Project Title: CA Community College Program Expansion: CA Secure Food Supply (SFS) Enhanced Biosecurity Plans

Project Profile

Cooperator: University of California (Davis)

Project ID: Agreement ID:

FAIN: AP22VSSP0000C025 Award Amount: \$ 502,156

Agreement Period: 4/1/2022 – 3/31/2024 Project PI POC: Bennie Irve Osburn Financial POC: Bennie Irve Osburn

VS Program Manager:

Project Summary

The WIFSS team at UC Davis will work collaboratively with two Hispanic serving institutions (HIS) to develop teaching materials and on-farm, experiential learning activities on enhanced biosecurity practices that will be integrated into existing community college certificate and degree programs. The community colleges that will be participating in the project are San Joaquin Delta College (SJDC) and Woodland Community College (WCC). The content of the newly developed community college curriculum will be derived from educational materials already developed by WIFSS and CDFA to assist farmers in the development of enhanced biosecurity plans that comply with the California Secure Food Supply program; a project funded by a 2019 USDA NADPRP grant. The newly proposed project will utilize the deliverables from the 2019 project and extend their impact. The new curriculum will give current college students in-demand job skills of writing enhance biosecurity plans and consulting on biosecurity for animal agriculture farms. Faculty from each college, along with other community college stakeholders, will help WIFSS staff adapt the current materials for use in existing college classes. This team will also interface with CDFA and the CA dairy industry to ensure that the skills taught will benefit CDFA and dairy farmers, and contribute to workforce development. College students who complete the new curriculum will complete on-farm experiential learning events that provide hands-on experiences including setting up and practicing essential biosecurity activities on an actual working dairy farm, and tours of poultry farms as a demonstration of existing enhanced biosecurity.

Report Date 4/2022-6/2022

Completion Score (Project is active)

Budget Status
XX% Spent

Project Update		
Objectives	Completion Score (0-10)	Major Project Milestone Achievements See Activities Completed This Quarter for further details.
1. Create one (1) enhanced biosecurity curriculum framework that will articulate with existing community college programs at both Woodland and SJDC by the end of month 5 (July 31, 2022).	10 (Project completed)	 Objective 1 Create one (1) enhanced biosecurity curriculum framework that will articulate with existing community college programs at both Woodland and SJDC by the end of month 5 (July 31, 2022). 1.1 / 1.2: Project kick-off meeting held on to allow all team members to meet and get familiar with each other; project plan reviewed and first steps outlined and assigned 1.2: WIFSS staff and college faculty drafted lists of knowledge, skills, and competencies that students should have after completing the new enhanced biosecurity training; whole team met to review and discuss the needs of the group. 1.2: CC faculty shared course syllabi for the classes into which the new course materials will be added. 1.3: A curriculum framework was drafted following this whole-team meeting and sent around for final review 1.4: All suggested changes were applied and the framework was saved as final; the framework is what is being used to guide the development of the training materials in objective 2. Objective 2 Synthesize fifteen (15) new online learning modules, learning activities, and/or video-based teaching aids on enhanced biosecurity theory and practice on-farms by the end of month 9 (December 31, 2022). 2.1: Team members from WIFSS, WCC, and SJDC self-selected initial tasks to work on that will lead to the creation of the new teaching materials. These tasks will continue to evolve and adjust as the team builds more materials.
2. Synthesize fifteen (15) new online learning modules, learning activities, and/or video-based teaching aides on enhanced biosecurity theory and practice on-farms by the end of month 9 (December 31, 2022).	1 (Project is active)	

3. Train at least sixty (60) college students on enhanced biosecurity so that they can demonstrate knowledge and skills by passing formative assessments with a score greater than or equal to 70%, and complete on-farm enhanced biosecurity activities scored by SMEs using a rubric. All student training and assessment will be completed by the end of month 21 (December 31, 2023)

- 2.2: CC faculty provided access to the cc system LMS (Canvas) to review previously developed courses and get a feel for the presentation style of the courses so that the new materials will articulate correctly.
- 2.2: An in-person college farm tour was hosted by the CC faculty on Tuesday, June 28, 2022 at the SJDC Experimental Farm in Manteca, CA. The project team met at the location, toured the facilities, and captured photographs and video footage that will be used in the modules that are being built. The team met at this location to review and edit the pest management module in-person and discuss the content changes that were needed.
- 2.2: An initial on-farm pest management module has been drafted, reviewed, and approved by the team to move into development in the CC LMS Canvas. This will serve as a prototype that the team will use as we continue to develop more materials.
- 2.2: Other modules, learning activities, and video-based teaching aides will be started following the completion of the first prototype module (Pest Management) described above.

