

<b>Title:</b>	<b>Ku I Ka Mana New Farmer Training Initiative</b>		
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**Program Code:** BFRDP

**Program Name:** Beginning Farmer and Rancher

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{NO DATA ENTERED}

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{NO DATA ENTERED}

**Non-Technical Summary**

The newly established Center for Agricultural Success (CAS), located in Hamakua, is a collaborative effort of public and private entities to train beginning farmers and ranchers to increase local food production on Hawaii Island. Expanding the program will develop interested local residents into productive, commercial farmers, leveraging the advantages of the land assets of the island, and providing rural income for families. As the most remote island chain in the world, importing 85% of our food, there is a growing urgency to address economic and food security by re-establishing a local food system to increase island self-reliance and economic diversification. Hawaii Island encompasses 2,573,400 acres of land. With so much available land there is great potential for further agricultural development on Hawaii Island. Recent changes in the economy have severely and negatively impacted Hawaii's tourism and construction industries. The Hamakua region of Hawaii Island, which is the service area targeted by this BFRDP program, has the resources and the motivation to participate in this agricultural growth strategy. Three large landowners, HI State, HI County and Kamehameha Schools have offered land at reasonable lease-rates, but the question remains, "Where are the farmers" The average age of farmers in Hawaii is now over 60. Without training in the skills necessary to consistently produce quality crops and without the knowledge and support to successfully market their products, new farmers and ranchers will not succeed in the face of Hawaii's high input costs. Key program objectives are to identify and recruit a minimum of 48 serious potential farmers/ranchers to participate in a year-long training program, with recruitment emphasis on limited resource and socially disadvantaged residents and veterans. The program will train four cohorts of 12 beginning farmers in production, small business management and marketing through a combination of classroom sessions, on-farm instruction, and one-on-one mentoring with established farmers. New farmers will secure access to one-year revocable leases on suitable public or private lands in the Hamakua District. The mentors and support new farmers as they produce their first round of crops, secure longer term leases, and expand production. The program expects that within five years of program completion, at least 70% of program graduates will be farming commercially; 60% will have a gross farm income which meets or exceeds the county average annual gross farm income; and at least 50% of program graduates will have a farm income which meets or exceeds the self-sufficiency family budget for Hawaii Island. The local food system will be strengthened and expanded so that local residents have increased access to locally produced food. A long range outcome is for this model farmer training program to create a growing number of farming and ranching operations that provide family-supporting income to rural residents of Hawaii, thereby stimulating additional interest in farming and ranching among our young people.

**Accomplishments**

### Major goals of the project

The primary goal of this Ku I Ka Mana New Farmer Training Initiative is to increase local food production on Hawaii Island by training, mentoring, and supporting a minimum of 48 beginning farmers as they start and sustain agricultural ventures. Key Program Objectives: a) Identify and recruit a minimum of 48 serious potential farmers/ranchers to participate in a year-long training program, with recruitment emphasis on limited resource and socially disadvantaged residents and veterans; b) Train four cohorts of 12 beginning farmers in production, small business management and marketing through a combination of classroom sessions, on-farm instruction, and one-on-one mentoring with established farmers; c) Mentor and support new farmers as they produce their first round of crops, secure longer term leases, and expand production; d) Document innovative strategies to overcome challenges facing beginning farmers in Hawaii County and share these innovations with program participants and farmer/ranchers island-wide and state-wide; e) Increase the number of active farmers and increase local food production on Hawaii Island during the two and a half years of the BFRDP grant. Program Outputs and Outcomes: a) At least 45 program graduates will have acquired a step-by-step understanding of how to successfully start and sustain an agricultural business, and graduates will report that the training/support they received has adequately prepared them to start an agricultural business. b) A minimum of 40 new farmers will begin agricultural production within one year of training program completion. At least 75% of program graduates will continue production for two years or more, meaning that at least 30 farm and ranch businesses will be created or sustained as a result of this program. c) A replicable farmer-rancher training model will be developed, refined, and documented for export to other areas of Hawaii Island and the State. d) Within five years of program completion, at least 70% of program graduates will be farming commercially; 60% will have a gross farm income which meets or exceeds the county average annual gross farm income; and at least 50% of program graduates will have a farm income which meets or exceeds the self-sufficiency family budget for Hawaii Island. e) The local food system is strengthened and expanded so that local residents have increased access to locally produced food, using 2011 as a baseline. A long range outcome is for this model farmer training program to create a growing number of farming and ranching operations that provide family-supporting income to rural residents of Hawaii, thereby stimulating additional interest in farming and ranching among our young people. Given the economic and ethnic characteristics of the Hawaii Island population we expect that substantially more than 25% of participants will be limited resource and/or socially disadvantaged beginning farmers and ranchers; therefore, we estimate that between 25% and 75% of our budget will go to serving the needs of these target groups.

