.**

* As a result of intercultural competence workshops and webinars for the 4-H Youth Development Program, 35 Extension professionals, 27 4-H volunteers and nine 4-H youth learned new practices to engage Latino populations as evidenced by post-pre-tests. In addition, the 4-H staff, academics and specialists who worked on their own intercultural competence moved from a focus on similarities, to an organization that also recognizes the complexity of the dimensions of diversity (e.g. from *minimization* (M= 104.32) to the *cusp of acceptance* (M = 111.18) on the IDI continuum). As 4-H academics and staff better engage Latino youth, families and communities in their programs, program diversity will increase fostering a sense of belonging for diverse youth and families in 4-H and increasing Latino youth's access to various career pathways. (Fe Moncloa and Russell Hill)

**Science-based information applied to making policy and decision-making.**

* The State Water Resources Control Board adopted language in the revisions to the Eastern San Joaquin River Watershed Agricultural Order to allow alternate reporting requirements for diversified, small-scale, and socially disadvantaged farmers. These changes are precedential for the state of California and can benefit diversified and socially disadvantaged farmers in other counties as well as small-scale organic farms.(Ruth Dahlquist-Willard and Aparna Gazula)
* In partnership with the Bishop Paiute Tribe, food safety audits were completed on all current and in-development Food Sovereignty gardens in Inyo and Mono counties. (Dustin Blakey)

**Change in condition: Workplaces are more inclusive.**

* Policy, systems, and environmental changes included installing gender inclusive restroom signs that reduced barriers for employees with marginalized identities. (Katherine Soule)
* After culturally responsive trainings for Asian farmers in the San Francisco-Bay Area, they were better able to have their businesses be compliant:
  + 45 small, socially-disadvantaged farmers complied Agricultural Order monitoring and reporting requirements and avoid fines. Failure to comply subjects the dischargers to additional enforcement actions by the Water Board, including penalties of up to $1,000 per day for each day of violation of monitoring and reporting requirements.
  + 60 small, socially-disadvantaged farmers successfully renewed their pesticide permits for the past four years and are legally able to apply pesticides to manage pest issues in their crops. (Aparna Gazula)

These measured outcomes demonstrate how UC ANR has strengthened its internal capacity to do effective outreach to diverse audiences. UC ANR increased access to opportunities and created environments where different kinds of people can thrive and succeed. In this way, UC ANR contributes to the public value of developing an inclusive and equitable society. The UC Berkeley Hass Institute of Fair and Equitable Society finds California ranking high in inclusiveness. However, the state dropped from fifth to eighth in the nation between 2018 and 2019, indicating there is still a lot of work to do.