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INVESTIGATOR: Teves, G.; Arakaki, A.; Arce, R.

PERFORMING INSTITUTION:

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MOLOKAI NATIVE HAWAIIAN BEGINNING FARMER PROGRAM

NON-TECHNICAL SUMMARY: The state of Hawaii produces less than 15% of its food and is food insecure. The island of Molokai has the highest unemployment in the state. There are over 7,800 acres of Hawaii Home Lands in Hoolehua, Molokai, Hawaii with ideal conditions for farm production. The Hawaiian Homes Act of 1920 set aside lands in order for native Hawaiians to be rehabilitated by returning to their agrarian roots. Today, of these lands, less than 10% are being farmed. Excess farm infrastructure exists, including water dedicated to these lands. The purpose of this program is to create new native Hawaiian farm families in Hoolehua, Molokai, Hawaii through a hands-on, experiential agriculture education program. Eleven families will be selected annually for a total of 22 families participating, and will farm 1/2 acres each. Beginning computer training will be provided by Kaunakakai Elementary School as part of a 21st Century Learning Center grant. A computer center and Resource and Reference Library have been created for this educational program. Extension agents will work one-on-one with participants and will follow them through the steps. Shortcomings by participants include lack of farm knowledge, lack of capital, and lack of equipment. This grant hopes to address all three bottlenecks while participants need to have the motivation to follow-through on assignments.

OBJECTIVES: The purpose of this Standard BFRDP Projects Grant is to create new farmers by delivering a hands-on sustainable and culturally appropriate agriculture education program to native Hawaiian families residing on Hawaiian Home Lands in Hoolehua on the island of Molokai in Hawaii. This grant will address the first three of the four long-term goals of Standard BFRDP Projects to enhance the sustainability of beginning farmers and ranchers. A total of twenty-two families will be targeted over a three-year period, with 11 families per year participating. The long term goal of this project is to increase the economic stability of this farming community and improve the survival and competitiveness of native Hawaiian family farms in Hoolehua, Molokai. The proposed project will not experiment with teaching methodologies, but instead will go directly into applying experiential teaching strategies as the primary teaching method, with high interaction among participants. Project Objective #1: Conduct agriculture educational program to develop skills of beginning farmers by applying predominantly experiential and "learn by doing" teaching techniques to train participants in crop production and business management. Month 1-2 Recruitment and Screening. Month 3-4 Developing crop production and business plan. Month 5-8 Preparing and installing long-term farm site infrastructure. Month 9-33 Execute production plan, incremental planting schedule and establishing consistent farm cash flow. Project Objective #2: Conduct training on utilizing rental services for farm equipment needs and develop management handbook on equipment rental cooperative for homesteaders. Month 3 to 33 The proposed beginning farmer program will develop a model equipment rental cooperative using equipment assets from the Cooperative Extension Service Applied Research and Demonstration Farm and from those acquired from previous projects. Equipment includes farm tractors, disks, rotor tillers, mowers, mulch/irrigation drip tube layers, compost-manure spreader, seeder, boom sprayer, electric sprayer, trailer, power sprayer, grain drill, and several hand implements. The farm equipment will be made available to meet beginning farmer demands for farm equipment on their 1/2-acre training site. The CES model will allow participants to learn about the functions and application of farm equipment and to submit work orders for the correct equipment for the task at hand. They will also learn and experience how to manage equipment services to meet their needs on the farm as an alternative to purchasing expensive pieces of equipment. A farm equipment manual will be developed to assist in the development of an equipment rental cooperative utilizing equipment acquired through grants by CES. Month 34-36: Project Wrap-up