### What was accomplished under these goals?

In general accomplishments for this educational project included:

1. Implementation of a classroom and on-farm training program for 78 (69 completed) beginning farmers and ranchers in four cohorts over the course of the 2 ½ year program. Note that the target number for training was 48.
2. Farm mentorship opportunities were offered to 8 individuals (7 completed), consisting of an 80-hour on-farm internship experience with a successful farmer or rancher.
3. The Kohala Center's Beginning Farmer-Rancher Training Program was approved by the State of Hawaii Department of Agriculture to allow graduates of our program to obtain a 3-year probationary lease with the Hamakua Agriculture Cooperative's agriculture lease lands (a local agriculture lease land cooperative).
4. Developed of a ten-acre demonstration farm, which serves as an outdoor classroom for hands-on training and demonstration activities. A 1,000 sq. ft. greenhouse, 1.5 acres of irrigated fields for mixed vegetable crop production, and a 4,000 sq. ft. agroforestry plot have been developed for training in organic (non-certified) production farming. The farm has generated over \$35,000 in sales since July of 2014, mainly through farmers market sales.

### What was accomplished under these goals?

Specifically, the following **Activity Measures** were as follows:

1. Materials to publicize and administer the program:
  - a. Six articles in the organizational newsletter circulated to 3,100 people; four articles in the organizational Agriculture and Business Development newsletter circulated to 3,000+ people statewide; and two articles in the organizational annual report that was sent to 500 people.
  - b. Project website was created and is being maintained and expanded: <http://kohalacenter.org/farmertraining/>
  - c. Twelve newspaper articles were published for outreach and recruitment (6 local, 5 island-wide, and one state-wide) and one news-radio story was aired on a statewide public radio station.
2. Four 16-session face-to-face training programs implemented (curriculum attached).
3. Numbers and demographics to complete initial training: A total of 69 individuals have successfully completed the training program.
  - a. Socially disadvantaged: 48 (70%)
  - b. Limited resource: 35 (51%)
  - c. Farm workers: 11 (16%)
  - d. Females: 33 (48%)
  - e. Currently farming/ranching: 21 (30%)
  - f. Farming/ranching less than one year: 13 (19%)

g. Veterans: 4 (6%)

Outcome Measures for the program:

Of those who have completed the training program:

1. Percentage actively pursuing land: 14% (10)
2. Percentage recently acquired land (up to one-year prior to participating in the program): 28% (19)
3. Percentage who previously had land: 51% (35); of those 35, 71% (25) are in the start-up phase of farm development and may be producing but aren't selling.
4. Percentage producing and selling: 33% (23); of whom (16) recently began selling (since beginning the program), representing 23% of the total number of program participants.
5. Percentage change in knowledge: 100% of those trained reported positive changes
6. Percentage change in attitudes: 100% of those trained reported positive changes
  - g. Percentage planned change in behavior/approach: 100% of those trained
- h. Percentage who plan to start farming: 32%, of those who are **not yet** already farming
- i. Percentage who plan to continue farming: 100% of those already farming

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

In addition to four 16-week session classroom-practicum training for beginning farmers/ranchers, the project has provided:

- a series of workshops on value-added production methods and marketing for all farmer/ranchers in the region;
- Two-day workshop entitled "Wholesale Success" for all farmer/ranchers on Hawaii, Molokai, and Maui;
- on-farm mentorships with experienced farmers or ranchers for 7 individuals.
- the project's program director attended the annual BFRDP Director's meeting in Linthicum Heights. MD.

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

We disseminated results of the second year of project implementation in The Kohala Center's annual report, sent to 500 people on Hawaii Island and posted to The Kohala Center website. The final results of the project will be published in The Kohala Center's 2015 Annual Report in December of 2015. The project results will also be published in our organizational newsletter in December 2015, which is electronically transmitted to 3,100 people, most of whom reside in Hawaii and are interested in island food self-reliance.

The Kohala Center

Resources for Beginning Farmers

Resources for Beginning Farmers

- USDA Beginning Farmers
- Start2Farm.gov
- beginningfarmers.org
- ATTRA

### RESOURCES FOR BEGINNING FARMERS IN HAWAII

- Cooperative Extension Service, UH CTAHR
- Sustainable and Organic Agriculture Program, UH CTAHR
- Hawaii Agribusiness Guidebook, UH CTAHR
- Hawai'i Guide for New Farmers, O'ahu Resource Conservation and Development
- Toward Sustainable Agriculture: A Guide for Hawai'i's Farmers, UH CTAHR

### OVERVIEW OF AGRICULTURE IN HAWAII

- 2012 Hawaii County Food Self Sufficiency Baseline

### AGROECOLOGY

- Agroecology: Key Concepts, Principles, and Practices

### AGROFORESTRY

- Agroforestry.net

- Nitrogen Fixing Tree Start-up Guide

#### Business Planning

- Planning for Profit in Sustainable Farming, ATTRA
- How to Begin Your Small Farm Dreams, New Entry Sustainable Farming Project
- Growing Farms: Successful Whole Farm Management Planning Book, Oregon State University Extension Service
- Evaluating a Farm Enterprise, ATTRA
- Affording Our Land: A Financial Literacy Guidebook for Young Farmers

#### Composting, Vermicomposting, and Compost Teas

- Basic Principles of Composting, LSU Ag Center Research & Extension
- Tea Time in the Tropics, UH CTAHR

