

<b>Title:</b>	<b>From Production to Market: Enhancing the competitiveness and sustainability of beginning minority and limited resource farmers in California</b>		
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**Program Code:** BFRDP

**Program Name:** Beginning Farmer and Rancher

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{NO DATA ENTERED}

**Non-Technical Summary**

Over the past few decades, the farming landscape of California has changed dramatically as an increasing number of immigrant and minority farmers are trying their hand at agriculture. More than 40 percent of all reported minority farmers are beginning farmers. As recently as 2004, tens of thousands of Hmong and Mien refugees arrived in California, and many of them turned to farming as their primary livelihood. In Fresno County alone, half of all family farms are operated by minorities. Increasingly, Latino farmworkers are looking to move away from farm labor to establish their own farms. While the U.S. Census of Agriculture of 2007 reports 9,000 Latino farms, 4,000 Asian farms, 320 African American farms and 452 Native farms in California, we believe these numbers to be under-reported. As such, many minority farmers remain unidentified and underserved. Although the acreage of immigrant and minority farms is relatively small, their sheer numbers, including more than 20 percent of all California farms, their contribution to California's crop diversity their value in terms of specialty commodities grown, their role in provision of culturally relevant foods for California's diverse population, and their importance in ensuring food security for their oftentimes economically disadvantaged communities all render minority farmers an important part of California agriculture. Clearly there is a pressing need to provide culturally relevant outreach. In collaboration with the National Center for Appropriate Technology and 15 community-based organizations or Cooperative Extension offices in 10 California Counties, UC Berkeley aims to this provide this needed outreach. Our long term goal for this project is to enhance the competitiveness and sustainability of beginning minority, immigrant, and tribal farmers and ranchers in California. We will conduct training and outreach to Latino, Southeast Asian and Native farmers and mentors in 10 counties. Specifically, we will offer in-depth, culturally-relevant training to beginning minority farmers in combination with capacity-building to partner organizations to improve access to sustainable farming information and technical support, increase adoption of organic and sustainable farming/ranching practices, enhance the economic viability of minority farms, strengthen farmer to farmer training networks, provide referrals to agencies that provide access to land, financial, and other services, and improve food safety and enhance food security for beginning minority farmers and their communities. To achieve these objectives, we will provide training and outreach in five topics over three years in each geographic region. Two topics related will be in sustainable production, as determined by farmers in each region. The other topics are food safety, financial literacy, and market linking. Outreach will involve hands on workshops, in depth coaching for grower leaders, farmer to farmer learning circles and mentoring, and capacity building for local organizations to provide ongoing support beyond the life of this grant.

## Accomplishments

### Major goals of the project

Objective 1 Enhance capacity of county based organizations to provide outreach to beginning minority farmers. Provide training to partners on culturally relevant technical assistance in food safety, business planning and record keeping, direct marketing, and sustainable production. Expected Outcomes Farmers will have increased access to culturally relevant training. 15 Partner organizations or mentor farms will have increased capacity to provide culturally relevant outreach to farmers.

Objective 2 Empower community grower-leaders and mentors: Recruit and train local grower leaders. Expected Outcomes 25 grower-leaders will be trained in all educational topics and paired with an established mentor farmer from their community. 35 on farm learning circles will provide learning opportunities to up to 175 mentees.

Objective 3 Foster sustainable production and land management. Create, implement and evaluate applied workshop and on farm training modules in sustainable, organic crop and livestock production and indigenous land management for food or other modules as needed. Expected outcomes Enhanced sustainability of production practices and increased food supply for community food security. 25 grower leaders will have adopted two new sustainable production practices on their farms. 325 farmers will have greater knowledge and understanding of sustainable production practices.

Objective 4 Establish Food Safety Programs. Provide training and coaching to beginning minority farmers and the institutions that support them in implementing farm and food safety. Expected Outcomes Safer food supply and increased access to markets. 90 farmers will better understand good agricultural practices and food safety requirements and how to implement a food safety program on their farm. 35 farmers will have established food safety programs on their farms. Manual will be created and published and available on websites. 45 members of organizations will have the capacity to train and coach beginning and minority farmers in on farm food safety program implementation. At least half will have piloted food safety training with their clientele by the end of the project.

Objective 5 Enhance Farmer Business Planning Provide training in business planning and record keeping for beginning farmers. Expected outcomes Improved farmer capacity for business planning and record keeping. 90 farmers will have knowledge of basic record keeping, cash flow budgeting, and pricing for profit margins. 18 grower leaders will have implemented improved financial record keeping strategies.

