

2019 ANNUAL REPORT

GLOBAL ENGAGEMENT





Ermias Kebreab
Associate Dean
Global Engagement

Professor
Sesnon Endowed
Chair in Sustainable
Agriculture

University of
California, Davis

Message from the Associate Dean

Global Engagement was renamed from its previous name 'International Programs Office' in 2018 mainly to reflect the breadth of activities that are international in nature within the College of Agricultural and Environmental Sciences (CA&ES). As you will see in this report, the international related activities span from research in various parts of the world to teaching, training and public engagement. This past year, we continued to carry out our mission of promoting agricultural, environmental and social activities around the world.

In today's world, the greatest challenges such as food security and climate change cannot be solved by one institute in one country alone. A quick search on the UC Davis Global Connections Database (globalaffairs.ucdavis.edu/data) shows that the College of Agricultural and Environmental Sciences is engaged in over 70 countries (so far reported). CA&ES Global Engagement facilitates the connections made between faculty and cooperative extension specialists at UC Davis with institutions around the world through agreements of cooperation. Currently there are more than 30 active agreements in place, which help foster research and education with partner institutions.

This year, we were excited to receive delegations from all habitable continents of the world. We have established new connections and renewed relationships with long-term friends. We were honored to participate in the Larry Vanderhoef Memorial Lecture at National Chung Hsing University, Taichung, Taiwan. Our involvement in the top agri-food universities (A5) consortium saw us engage in student competitions in Sanya, China (China Agricultural University) and New York (Cornell University).

I am particularly pleased to see the level of engagement from faculty, Cooperative Extension specialists and staff in working with Global Engagement to implement various training programs. Some programs such as training for Japan's Iwate Agricultural Junior College have been going on for more than 30 years. We continue to arrange several training sessions for the Cochran and Borlaug programs of the USDA (Foreign Agricultural Service). Through our graduate fellowship program, we continue to create opportunities to engage in hands-on international experience and exposure to potential future employers for our graduate students.

I encourage you to visit the newly revamped CA&ES Global Engagement website (caes.ucdavis.edu/outreach/geo). You can also follow us on Twitter (@CaesGlobal) as we announce various events throughout the year. In this annual report, you will discover the various accomplishments of the past year as we look forward to more engagement with faculty, staff, students and our partners across the globe.

I hope you will join us in our mission!



Global Engagement Mission

In alignment with the CA&ES mission of promoting agricultural, environmental and social sustainability through research, teaching and public engagement to meet the challenges of global change in the 21st century, the Global Engagement Office focuses on facilitating agricultural education, research, and implementation in resource-poor nations.

Global Engagement in Action!

TEACHING AND PUBLIC ENGAGEMENT

Developed and implemented programs for 130 foreign nationals from more than 12 countries who visited UC Davis in search of knowledge in new technologies and methodologies in agriculture, food security, as well as initiating the establishment of Agreements of Cooperation or Memorandum of Understanding between their home institutions and the University of California. These programs were successfully executed in cooperation with targeted campus departments and faculty.

Partnerships and potential collaboration visits

United Kingdom

Senior faculty members of the University of Edinburgh to further planetary health collaborations and explore collaborations on veterinary science, agriculture and environmental sciences.
September 2019

France

National Research Institute for Agriculture, Food and Environment (INRAE). The Vice-President and Scientific Officer of the International Relations Department of INRA (National Research Institute for Agriculture) for collaborative discussions in relation to the MUSE program of the University of Montpellier and opportunities for collaboration with UC Davis.
March 2019

Two-party delegation from SUPAGRO, France for exchange student collaboration with CA&ES, particularly in plant sciences, IAD, agroecology and wine studies.
September 2019

Nigeria

Leadership of the Committee of Vice Chancellors of Nigerian Universities, Youths Off the Street Initiative (YOTSII), Wells-Hosa Greenhouse Farms Ltd.
March 2019