#### Cover Crops:

- Managing Cover Crops Profitably, SARE
- Cover Crops and Green Manures for Hawaii, UH CTAHR
- Cover Crop Chart for Hawaii, UH CTAHR
- Cover Your Asset: Choosing Appropriate Cover Crops for your Production System, UH CTAHR
- Cover Crop & Green Manure Data Base, U.H. CTAHR
- Cover Crop PAN Calculator, UH CTAHR

#### FRUIT AND NUT PRODUCTION

- Establishing the Orchard, UC Agriculture and Natural Resources
- Organic Fruit and Vegetables from the Tropics, United Nations
- Hawaii Tropical Fruit Growers
- Growing Tropical Fruit & Nut Trees, UH CTAHR

#### IRRIGATION

- Irrigation Principles and Practices

#### MARKETING

- Marketing Strategies for Farmers and Ranchers, Sustainable Agriculture Research Education
- Teaching Direct Marketing and Small Farm Viability, UCSC, Center for Agroecology and Sustainable Food Systems
- ?NCAT Marketing Tip Sheet
- Hawai'i Island Farmer's Guide to Accessing Local Markets

#### NATURAL FARMING

- How to Cultivate Indigenous Microorganisms; UH CTAHR

#### Pest Management

- Integrated Pest Management, GoFarm Hawaii
- Organic IPM Field Guide, ATTRA
- IPM for Soil and Soilless Systems, UH CTAHR
- Weed Management for Organic Crops, University of California, Vegetable Research and Information Center
- Steel in the Field, Sustainable Agriculture Network
- Hawaii Plant Disease, Scot Nelson
- Pests and Disease, UH CTAHR
- Biointensive IPM, ATTRA,
- Organic IPM Field Guide, ATTRA
- Bio Intensive Integrated Pest Management, ATTRA

- Sustainable Management of Soil Borne Plant Diseases, ATTRA
- Pathogens of Plants of Hawai'i
- Hawai'i Plant Disease .Net

#### Seed Saving and Production

- Introduction to On-Farm Organic Farm Breeding, Organic Seed Alliance
- A Seed Saving Guide for Gardeners and Farmers, Organic Seed Alliance

#### Soils: Jonathan Deenik

- Testing Your Soil: Why and How to Take a Soil-Test Sample, UH CTAHR
- Soils of Hawaii, U.H. CTAHR, Deenik, J.
- Soils of Hamakua, U.H. CTAHR, Deenik, J.
- Basic Concepts in Soil Fertility and Nutrient Management, Jonathan Deenik
- Building Soils for Better Crops, Sustainable Agriculture Research
- Sustainable Soil Management, ATTRA,
- Enhancing Soil Function and Plant Health with Locally Available Resources, Permanent Agriculture Resources

#### SOIL & CROP NUTRITION

- Soil & Crop Nutrition, GoFarm Hawai'i
- Managing Crop Nutrition, UH CTAHR
- Essential Nutrients for Plant Growth: Nutrient Functions and Deficiency Symptoms, UH CTAHR
- Applying the Principles of Sustainable Farming
- Enhancing Soil Function and Plant Health with Locally Available Resources, Permanent Agriculture Resources

#### SUSTAINABLE AGRICULTURE

- Sustainable Agriculture an Introduction, ATTRA
- Applying the Principles of Sustainable Farming, ATTRA
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#### VEGETABLE CROP PRODUCTION

- Commercial Vegetable Production in Hawaii, UH CTAHR Cooperative Extension Service

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

{Nothing to report}

#### **Participants**

{Nothing to report}

#### **Target Audience**

Potential beginning farmers and ranchers on the Hamakua Coast of Hawaii Island were initially targeted, but because of demand, we also served residents from all around the island. Men and women were recruited, with an emphasis on family farms and family units. Veterans were given preference, as were those from traditionally under-represented groups that include those with low income, those classified as "socially disadvantaged", and women.

70% (48 of 69) of the new and aspiring farmers served were socially disadvantaged. Of those, 48% of participants (33 of 69) were rural women. With the exception of one participant who drove 100 miles (one-way) to attend the trainings (Ocean View to Honokaa, Hawaii), nearly 50% (35 of 69) of the participants commuted 0-30 minutes; 25% (17 of 69) commuted 30-60 minutes; and 25% (18 of 69) commuted 60-90 minutes. This is due to The Kohala Center's Beginning Farmer-Rancher Training Program being the only beginning farmer-rancher training program on the island in the final year of the program period (2015).

**Products**

Type	Status	Year Published	NIFA Support Acknowledged
Websites	Published	2015	YES

**Citation**

<http://kohalacenter.org/business/resources>

**Patent(s) and Plant Variety Protection(s)**

Application Number	Application Filing Date	Title
N/A	10/23/2013	N/A

**Other Products****Product Type**

Evaluation Instruments

**Description**

We have also been collaborating with the USDA BFRDP-funded GoFarm project at the University of Hawaii College of Tropical Agriculture and Human Resources Agribusiness Incubator Program (UH CTAHR AIP), piloting and evaluating their beginning farmer training materials.

**Changes/Problems**

{Nothing to report}