APPROACH: The program will focus on sustainable culturally-appropriate hands-on or experiential learning for native Hawaiian farm families to develop a farm business plan and implement this plan. Eleven families will be targeted annually for a total of 22 families participating. An elementary school, through a 21st Century Learning Grant will train

farmers in the use of a computer. A computer center and a resource and reference room has been created for this project in the Cooperative Extension Service (CES) Office located in the native Hawaiian farm community. Three CES agents will work one-on-one with participants. CES has farm equipment to assist in developing their farms and will also provide supplies to set-up their farm. A farm equipment rental model will be developed, with a manual, in the hopes of creating an equipment cooperative utilizing farm equipment acquired by UH Cooperative Extension Service through grants. Participants will need to plan incrementally to supply a market or markets. An open market will also be created in the native Hawaiian community so program participants can practice marketing skills and develop value added products. The project will be evaluated based on the number of farm plans implemented, number of farms created, acres planted, and dollar value of crops sold.

PROGRESS: 2009/09 TO 2012/08

OUTPUTS: A total of 41 native Hawaiians representing 29 families participated in three rounds of training over three years. Demographics: 41 Socially Disadvantaged, 41 Limited Resource, 18 or 44% Females. Workshops & training programs produced: 76 Face-to-face workshops, trainings, and classes with 821 total face-to-face contacts; 75% were classroom workshops, while 25% were field and hands-on activities. Other program delivery included newspaper articles on potential crops(51), mail outs(85), office consultations(760), email(477), office phone(1806), cellphone(1768), small group discussions(53), individual field demonstrations(144), and on-farm assistance(346). Materials produced included 4 local Newsletters, 3 recruitment posters, 76 Class email announcements, 10 Workshop related event flyers/brochures, 1 video on hiving a swarm of bees, 1 Website is under development: www.newhawaiianfarmer.com. Training resources developed included twenty PowerPoint presentations, two Excel tools for irrigation design and a production map spreadsheet, and twenty-six handouts. Media exposure of program re included in publications. In August 2011, the Molokai Native Hawaiian Beginning Beekeeping On-Farm Pollination program was implemented as a supplement, prompted by pollination problems faced by beginning farmers. A two-day Beginning Farmer Conference provided intensive training opportunities for beginning farmers. An Ohana (Family) Garden-to-Farm Series was conducted for six weeks with 10 Hawaiian homesteaders participating. Other workshops conducted included a two day Compost Workshop (75), Swine Production Workshop and Tour(25) and a Back Yard Poultry Production(21). Seven workshops were conducted by specialists from UH Manoa and a Molokai honey producer. Other assistance included Molokai CES Demonstration farm staff, and two technicians hired through Department of Defense stimulus funds. The development of a production map by each participant to farm a one-half acre demonstration plot to understand the production process. Area was broken down into increments to supply the market for a year was a key training tool. Participants researched their potential crops, consulted PI's on crop selection, and identified potential crops. The most effective method used in delivering this program was mentoring, including hands-on demonstrations and classroom presentations, by sharing their experiences working with farmers and also farming themselves. One-on-one counseling, especially in selecting their crops and developing their production maps, was an important component of this program. Participants acknowledged that hands-on training was the preferred technique for learning, while contacting project directors by cell phone was an important mode of accessing timely information. Land was cleared, mowed, limed, ripped, and plowed for each participant, and a minimum of a half acre each was prepared based on their production map. Participants were also allowed the option of clearing an additional half-acre to kick-start their farming production after completion of this program. PARTICIPANTS: Mr. Ted Radovich, UH CTAHR Sustainable and Organic Agriculture Program. Mrs. Josephine Smith, UH CTAHR Sustainable and Organic Agriculture Program. Mr. Jim Hollyer, UH CTAHR Food Safety Coach. Mrs. Tina Tamanaha, Ikiola Cooperative manager. Dr. Ethel Villalobo, UH CTAHR Bee Program. Mr. Scott Nikaido, UH CTAHR Bee Program. Barbara Kalipi, Queen Liliuokalani Childrens Center. Frederika Bain, UH CTAHR Publications. Miles Hakoda, UH CTAHR Publications. Faith Tuipulotu, UH CTAHR CES Molokai. Edward Ayau, Department of Hawaiian Home Lands. Wallace Jennings, USDA-Natural Resource Conservation Service. Vance Christianson/ John Tamashiro/James Robello, USDA-Farm Services Agency. Fukuda Seed Store. Glenn Marshburn, Champion Seed Company. Frank Morton, Wild Garden Seed. Syngenta Seed. Castle Adolpho/Ochie Bush/Matthew Adolpho/David Bush/Wayde Lee, Hoolehua Homesteaders Association. Stuart Nakamoto, UH CTAHR Economist. Keanu Kapuni, CTAHR Research and Demonstration Farm. Bob Joy/David Duvachelle/Glenn Sakamoto, USDA NRCS Plant Materials Center. Brad Sakamoto, Molokai Seed Company. Shirley Han, UH CTAHR CES Molokai Office. Dr. Janice Uchida, UH CTAHR Plant Pathologist. Dr. Koon Hui Wang, UH CTAHR Plant Systems Researcher. James Boswell, UH Maui Campus Molokai Center, Molokai Farm. TARGET AUDIENCES: Target audience are native Hawaiian. They are lessees of the Department of Hawaiian Home Lands and have 100 year leases of \$1 per year. This area is located in Hoolehua on the island of Molokai in Hawaii. There are over 7,800 acres of farmable homestead land with prior rights and access to water from the state irrigation system.

