**CED10: Agriculture Technology Area Advisor**

**DESCRIPTION**

This position will develop a program to support agricultural technology innovation and adoption to enhance the economic viability of farmers and producers in Monterey and adjacent counties. The research and extension approach will evaluate, demonstrate, and improve a variety of on-farm technologies focused on coastal specialty crops to create solutions to key challenges and to increase the environmental and economic resilience of these systems. The position will also include a community and an economic development component, working closely with industry and other regional organizations to promote economic prosperity through collaborative efforts. The minimum qualification is a master’s degree in agricultural engineering, horticulture, crop science, agronomy, soil science, irrigation science, or a related discipline. Course work or experience in engineering, economics, business management, and computer and data science are preferred.

**JUSTIFICATION**

While ANR has long focused on technical fields such as agricultural and plant sciences, and environment-related issues such as nutrient and water use efficiency, work on community development and rural assistance has often been a separate focus. Given increasing pressure on rural communities and the agriculture industry due to labor shortages, increased regulation, drought and limited water supplies, as well as access to markets, it is an important to now integrate ANR's research and extension efforts with community and economic development activities that support farmers in evaluating and integrating agricultural technologies in their operations. This approach will better ensure long-term resilience of the agriculture sector and help spur economic development in the region.

This advisor would focus on providing technical assistance for a variety of on-farm technologies such as drones, sensors, wireless communications, robotics, software tools, and other technologies that potentially enhance water and nutrient management, crop production, food processing, and pest management. The position would work collaboratively with other regional entities and technology companies in developing, evaluating, and integrating appropriate technologies to address agricultural challenges. The focus would include labor-saving robotics, automation and integrating data from drones, satellites, sensors and software technologies to strengthen regional farming operations and the local food system supply chain, while enhancing both near and long-term community resiliency in the face of a changing climate.

The advisor will be expected to work cooperatively with the US federal government and the state of California including the California Department of Food and Agriculture, Governor’s Office of Business and Economic Development, and the Small Business Administration, to name a few.

This position will contribute to UC ANR's goals of 1) promoting economic prosperity in California, particularly through enhanced community economic development, 2) protecting California’s natural resources through promoting climate smart agriculture, and 3) building climate-resilient communities and ecosystems, and 4) workforce development.

**EXTENSION**

The position will be expected to partner with organizations involving all scales of agriculture including, historically underserved communities of farmers and Native American groups, and take an active role in public outreach and develop strong collaborations with key community groups and other non-governmental organizations. Extension programs may include up-to-date information on current agricultural technology, verified outcomes, practical solutions for improved agricultural sustainability, and needs and strategies for workforce development.

**RESEARCH**

The candidate would address key questions such as: 1. How can agricultural technologies supporting sustainable, climate smart agriculture practices be appropriately scaled on smaller farms to increase community resilience? 2. Impacts of agricultural technologies on farm labor. The candidate will need to cross disparate fields, such as agricultural engineering, plant and agricultural sciences, community and economic development, and technical assistance provision, to address critical issues that will ensure the long-term resiliency of rural and urban communities on the central coast.

**ANR NETWORK**

IGIS, UC Vegetable Research & Information Center, USDA ARS, CIWR, IPM, the UC ANR RECS, and Cooperative Extension throughout the central coast

**EXTERNAL NETWORK**

Monterey Bay Economic Partnership, Monterey Bay DART, Hartnell College, Western Growers Center for Innovation & Technology, California State University, Monterey Bay

**SUPPORT**

The advisor will be provided with an office, telephone, high speed wireless internet access, storage space, office supplies, etc.

**OTHER SUPPORT**

USDA, EDA, ANR competitive grants and local community groups. Program support will come from UC ANR general funds.

**HEADQUARTERS AND COVERAGE AREA**

UCCE Monterey and neighboring counties of Santa Cruz, San Benito, and San Luis Obispo.

**DEVELOPED AND PROPOSED BY**

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