Objective 3 Train at least sixty (60) college students on enhanced biosecurity so that they can demonstrate knowledge and skills by passing formative assessments with a score greater than or equal to 70%, and complete on-farm enhanced biosecurity activities scored by SMEs using a rubric. All student training and assessment will be completed by the end of month 21 (December 31, 2023)

Not started – will begin when courses start Spring 2023

Objective 4 Publish one (1) article on the development of the curriculum and the delivery of the new course materials and experiential learning activities.

Not started

- 4. Publish one (1) article on the development of the curriculum and the delivery of the new course materials and experiential learning activities.
- 0 (Project is active)

(Project is

active)

Next Steps

- Creation of the project landing page on the WIFSS website for sharing of materials and publication of project updates
- Modules next to be developed: Enhanced Biosecurity Overview, Biosecurity and One Health, Specific On-Dairy Biosecurity Practices, Personal Protective Equipment (PPE)
- Begin design of on-farm experiential learning activity select a farm location, visit the facility, draft the assignment learning objectives, outline the corresponding lesson plan
- Review prototype Pest Management module and discuss changes to the development process streamline our team's SOP for creating learning materials and getting them online
- Select topics that need training videos and outline the video script and shot list
- Coordinate a day/time/location for filming the training video(s)

Activities Completed This Quarter

List activities completed in the last quarter. These should align with items listed in the project Work Plan under the plan's action section.

Major Project Milestone Achievements

Objective 1 Create one (1) enhanced biosecurity curriculum framework that will articulate with existing community college programs at both Woodland and SJDC by the end of month 5 (July 31, 2022).

• Milestones 1.1, 1.2, 1.3, and 1.4 were completed through the collaboration between UC Davis staff and community college (CC) faculty. The curriculum framework is available for review and was submitted along with this report.

Objective 2

- The project team is working very well together and continues to divide up the development work (milestone 2.1) as the project unfolds. The CC faculty are taking the lead on the assembly of the course materials in the colleges' LMS, Canvas. The WIFSS project team is working on gathering content, organizing "raw" materials that will be used for creating learning activities and presentation, and is managing the logistics of the project (timeline, spending, work assignments, etc.).
- The team has made progress towards milestone 2.2 in that we have drafted a prototype module on pest management for biosecurity on farms. The content has been written, revised, and approved. It is moving forward into development and will be ready for review and final production of the prototype in late summer.

Significant Changes from the Work Plan

Describe major deviations from the original project work plan. Significant changes in the project objectives, sub-objectives, deliverables, and outcomes must be approved by the Program Manager.

None

Success Stories

Please share any unique event, outcomes, or evidence of positive change related to the project that provides a narrative for project success. This includes any story related to the project that paints a picture of a situation, provides background information, or shares activities associated with the project that do not qualify for reporting elsewhere in the report.

• As we move forward with the creation of the course materials to satisfy the objectives of this project, our team continues to look for opportunities to further develop a complete certificate and/or degree program in on-farm biosecurity that could be delivered through the community college system. The program would be based on needs assessment data and specific needs from the industry following the community colleges well-established system for evaluating community needs. The mission of the community college is to serve the local community first and foremost. We believe in this mission and are looking for opportunities to help develop the agricultural workforce in communities where agriculture is a major industry. We also aim to strengthen the working relationship among institutions of higher learning from the community colleges to the universities to state and county agricultural departments. Funding for workforce development projects will likely become available during the course of this project and we plan to gather information from the industry and college administration to help us better understand the needs that a certificate and/or degree program in on-farm biosecurity could meet.