resently, less than 5% of this land is being utilized for farming. Homesteaders have agricultural lots of 5 to 35 acres. Knowledge in farming is a major limiting factor hindering farm production in this native Hawaiian community. There are about 1500 residents in this area, and over 80% have agricultural lots of which less than 5% of the 7,800 acres are being utilized. If this educational program is successful in creating 20 new farmers, it will double the number of farmers in this native Hawaiian farm community. This would be a monumental achievement benefiting this native Hawaiian farming community in terms of food security and increased economic stability for families. PROJECT MODIFICATIONS: One of the project directors, Kali Arce, resigned on June 2010. On June 2011, Jennifer Hawkins was hired and has served as the third project director. A request to hire two technicians called for in the grant didn't receive clearance for hire through the State Civil Service system. As a result, monies became available to expand the training program, and a third round of training was implemented. A Bee Keeping and Pollinator Training Program was implemented as an integral part of the Native Hawaiian Beginning Farmer Program when participants in the first round encountered pollination problems due to lack of sufficient bees on their farm. Participants learned how to grow food plants for bees and capture wild hives, and maintain them on their farms. Seventeen participants were trained in this program. Nine hives were developed and placed on farms; five additional hives were produced recently and are being stabilized before placement on beginning farmer's farms. Fifteen beginning farmers will maintain hives on their farms, and this can be a springboard for alternative crops, including honey, beeswax, and pollination services.