Tanzania

Visit with the principal of Dabaga Institute of Agriculture to learn current resources and technologies used to increase animal and farm products; and potential collaboration in these technical fields.
November 2019

China

Sino-US Food and Agriculture Innovation Center (SUFAC)

Four-member delegation from the Consulate General of the People's Republic of China in San Francisco to promote the agriculture science and technology cooperation.
December 2019

Japan

Niigata University visit to introduce three-party collaboration on "Sakeology" and potential inter-university agreement with the Department of Viticulture and Enology and the Sakeology Center Niigata University.
October 2019

Hong Kong

The associate dean and faculty members of The Hong Kong Polytechnic University for potential research collaborations in the areas of food safety and health.
May 2019

Thailand

Visit from Dr. Siriwat Wongsiri, president of the Asian Apiculture Association as a follow-up discussion on bee research, cannabis pollination and research; potential collaboration between Maejo Univ and UC to study and conduct research in Cannabis Science Teaching Programs.
October 2019

India

Dr. Dilip Kulkarni, President of the Jain Irrigation Systems Limited in India for potential collaboration in the areas of water resource management, sustainable agriculture, renewable energy and rural development.
March 2019

Indonesia

Prof. C Hanny Wijaya for potential collaboration with UC Davis in the higher education program.
December 2019

Australia

Commonwealth Scientific and Industrial Research Organization (CSIRO)
January 2019



Technical Programs and Study Tours

Brazil

30-member delegation composed of Research, academic, extension service faculty from EMBRAPA (Brazilian Agricultural Research Council) as well as growers with focus on vegetable productions areas in California, including mechanization and commercialization.

April 2019

A five-member delegation composed of the CEO, engineer and managers from Coopavel Cooperativa Agroindustrial to learn about sustainable agricultural technologies in the field: agricultural practices, best water and energy efficiency practices in production and food processing.

December 2019

China

A group of 15 professors, lecturers and dean from various agricultural universities to visit the Seed Biotechnology Center, its seed testing labs and meet with Kent Bradford.

January 2019

In its 2nd year, over 30 students and faculty from China Agricultural University visited the campus to embark on a two-week study tour in global agriculture with focus on agricultural resources conservation and environment protection.

August 2019

Four-member delegation composed of professors, engineers and researchers from the Chinese Academy of Agricultural Sciences to learn about American system of vegetable water-saving irrigation and greenhouse vegetable production technologies.

October 2019

Europe (World Trade Center)

Multi-regional visitors from Poland, Turkey, Austria, Hungary (World Trade Center) and UK in coordination with the Northern California World Trade Center for informational awareness of the varying forces influencing US agricultural trade policies and how federal, regional and local programs for agriculture ensure US agricultural competitiveness globally.

May 2019

India

A group of 12 students from Junagadh Agricultural University, for a 6-week training on greenhouse technology.

May-June 2019

[youtube.com/watch?v=dOka2cyhjl](https://www.youtube.com/watch?v=dOka2cyhjl)

Sathguru Management Consultants and Cornell University joint visit to learn education and agricultural systems in California.

April 2019

Agricultural Attaches from USDA-New Delhi with managers and executives of various dairy and animal husbandry organizations in India to introduce dairy fodder users to the benefits of using US alfalfa hay for dairy cow nutrition.

October 2019



Japan

The graduating class of the Iwate Agricultural Junior College (IAJC) participated in a week-long technical field program on a variety of agricultural operations in California as well as UC Davis and UC Cooperative Extension activities. This is an annual activity that the Global Engagement Office has been executing for IACJ for more than 30 years.

August 2019.

Kazakhstan

A delegation from various agricultural industry, accompanied by the staff of the Northern California World Trade Center, to learn about sustainable agriculture, adaptation to climate change and use of innovation and technology.

July 2019

South Korea

An 18-member delegation from the Department of Eco-Friendly Agriculture to learn about the production of high quality rice and distribution in California. This visit was hosted by UC Cooperative Extension.