Objective 6 Foster Market Development and Direct Market Linking Conduct 7 market analyses to identify potential markets, identify and link buyers with participating farmers. Expected Outcomes Increased sales and livelihood security for beginning minority farmers. Market Opportunities Resource List for each county published and distributed. 90 farmers will have increased knowledge of market opportunities and requirements. 15 markets for local product will be established or will expand purchase of local product. 35 to 50 growers will have increased sales from farmer-buyer linking.

### What was accomplished under these goals?

During this granting period, we conducted 17 workshops both in-class and in the field, reaching 253 participants, and provided 1:1 technical support to 50 farmers. Topics ranged from business planning and financing, to food safety, food preservation and value-added processing, orchard health and management, cover cropping and beneficial habitats. More specifically, for each objective, we achieved the following outcomes:

**Objective 1: Enhance capacity:** A key accomplishment of this program was the initiation of the Foodsheds Program at the Mid Klamath Watershed Council, including their foodshed website and Facebook page that provides regionally appropriate technical information to Native communities in the Klamath. We built a strong network of non-profit partners, who we continue to collaborate with on the launch of our new BFRDP (2014). This grant increased the knowledge and capacity of 825 participants who attended workshops over 3 years, in achieving more ecologically and economically viable farm programs. We helped launch the UC Gill Tract Community Farm, an innovative urban educational and production farm which has provided hands-on instruction for over 180 participants, and produced over 2,000 pounds of fresh produce that has been distributed to the hungry.

**Objective 2: Identify and empower community 'grower-leaders' and mentors farmers:** In each project area, key farmer leaders emerged and were provided in depth training. The most notable successes were In Stanislaus County, where we helped Latino farmers plant cover crops and beneficial insect habitat. Latino farmers are now signing up for follow-up technical assistance and are planting cover crops and beneficial habitat, like never before.

**Objective 3: Foster sustainable production and land management:** Our project is especially proud of the work we've done with a group of Latino growers who have learned about soil health and beneficial insect habitat in the context of almond orchards. We were able to provide access to information that minority farmers have not previously been exposed to. In response to serious drought conditions, the Mid-Klamath Watershed Council launched an educational program to teach local farmers about water conservation. With support of this project, MKWC launched an extraordinary website with pages of technical support and advice to regional farmers on climate zones, farm and garden calendars, ideal fruits, nuts, vegetables for growing in the region, pest and disease management and a calendar of events: <http://www.mkwc.org/programs/foodsheds/>

**Objective 4: Establish Food Safety Programs:** Food safety is a growing concern to small and beginning farmers, as they seek new markets for their products, but confront market-driven food safety compliance requirements. We provided hands-on, participatory training both in class-room and on the farm for Southeast Asian, urban and other small farmers. Our program resulted in 8 food safety plans being written. However many attendees were most interested in simply learning about food safety and GAPs and the effects of FSMA on their operations. We will continue to work on developing tailored food safety training for our urban food producers, as the risks can be different from their rural counterparts, in our new BFRDP (2014).

**Objective 5: Enhance Farmer Business Planning:** The project has worked with Latino farmers in collaboration with ALBA in Monterey in a series of 3 workshops related to aspects of farm business planning. This effort included training on "how to tell your story," food safety, and a product pricing/availability list. We worked with Latino farmers at Puentes in Stockton, CA on a 5-part series of farm business planning and this effort resulted in 10 business plans being developed by participants with critiques/feedback provided by other participants and project staff.

**Objective 6: Foster Market Development:** Small farms were able to expand their product base, as well as perhaps use some cosmetically deficient product that would otherwise have been unsaleable through the value-added processing, and direct marketing training. We held 2 "speed dating" exercise, in which potential buyers were introduced to farmers. These workshops proved very popular.