IMPACT: 2009/09 TO 2012/08

Outcome Measures: 1. Assess size of target beginning farmer audience a. 500 at project start. b. Year 1: 16 individuals representing 11 farms; 4 individuals representing 4 farms dropped out: Adjusted Year 1 total: 12 individuals representing 7 farms. c. Year 2: 15 individuals representing 12 farms. d. Year 3: 14 individuals representing 10 farms. e. Total: 41 individuals representing 29 farms 2. Number completing training program a. Year 1: 9 individuals representing 7 farms=60%. b. Year 2: 11 individuals representing 9 farms=73%. c. Year 3: 14 individuals representing 11 farms=78%. d. Total: 34 individuals representing 27 farms=83% 3. Farms who Completed Production Map a. Year 1: 9 of 9=78%. b. Year 2: 9 of 11=82%. c. Year 3: 11 of 11=100%. d. Total: 26 of 31=84% 4. Of those individuals who completed program: a. 53% or 18 individuals are farming. b. 100% or 34 individuals change in knowledge. c. 100% or 34 individuals change in attitude. d. 100% or 34 individuals planned change in behavior/approach. e. 35% or 12 individuals plan to start farming. f. 53% or 18 individuals plan to continue farming 5. Year 1 (Round 1) after individuals who completed a workshop or training program: a. 54% changed farming/land management practices. b. 54% started farming. c. 54% not farming. d. 42% stopped farming. e. 54% changed marketing practices. f. 54% changed business practices. g. 33% who continued to participate in training programs. 6. Year 2 (Round 2) after those who completed a workshop & training program: a. 75% changed farming/land management practices. b. 91% started farming. c. 45% not farming. d. .09% stopped farming. e. 75% changed marketing practices. f. 75% changed business practices. g. 40% who continued to participate in your training programs 7. Year 3 (Round 3) after those complete a workshop & training program: a. 21% changed farming/land management practice. b. 50% started farming. c. 36% not farming yet. d. 0% stopped farming. e. 33% changed marketing practices. f. 33% changed business practices 8. Overall: a. 34% participating in farmer collaborative networks. b. 31% participating as mentors for other beginning farmers and interested homesteaders. c. 50% or 17 have been certified as beekeepers through the On-Farm Pollination Program .26% or 9 producers managing on-farm hives. Five additional hives have been produced for beginning farmers and will be released to them. A total of 9.5 acres of new crop produced, including long and round eggplant, butternut squash, watermelon, green and bulb onion, broccoli, butternut squash, herbal teas, lettuce, strawberry, taro, sweet corn, cucumber, long bean, winged bean, okra, bittermelon, daikon, kabocha, cantaloupe, and papaya. In third round many didn't have sufficient time to implement their farm plan, but all finished production map. 33% are farming, and 66% have fields ready but waiting for spring to grow warm season crops. A History of Cooperatives on Molokai, and a Farm Equipment Cooperative Manual was produced, including an Excel program to determine per hour costs of equipment services. Information from these reports is being utilized to organize an equipment cooperative composed entirely of beginning farmers from this program.

PUBLICATIONS (not previously reported): 2009/09 TO 2012/08

- . Teves, G., Villalobos, E., Hakoda, M., 2012. Molokai Native Hawaiian Beginning Farmers Program. Poster for Smithsonian Folklife Festival in Washington D.C.
- . Teves, G., Villalobos, E., Hawkins, J., Hakoda, M., 2012. Molokai Native Hawaiian Pollinators Program. Poster for Smithsonian Folklife Festival in Washington D.C.
- . Teves, G., Hawkins, J., Bain, F., 2012. University of Hawaii College of Tropical Agriculture and Human Resources Impact Report. A report of accomplishments for the University of Hawaii.

- . Teves, G., Smith, J., and Hawkins, J. 2012. Hanai Ai Sustainable and Organic Agriculture Program News. Article on the Molokai Native Hawaiian Beginning Farmers Program.
- . Teves, G., 2012. History of Equipment Cooperatives on Molokai. An overview of equipment cooperatives in Hoolehua, Molokai, HI
- . Teves, G., Arakaki, A., and Hawkins, J., 2012. Farm Equipment Cooperative Manual for the Molokai Native Hawaiian Beginning Farmer Program, Hoolehua, Molokai, HI. A farm equipment cooperative manual to assist in the development of a native Hawaiian farm equipment cooperative.
- . Hawkins, J., 2012. The Bee Buzz. Bee newsletter for beginning bee keepers.
- . Hawkins, J., 2012. Newsletter to Beginning Beekeepers. Bee newsletter for homesteaders.
- . Hawkins, J., 2012. Growing Healthy Newsletter. Health newsletter for homesteaders.
- 0. Hawkins, J., 2012. Home on the Hoolehua Range. Range newsletter for homesteaders.
- 1. Hawkins, J., 2012. The BUZZ on Molokai. Newsletter for farmers interested in bees and pollination.
- 2. State of Hawaii Department of Hawaiian Home Lands. 2012. MANA Magazine. Molokai Homestead sweet as can be! Article on the Molokai Native Hawaiian Beekeeping Program.
- 3. Hawkins, J., 2012. Letter on Financial Resources for Farmers. Newsletter on financial resources available to farmers.

