

EXPANDING TECHNICAL ASSISTANCE TO SUPPORT ON-FARM CLIMATE RESILIENCE

PLATFORM RECOMMENDATIONS AT-A-GLANCE

- Expand Regional Hubs to Deliver State and Federal Resources
- Establish a California Center for Technical Development
- Improve State Grant Terms to Support TA Provider Professional Development

A CLIMATE PLATFORM FOR CALIFORNIA AGRICULTURE

This is one in a series of CalCAN policy briefs that describe approaches to moving California agriculture boldly and quickly toward a carbon-neutral and climate-resilient future. Together, they make up *A Climate Platform for California Agriculture*.

Access the full report at: calclimateag.org/ca-agriculture-climate-platform

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INTRODUCTION

Agricultural producer access to professional technical assistance (TA) is crucial to the success of the transition to climate-resilient agriculture. Technical assistance providers include Resource Conservation Districts (RCDs), University of California Cooperative Extension (UCCE), and nonprofits with access to the latest science to inform a farmer’s decision-making about their management choices. They provide farmers with a range of services that can include on-farm conservation planning, market development/business planning, on-farm conservation project development, grant application assistance, and project implementation.

TA is most effective when provided in the context of a long-term relationship between the conservation planner and the producer. TA providers not only anticipate potential problems for current practices and help troubleshoot failing practices from past years, they also help identify opportunities for climate smart management and financial support for adoption of new practices. Adaptive management allows farmers and agricultural practitioners to dynamically respond to changing conditions and uncertainties in their farming systems, an approach that is becoming increasingly important as climate impacts increase. A recent study by UC Agriculture and Natural Resources (UCANR) reported on the success of their Climate Smart Agriculture Team that has provided in-depth technical assistance to more than 1,300 farmers and ranchers in 24 counties.¹⁵⁹ The report emphasizes the importance of providing tailored outreach, education, and technical assistance to small-scale, non-English-speaking, and otherwise underserved farmers and ranchers.

In addition to the coordination and information sharing among technical assistance providers, as highlighted in the recent memorandum of agreement (MOA) signed by the California Department of Food and Agriculture (CDFA) and several other



Photo Credit: USDA-NRCS



¹⁵⁹ California Ag Today. [Farmers save money, water by adopting climate-smart agriculture practices.](#)

partners¹⁶⁰ (see the solution chapter [Breaking Down the Silos: Coordinating Agriculture Climate Action Across Programs](#)), more attention is needed to the professional development and career pathways for TA providers in agriculture. The complexities of managing agricultural lands in the face of greater weather extremes, new pest pressures, and constrained water resources require that technical assistance providers receive relevant training and professional development to address these new realities. Such efforts can develop career pathways for 21st-century agricultural technical assistance and assist with staff retention and development and are central to a viable and sustainable agricultural industry in the state.

To better understand these issues, we interviewed leaders in the field of agricultural technical assistance. Below we offer our findings and recommendations.

FINDINGS

Technical Assistance Hubs and Networks Can Amplify Impact

Climate-resilient practices vary depending on regional context and specific farm conditions, and we heard how important it is to tailor TA provision and deliver services at the local level. Also, to be successful with outreach and project design and implementation, TA providers need trusted relationships with the farmers and ranchers they serve, particularly those who have been systematically disenfranchised. Strong local partnerships and collaborations are needed to expand the reach to producers who may not have participated in government grant programs.

One example of a strong TA network is the North Coast Soil Hub,¹⁶¹ which is a partnership of the region's Resource Conservation Districts, field offices of the Natural Resources Conservation Service (NRCS), UCCE, the Santa Rosa Junior College, Carbon Cycle Institute, and farmers and other agriculture professionals in the area. Together they provide farmer-to-farmer workshops, long-term experimental demonstrations, technical services, and educational resources to improve soil health and accelerate on-farm climate solutions.

Another model is the network of partner biologists at Point Blue Conservation Science¹⁶² who work closely with district NRCS offices to do conservation planning and support producers with federal grant applications. Having adequate, dedicated, and permanent TA funding and sufficient staff that can serve the needs of their local agriculture communities is essential. Finally, SAREP was recently awarded \$2 million to strengthen the California Farm Demonstration Network by building a "hub-and-spoke" network in three regions (Sacramento Valley, North Coast, and Central Coast), a pilot Hmong/Mien Demonstration Hub, and a statewide Organic Demonstration Hub.¹⁶³

Grant Structures Can Limit Professional Development for TA Providers

In our interviews with TA providers, we heard concerns that the lack of career pathways and professional development is impacting staff retention. One former RCD director noted that the types of jobs that the RCDs offer are in high demand, but that for some RCDs, the lack of resources for professional development and related career pathways creates long-term staff retention issues and high turnover. We were told that when grant terms are only one to three years or offer limited indirect cost reimbursements, it is harder to invest in long-term career development for staff. We heard that compared to state grants, federal grants often offer better indirect rates and reimbursement policies overall, making investments in staff development easier. For example, one interviewee noted that it can take up to two years of work to complete a state grant and bill for the work done. This creates not only cash flow constraints but also limits funding for staff professional development and training.

¹⁶⁰ USDA NRCS. [Memorandum of agreement between CDFA, CARCD, UCANR and USDA/NRCS](#).

¹⁶¹ For more on the North Coast Soil Hub, see <https://soilhub.org/>.