**Measuring Impact:** We effectively captured people's changes in knowledge after each workshop, and attempted to measure change in behavior by conducting 6 month post-follow up calls. However, many of the participants had changed their phone numbers, and were difficult to reach. The Project was successful in increasing beginning farmers' knowledge on a range of topics, from Pastured Poultry production to Cottage Food Laws and Food Safety. Below are some excerpts of our findings from our evaluations:

**Business Planning for Cottage Food Operators, and Cottage Food Operators.** Two thirds (67%) of participants reported an increase in knowledge on a range of 5 key topics related to business planning for a cottage food operation, and over 70% had an increased knowledge of the new Cottage Food Law . **Pastured Poultry:** Over 90% of participants had increase in Flock Health, Cost of Production, Land Management and Production Regulations, with nearly two thirds of participants reporting a "significant change in knowledge" in these topics as a result of the workshop. **Ecological Pest Management:** Nearly three quarters (73%) of participants reported an increase in knowledge about topics such as Good Soil Management Practices, How to ID common good and bad bugs at different life stages, Organically approved pesticides, when to use them and consequences to beneficials and several other topics. **Promotions and Marketing, and Marketing Linking workshops:** Evaluations from two well-attended workshops showed that nearly two thirds of participants reported a "moderate" or "significant change in knowledge" on a range of 9 farm business planning topics. **Farm Business Series:** Participants of the 5-part farm business planning series reported "moderate" or "significant change in knowledge" on Farm Finance (over 92%), Marketing (100%), and Business Goals and Vision (63%). At the end of this series, the participants had developed an outline of a business plan for their farm. **Legal Regulations, Ecological Pest Management and Orchard Floor Management workshops** (3 workshops). Over two thirds (68%) of participants had increase in knowledge about legal regulations, Ecological Pest Management topics, and topics such as Organic matter & soil health, and Role of microorganisms.

**Testimonials:** 1. Karuk Tribal Members achieving food security and preparing to launch Hog business. Hawk and Jeannie White, Karuk Tribal members, have achieved greater household food security, and have begun selling hogs they raise, and are developing plans for launching a hog business for niche pork. They have a vibrant homestead farm, raising chickens, ducks and hogs for meat, and have canned over 50 cases of fruits and vegetables as well as traditional foods they gather such as salmon and mushrooms. Prior to this project, they had never canned or raised animals for meat. They participate as peer-trainers in our workshops. 2. Rural Homesteader Expands Poultry Operation. Jeff Reynolds attended our Poultry Class and now uses what he learned raising chickens for eggs. We visited his farm and couldn't help but be impressed. He has a flock of over 40 hens, they produce 2 to 3 dozen eggs per day during the summer the eggs are sold in a local store. Jeff says he plans to try meat birds this next year.

#### **What opportunities for training and professional development has the project provided?**

NCAT staff gained greater knowledge and proficiency in food safety, developing on-farm food safety programs, and cottage food laws. Particularly in the area of how food safety plans can influence and support increased market access, NCAT staff gained knowledge. NCAT staff also developed better presentation skills concerning Farm Business Planning. Questions from farmers as well as workshop activities at the soils and cover crops workshops required NCAT staff to increase their knowledge about planting cover crops, soil sampling and interpreting soil test results. UCB staff gained greater knowledge of ecological pest management, and has transferred that knowledge to the work at the Gill Tract Community Farm.

#### **How have the results been disseminated to communities of interest?**

Results have been disseminated in a wide variety of venues including at annual Small Farm and Ecofarm conferences, at Tribal council meetings, as well as in undergraduate classes and seminars at UC Berkeley. They have also been disseminated at non-profit farm meetings, community meetings, and at UCCE meetings and conferences. NCAT has included information about workshops, as well as materials developed to support the workshops, in our monthly Spanish language newsletter, Cosecha Mensual (Monthly Harvest), which has over 2,000 subscribers, as well as the ATTRA Weekly Harvest, which has over 11,000 subscribers. In addition, NCAT's other offices outside of CA have benefitted from some of the evaluation forms developed under this project, and have used modified versions of these forms, to evaluate skills and knowledge change in participants in their workshops.

#### **What do you plan to do during the next reporting period to accomplish the goals?**

{Nothing to report}

**Participants**

**Actual FTE's for this Reporting Period**

Role	Non-Students or faculty	Students with Staffing Roles			Computed Total by Role
		Undergraduate	Graduate	Post-Doctorate	
Scientist	1	0	0	0	1
Professional	1.3	0	0	0	1.3
Technical	0.1	0	0	0	0.1
Administrative	0.1	0	0	0	0.1
Other	0	0	0	0	0
Computed Total	2.5	0	0	0	2.5

**Student Count by Classification of Instructional Programs (CIP) Code**

{NO DATA ENTERED}

**Target Audience**

In the final year, we provided training and technical support to 253 BFRs through our programs. Our target audience was limited-resource, socially disadvantaged farmers including Latino, Southeast Asian (Hmong, Mien), Native and Urban farmers. 80% of the attendees were from these diverse ethnic groups with roughly 40% Latino, 20% Southeast Asian, 10% Native and 10% low-income urban.