PROGRESS: 2010/09/01 TO 2011/08/31

OUTPUTS: For the period 9/1/10 to 8/30/11: The Molokai Native Hawaiian Beginning Farmer Program is in its second year. Only eleven participants are selected annually. Criteria for selection include access to agricultural water, and also Hawaiian Homes agricultural land controlled by their immediate family. The purpose is to ensure that participants have access to agricultural lands for generations to come. To promote and publicize the program, two newspaper articles were developed, including one with a picture of Round I participants. Both were published in the local newspaper, Molokai Dispatch, and were mailed to each family with a post office box. This is the only method of mail delivery on the island. In addition, three posters were produced and posted at key high-traffic areas on the island, including banks, post offices, and stores. Only eleven participant families were allowed in each round, but more than one family member is allowed to participate. For Round 1, a screening committee composed of three individuals from community based agencies and organizations screened applicants. The committee decided to allow all to participate, including one alternate. One of the selected participants withdrew at the orientation meeting, and his slot was filled by the alternate. In Round 2, there were less than 11 applicants, so all were allowed to participate. In the early stages of the program, at least three more applicants wanted to join and all were allowed to do so. Some were partners on an individual farm project, and all were counted. As part of the screening, each participant needs to complete an essay on why they want to farm, and are also expected to keep a journal. They each identified a one-half acre area on their farm for their project, staked their plot, and collected a soil sample. A class was held to help them interpret soil sample results for their individual farm. PI's assisted in liming their plots. A key component to this program is the development of a production map to farm a maximum of a one-half acre, broken down into increments to supply the market on a weekly basis for a year. Participants researched their potential crops and consulted with PI's of pros and cons of different crops after they completed their crop research. They also met with store owners and produce managers to identify potential crops for the local market. Market owners were apprised of the program and were supportive of having participants grow crops for their market. Each participant is expected to execute on their production. Any changes to the implementation of their project must be reflected in the production map. Each farm is considered a demonstration project to help them understand the production process. **PARTICIPANTS:** Organizations - Maui Community College Molokai Farm, CES Molokai Research Demonstration Farm, Hikiola Cooperative, Hoolehua Homesteaders Association, Queen Liliuokalani Childrens Center, Department of Hawaiian Home Lands, USDA-Natural Resource Conservation Service, USDA-Farm Services Agency, CTAHR Sustainable Agriculture Program, Fukuda Seed Store, Champion Seed Company, Wild Garden Seed, Syngenta Seed, Collaborators: UH Honey Bee Project-Ethel Millalobos and Scott Nikaido, David Bush - Hoolehua Homesteaders Association, Stuart Nakamoto (CTAHR Economist), Ted Radovich (Sustainable Ag Specialist), Wallace Jennings (USDA-NRCS), Faith Tuipulotu-Ag Technician CTAHR Research and Demonstration Farm. Individuals - Vance Christianson (USDA-FSA), Ochie Bush, and Matthew Adolpho (Hoolehua Homesteaders Association), Barbara Kalipi-Queen Liliuokalani Childrens Center. **TARGET AUDIENCES:** Native Hawaiian Homesteaders residing in Hoolehua, Molokai in Hawaii with access to agricultural water, and with agricultural land awarded to their immediate family. **PROJECT MODIFICATIONS:** There are changes to one of the principal investigators. We have removed Kali Arce, who has resigned in June 30, 2010. We have added Jennifer Hawkins, who was hired in June 1, 2011. We have added a Beginning Bee Keeping program as a supplement to the

program to improve pollination of crops and also provide options for economic opportunities. We don't believe this is a modification to the program; it's just additional educational subject matter being taught that can improve their farming system. With the onslaught of bee diseases in Hawaii, such as the bee hive beetle and the Varroa mite, this program provides a special opportunity to improve bee keeping technology to new farmers. Molokai has a proud history as a world leader in honey production in the 1930's.