¹⁶² For more on the partner biologist program at Point Blue, see <https://www.pointblue.org/our-work/working-landscapes/>.

¹⁶³ Read more about the [SAREP grant](#) for the California Farm Demonstration Network.



Expertise in Climate Smart Measurement, Monitoring, Reporting, and Verification Needed

Interviewees noted that new U.S. Department of Agriculture (USDA) funding for climate smart agriculture creates opportunities for staff development but also brings with it the need for new staff expertise. Specifically, TA providers need to develop or enhance their capacity to do measurement, monitoring, reporting, and verification (MMRV) of GHG emissions reductions associated with their climate change and agriculture projects. Some interviewees noted that moving toward MMRV systems creates opportunities for staff development, but noted a lack of resources to do that kind of professional development. Some noted that more automated systems that allow for standard reporting are also needed.

Innovative Approaches in California and Washington Offer Models

We heard from several of our interviewees about professional development efforts in California and elsewhere that offer models to scale up career pathway opportunities in resilient agriculture. Among them is the work of the Carbon Cycle Institute (CCI), which offers a variety of professional development training options for RCDs and others working on carbon farm plans in agriculture.¹⁶⁴ With funding from USDA and others, CCI is able to provide a three-week online training for TA providers on carbon farm planning and implementation, reaching 40 to 50 TA providers annually. The Center For Regenerative Agriculture And Resilient Systems at Chico State University¹⁶⁵ has launched a comprehensive TA provider training program that provides many pathways for professional development and technical service certification. Training is carried out in coordination with NRCS specialists.

The Center for Technical Development (CTD) in Washington state is one out-of-state model to look to for inspiration. Developed by Washington's Conservation Commission in partnership with NRCS, UCCE, local conservation districts, and others, the CTD offers ongoing professional development for TA providers working with farmers on conservation management. It provides ongoing and consistent professional development. This kind of well-resourced and comprehensive professional training can center efforts to scale up climate resilience efforts across the state's working lands.

Washington State's Center for Technical Development

One potential model for California to consider for climate smart agriculture professional development can be found in Washington state. The Center for Technical Development (CTD) was established “for the purpose of ensuring that all Washington State Conservation Districts have equal access to the proper professional development opportunities to advance technical expertise and the support to consistently plan and implement diverse conservation programs unique to the clientele, available resources, and geographical influences of their region.”¹⁶⁶

In 2022–23, CTD reported that 150 people attended nine trainings that were offered by a collaboration of six partner organizations. Topics included conservation planning, soil health, soil testing, riparian considerations, on-farm solar, and contract and procurement training. They also offer online networking forums, bringing TA professionals together to ask questions, discuss resources, and build professional relationships; and they have a certification program intended to complement and improve integration with NRCS certifications and reduce barriers to entry.



Photo Credit: WSCC Center for Technical Development

¹⁶⁴ For more on the CCI Carbon Farm Planning training, see <https://www.carboncycle.org/education-training/>.

¹⁶⁵ Read more about the [Chico State TAP](#).

¹⁶⁶ Read more about the [Center for Technical Development](#) in Washington.



RECOMMENDATIONS

Expand Regional Hubs to Deliver State and Federal Resources

Regional hubs are likely to be most successful with expanding the reach of California's TA provision and scaling up practices. They should be structured to involve a variety of partners and professionals. The California Association of RCDs, in collaboration with the Carbon Cycle Institute, is in the process of replicating the successful North Coast Soil Hub, launching six new Regional Carbon Farming Hubs across California. These can form the building blocks of an impactful network of organizations and agencies that can connect funding opportunities and expertise to farmers and ranchers interested and willing to implement new practices that mitigate climate change and shore up the resilience of their operations. They also provide a framework for documenting needs and opportunities at the regional scale and act as a conduit between local agricultural communities and state and federal resource agencies.

Establish a California Center for Technical Development

We support the creation of a California Center for Technical Development, similar to the center found in Washington state. Such an effort can coordinate professional development training and mentorships across provider types (e.g., NRCS, UCCE, RCDs, nonprofit, PCAs, etc.) and improve staff retention by developing career pathways. Given the racial demographics and language diversity of California's farmers and the fact that the percentage of non-white farmers and farmers with limited English proficiency is likely to grow, recruitment of TA providers with cultural and language literacy that matches the state's demographics should be a high priority.

A California Center for Technical Development can also address new technical assistance needs, including MRV expertise. Having a lead entity focused on agricultural technical assistance can relieve the burden of professional development across individual TA providers and provide a more cohesive and effective delivery of professional development in this space. The state can look to the Washington state model for lessons learned. With an initial investment of \$5 million, California can support the professional and career development of the state's agricultural technical assistance providers and meet the challenge of developing a resilient workforce.

Improve State Grant Terms to Support TA Provider Professional Development

Waiting two years to be paid on a state grant or finding that a state grant will not cover basic administrative costs hamstrings TA providers and limits investments in staff. To address this, the state must improve grant terms and can look to USDA grants as one model for providing better terms for its TA providers. Another option is to develop agreements across provider types (e.g., RCDs) and the state to provide uniform and fair compensation (e.g., indirect rates, reimbursement time frames, etc.). The Governor's Office should prioritize and lead this effort so that there are improved grant terms for TA providers across state agencies and departments. Improved state grant terms can provide the stability and necessary funding to support the professional development of TA providers.



Photo Credit: USDA-NRCS