July 2019

Twenty-eight students from the Korea National College of Agriculture and Fisheries, to learn about sustainable agriculture, adaptation to climate change and the use of innovation and technology. This visit was hosted by UC Cooperative Extension.

July 2019

Kenya

Senior inspectors from the Kenya Plant Health Inspectorate Services to participate in a short-term training on and exposure to seed variety characterization, certification (crop inspection) and seed testing with a focus on pulses.

June 2019

EXCHANGE FELLOWS

The Global Fellowship in Agriculture Development program awarded fellowships to fifteen graduate students across UC Davis, UC San Diego and UC Berkeley. Each fellow traveled to various developing countries across the globe and spent between two and six months working with a local university, a government agency, an international development organization, or an NGO to do either data collection, data analysis, or training of trainers and field researchers.

In 2019, students traveled to the following countries, institutions and corresponding programs:

Cambodia



Royal University of Agriculture (RUA)—Scaling of technologies to use in safe vegetable value chains

Gambia



United Purpose (UP)—Participatory research project and outreach to increase nutrition knowledge and determine strategies to increase production and consumption of bio-fortified crops for 1,800 households across the six regions of the country

Guatemala



Disagro—Conducted farmer, farmer groups and cooperative group interviews to research major agronomic challenges faced by coffee producers

India



Conducted a study in the Pandua block of communities to understand the variability among villages of subpar performance in low education enrollment, low social mobility, malnutrition, low crop diversity, and low market accessibility of most of the Gram Panchayats compared to the rest of West Bengal

Kenya



International Maize and Wheat Improvement Center (CIMMYT)—Analysis of already-collected data to support a larger agronomic scaled-up project

Development in Gardening (DIG)—Analysis and improvement of the design of future evaluations for the data in nutrition, food security and income

International Center for Tropical Agriculture (CIAT)—Analyzed the factors for food/nutrition insecurity in informal settlements in Kenya and made changes to the procedures that worked with the existing dataset

Mexico



International Maize and Wheat Improvement Center (CIMMYT)—Used baseline agricultural and hydrologic diagnostics to promote sustainability in Cuatro Ciénegas' basin

Pro Naturane—Designed and executed a short course on water and agricultural sustainability that transferred skills and knowledge in water resources management, hydrologic field method, and agricultural community engagement

Peru



International Potato Center (CIP)—Software development used for data analysis and generating fine-scale risk maps for sweet potato pests for Burundi and Rwanda

Vietnam



International Center for Tropical Agriculture (CIAT)—Synthesized existing food systems data for Vietnam's "Zero Hunger Initiative" by using nutrition-sensitive agriculture interventions to reduce malnutrition; analyzed agricultural biodiversity and children's dietary diversity, which used the same design for Ethiopia





COLLABORATIVE PROGRAMS

Two on-going vital agricultural development programs:

Center of Excellence in Agriculture, Egypt (COEA)—USAID-sponsored initiative led by Cornell University. This consortium project plans to develop an Egypt-US Center of Excellence in Agriculture situated in Cairo University for the purpose of responding to changing agriculture and industry needs across a wide array of stakeholders and evolving socio-economic and political contexts. Other university partners are Michigan State and Purdue University.

Guatemala California Agricultural Extension Program—USDA Food for Progress project for the University of California to build the capacity of the Guatemalan agricultural extension service to better serve smallholder producers.

BUDGETING AND FUNDING

In 2019, the CA&ES Global Engagement office had an operational budget of \$1.3M, of which \$197K was for operational costs and \$1.18M were external funds from both federal and foreign organization support for collaborative activities, study tours, and technical training events.

MOVING FORWARD

Living up to our name, “Global Engagement,” we will continue to remain committed to the mission and guiding objectives of providing expert assistance in responding to the needs in capacity building and skill development. This allows us to meet the increasing demands for knowledge exchange, learning and innovation in agriculture that are rapidly evolving.