IMPACT: 2010/09/01 TO 2011/08/31

OUTCOMES: There were total of 30 participants in the program. In Round 1, there were 14 participants and of these, 2.8 percent or 6 were female. In Round 2, there were 16 participants and of these, 37.5 percent or six were female. The ethnicity of the group included 96.6 percent or 29 native Hawaiians, and 3.3 percent or 1 Pacific Islander. All participants are Hawaiian Homesteaders on the island of Molokai, and are considered limited resource and socially disadvantaged farmers. Only 16 percent or 5 of the 30 own land. Four participants dropped out of Round 1. To date, only one dropped out in Round 2. Six participants from Round 1 completed their production map and have started farming. As a result of this program, there's a total of 4.25 acres of new crop production on the island, mostly fruits and vegetables. For Round 2, most of the participants have started working on their production map, and all are expected to complete it before the end of the year. Of this group, only one participant is actively farming. The rest are new farmers. A total of 29 workshops were held. Sixty-nine percent or 20 were classroom workshops, including powerpoint presentations and teaching from hand-outs. Thirty-one percent or 9 workshops were field demonstration and hands-on. Other methods of program delivery included newspaper articles on potential crops for Molokai (30), mail outs to participants (242), office consultation (68), email (731), office phone (465), cellphone (288), office consultation (6), small group discussion (12), individual field demonstrations (10), and on-farm assistance (78). All technical assistance was provided by three extension agents, except for two workshops conducted by specialists from H Manoa, including a sustainable agriculture specialist and extension economist. Collectively, agents have over 95 years of agriculture technical assistance and farming experience with over 70 years on the island of Molokai working in this native Hawaiian farming community, and participants have been able to capitalize on their experiences in agriculture on Molokai. The most effective method used in delivering this program is mentoring, including hands-on demonstration and classroom presentations, by sharing their experiences working with farmers and also farming themselves. One-on-one counseling, especially in selecting their crops and developing their production maps, was an important component of this program. A total of 13 power point presentations were developed for this program. Two excel programs were developed expressly for this program, including irrigation design and a production map spreadsheet. Fifteen handouts were developed for this program, including an introduction to the program, self assessment of farming knowledge, field diagnostics, drip irrigation basics, Growing Vegetable Seedlings, Seedling production, Agricultural Websites, Molokai and Lahaina Series Soils, Weeds, Alternative Weed Management techniques, Calibrating Your Sprayer, Use of Weed Mats for Weed Suppression, Soil Sample Evaluation, and others. Resource materials were shared with participants to help them select their crop and develop their production system.

PUBLICATIONS: 2010/09/01 TO 2011/08/31

no publications reported this period

PROGRESS: 2009/09/01 TO 2010/08/31

OUTPUTS: Infrastructure to support the program was completed, including internet for computer lab, widescreen for polycom, and purchase of farm implements. Selection process completed and eleven families were selected with one alternate. One participant withdrew when his job was relocated to another island. Present total is eleven families. After a slow start, due to lack of hired staff to oversee the program, an orientation meeting was held in March 2010. Twelve participants attended with two participant families missing. Resource materials and overview of program disseminated. Five workshops were held, including production mapping (2 classes with 15 total attending), farm production steps (8 present), soil fertility (7 present), and Organic agriculture (6 present). Resource materials were also disseminated at each workshop. Those missing the workshops will pick-up resource materials at our office. Powerpoint presentations were developed for two workshops, including production steps, and organic agriculture. One of the co-P.I.s resigned her position in June 30, 2010, so the two remaining P.I.s will take the project forward. Two positions created through this program are going through the hiring process but since the end of this reporting period, none were hired. Assistance was rendered by an agricultural technician at our CES Demonstration farm to assist in field preparation of participant farms. Two summer youth workers worked for a 1 1/2 months through stimulus funds from the Department of Defense, one at the demonstration farm and assisted the ag tech in field preparation. A second individual worked solely on this project assisting participants with their production maps, and was a valuable asset to the program. **PARTICIPANTS:** Co-P.I.s Glenn Teves and Alton Arakaki worked on the day-to-day activities of this program