**Products**

Type	Status	Year Published	NIFA Support Acknowledged
Journal Articles	Accepted	2015	YES

**Citation**

Sowerwine, J. Getz., C, and N. Peluso. Forthcoming . The myth of the protected worker: Southeast Asian micro-farmers in California agriculture. In Agriculture and Human Values

Type	Status	Year Published	NIFA Support Acknowledged
Websites	Published	2014	YES

**Citation**

Support for the creation of the Berkeley Food Policy Council webpage: <http://ecologycenter.org/berkeley-food-policy-council/>

Type	Status	Year Published	NIFA Support Acknowledged
Websites	Published	2013	YES

**Citation**

Mid-Klamath Foodsheds Program Pages: <http://www.mkwc.org/programs/foodsheds/>

**Other Products**

**Product Type**

Audio or Video

**Description**

One short video was developed which highlighted our work helping a Latino grower plant cover crops in his almond orchard: <http://www.youtube.com/watch?v=iciPxzO-t9Y&feature=youtu.be>

**Product Type**

Educational Aids or Curricula

**Description**

The project developed presentations for almost every workshop provided. The following ppt presentations were developed:

Understanding Your Soils (in Spanish and English)

Ecological Pest Management (in Spanish and English)

Pastured Poultry I and II (in Spanish and English)

Food Safety (English)

Legal Regulations (for Farms)

Orchard Floor Management (Spanish)

Farm Business Planning

\* Business Basics: Goals and Visions

\* Business Basics: Marketing

\* Business Basics: Farm Finance

Promotions and Marketing (English and Spanish)

Market Linking (English and Spanish)

Cottage Food Operations (English)

**Product Type**

Evaluation Instruments

**Description**

We developed a series of evaluations for changes in knowledge and practice surveys which were used to look at two things: practices of participants before and after the workshop, and also used as a "snapshot" evaluation of knowledge before/after workshop. These "practices" evaluations were the basis of call back evaluations to determine changes of behavior 6-16 months after a workshop.

**Product Type**

Other

**Description**

Networking: This project developed a series of collaborative partnerships which are still being used, and which were the basis of a second BFR project application, which was funded. Examples: NCAT developed collaborations with Puentes of Stockton, Soil Born Farms, Alameda RCD, East Stanislaus RCD, and strengthened collaboration with ALBA and SAGE (both non-profits), NCAT, UCCE, Orleans Community Service District, Karuk Tribe

**Product Type**

Other

**Description**

Facebook: Mid Klamath Foodsheds Facebook Page, see [https://www.facebook.com/groups/164617520311363/?ref=br\\_tf](https://www.facebook.com/groups/164617520311363/?ref=br_tf)

**Product Type**

Other

**Description**

Tutorials: We refined two of our on-line tutorials (Farm Business Planning, and Pastured Poultry)

**Product Type**

Audio or Video

**Description**

Several short videos were completed to support beginning Southeast Asian farmers. Topics include land access, organic farming, fertilization, etc.: [https://www.youtube.com/channel/UC7OouaLL\\_0BjGvvnkqqempA](https://www.youtube.com/channel/UC7OouaLL_0BjGvvnkqqempA)

**Changes/Problems**

Major changes/challenges included information management on several different levels. Over 40 workshops were developed and given under this project, and maintaining the information related to planning, outreach, materials development, evaluation, and followup to each of these workshops, which averaged 20 participants, was a challenge met through the use of Cloud-based information technologies (Google docs and Drop Box) as well as frequent phone calls, emails and less frequent face-to-face meetings. We also found that having active local partners is critical to the success of workshops, especially with respect to getting the word out to target clients about the workshop. Most of the partners the project started with did a good job of outreach and supporting other collaborative activities of the project. However, we had a couple of partners that simply didn't have the administrative capacity and/or ongoing contacts with farmers to support project activities on a level that would support successful information transfer to targeted farmers. We believe the grower-mentor model works reasonably well for most of the topics that we're offering. In some cultures, individuals are less likely to embrace the idea of being a grower-leader, so we do not brand these individuals as "grower-leaders" but simply ask if they would be willing to host workshops on their farms.