including public relations, formulating and implementing the selection process, ordering farm equipment, coordinating the completion of the computer lab. Weekly contacts include working with participants in the field, workshop attendance, phone contacts, emails, one-on-one office visits/consultations. Workshops were developed and presented by P.I.s with resource materials gleaned from many sources. Where resources were inadequate or too difficult for participants to understand, P.I. created resources including power points on farm production steps, organic agriculture, and marketing. Partner organizations assisting in the selection of participants included Maui Community College-Molokai Farm, Hoolehua Homesteaders Association, and Queen Liliuokalani Childrens Center. Field supplies were purchased through the local supply cooperative, Hikiola Cooperative and they have assisted in portioning supplies for these small operations. Maui Community College - Molokai Farm allowed the use of their facility to store farm equipment. **TARGET AUDIENCES:** The target group are eleven Hawaiian families residing in Hoolehua, Molokai. At the orientation meeting, resource materials were disseminated including Knotts Handbook for Vegetable Crops, Vegetable Production Manual from Florida, a planner, notepad, pen, and journal. All participants are expected to keep a journal of all events in this project. Five workshops were deemed relevant based on feedback from participants, and questions asked. Classes are very upbeat with lots of interaction between participants and instructor. Of particular note is an understanding of soil fertility and impact of liming on soils, such as exchange capacity, tie-up of nutrients by low pH, etc. Participants chose their sites and watched land clearing, including liming of all plots. Methods of delivery included workshops, one-on-one field and office consultation, phone discussions, and email exchange. The enthusiasm level for many is great, and some have become very comfortable in stopping by the office. If they miss the workshop, participants are expected to pick-up the material from the office. A strong soil management focus is being imposed on them, with two books on Soils, Plant Nutrients in Hawaiian Soils, and Building Soils for Better Crops Organic Matter Management by Magdoff. Participants are presently in the process of completing their production maps, while some have already completed it. The next step is the presentation of their plan to the P.I.s for critique and approval. Each participant will be held to the plan, and will draw down supplies based on their plan. If they diverge from their plan, all draw down of supplies will cease until a modification is made or the participant returns to the approved plan. Feedback from participants have been positive. A few cannot make the workshops on Wednesdays due to prior commitments, but as many as 8 of the 11 have attended. Will implement more evaluation instruments to instruction. **PROJECT MODIFICATIONS:** Two positions to be hired for this program have not cleared the civil service process to date. This has stalled the program somewhat, but P.I.s have decided to move forward without these two positions. We have been fortunate to utilize a staff member from our CES Demonstration Farm to assist in preparing the participants fields, and also a youth worker through a summer youth program funded through the Department of Defense (stimulus funds). An additional youth worker from the DOD program also worked at our office and assisted participants in the development of their production maps once they selected their crop and also the size of their incremental plantings. This individual worked for about a month and was a valuable asset to this project. A total, engaged team will help to decrease P.I. time on the mundane and focus in teaching and one-on-one field assistance and farm implementation. The approach is to encourage them to implement their plan, identify bottlenecks in knowledge, then implement training to address these shortfalls through group and one-on-one technical assistance, and to be available when they fall to pick them up and get them to the finish line, which includes selling their produce

IMPACT: 2009/09/01 TO 2010/08/31
land was mowed, limed, ripped, and plowed for each participant, and a minimum of 1/2 acre each was prepared. Participants were also allowed the option of clearing additional land to be utilized after the completion of this program. Participants are expected to complete their production maps and present their plan to P.I. for critique before receiving the go-ahead to start their farm.

PUBLICATIONS: 2009/09/01 TO 2010/08/31
0 publications reported this period