

Final Report

Title:	Farming for Cash: An Apprenticeship Program for Kentucky's Beginning Limited-Resource and Small-Scale Farmers		
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Program Code: BFRDP**Program Name:** Beginning Farmer and Rancher**Project Director**

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Non-Technical Summary

With some 87,000 small farms, Kentucky is dominated by small farms, indicating that most of the Commonwealth's beginning farmers will be involved in small-scale agriculture. This requires that they have production and marketing skills that are specialized to small-scale agriculture. While Kentucky's agricultural situation is exacerbated by economically-depressed rural areas, particularly Appalachian counties, the commonwealth has many local food markets such as a large farmers' market network, independent restaurants that prefer local foods, and numerous direct marketing opportunities. The Kentucky Department of Agriculture enhances this with its Kentucky Proud marketing program. This creates an environment where specialized crops and enterprises can be profitably grown in the small-scale when they are tied to specialized or niche markets or tied into the Kentucky Proud marketing system. This gives rise to various 'cash enterprises' that provide liquidity to the farm by readily being sold for cash. In poor communities, this is useful at times when cash is needed, such as at the beginning of the school year or when an unexpected illness occurs. Examples include fresh vegetables, organic vegetables, honey, organic chickens and eggs, meat goats, and value-added, processed foods. These enterprises, specifically those requiring limited resources and investment, benefit beginning farmers in Kentucky. This proposed program is a standard beginning farmers and ranchers project that will train Kentucky's beginning farmers to manage their farm businesses, apply low-cost production systems, and utilize, and participate in, local markets. It will also foster urban agriculture and address the production of foods in 'food desert' areas. Emphasis will be given in recruiting beginning farmers from under-served communities such as African Americans, Hispanics, refugees, and Appalachians. This project offers education in farm management, three apprenticeships in production, food processing, and local marketing, and mentoring with a focus on helping beginning farmers to start farming as soon as possible.

Accomplishments**Major goals of the project**

Objective 1: Train beginning farmers to manage limited land, water, and capital resources for profitable farming. Objective 2: Train beginning farmers and ranchers to develop practical business plans so their farms will be grounded on sound financial plans. Objective 3): Train beginning farmers in developing marketing strategies suitable for small-scale farming and local sales fostering rapid cash flow. Expected outputs: 1.A list of all recruited beginning farmers will be maintained. 2.Number of beginning farmers attending each KSU-Third Thursday workshop. 3.Educational materials for three specialty workshops that

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beginning farmers will attend, in addition to the Third Thursday workshops. 4.Names and qualifications of the two hired program assistants. 5.Video record of three specialty workshops for on-demand access for training of beginning farmers 6.A report of attendance of beginning farmers, extension personnel, students, and others in each of the conferences from every location, including remote locations (e.g., county extension offices) reached by satellite transmissions. 7.Results of the attendee-questionnaires at the conclusion of each workshop indicating the importance and usefulness of the workshop to the audience. 8.A list of demonstration farms with details of facilities and agricultural enterprises to be demonstrated. This list will also include a timeline for planting, culture, harvesting, and marketing. Also, production data from demonstration farms will be included in the report. 9.A report on production/farm management apprenticeship activities and the number of beginning farmers attending these activities. Included with the report will be feedback from beginning farmers about the usefulness of the apprenticeship program. 10.(a) A list of beginning farmers who have participated in the harvesting activities at the demonstration farm; (b) a list of beginning farmers who were legally-trained to process poultry, fish, and honey; (c) a list of beginning farmers who have participated in workshops. 11.Video footage of processing demonstrations available online for future reference. 12.Summary of post-workshop questionnaires indicating beginning farmer's perceptions about the usefulness of the workshop materials. 13.Beginning farmers will report their successes and challenges during the Southern Sustainable Agriculture Working Group (SSAWG) Conference and KSU Small, Limited-Resource, Minority Farmers Conference during Year 2 and 3.

What was accomplished under these goals?

During Year 1, major activities completed were:

- 1) A database of 120 beginning farmers, containing information of available farming resources and their farming plans/preferences.
- 2) The following number of beginning farmers were trained:
 - 10 were trained in developing enterprise budgets and cash flow statements.
 - 36 were trained in land acquisition and NRCS programs.
 - 25 were trained in bee keeping.
 - 6 were trained in organic gardening.
 - 18 were trained in pastured poultry.
 - 11 were trained in poultry health management.
 - 20 were trained in marketing food through Kentucky's farmers' markets.
- 3) On-farm production demonstrations were conducted. A total of 10 apiculture demonstrations, 18 pastured poultry demonstrations, and 8 horticulture demonstrations,
- 4) Two marketing demonstrations were organized: one at the Franklin County farmers' market and one at a Christian church in

Franklin County

Number of beginning farmers trained during Year 2:

- 14 in Small Fruit production and management,
- 11 in local food marketing through registered farmers' markets in Kentucky,
- 14 in retail and wholesale marketing of vegetables,
- 28 certified in Good Agricultural Practices (GAP) and received their diplomas,
- 9 in starting a commercial vineyard,
- 12 received hands-on training on starting production of edible Oyster mushrooms,
- 13 in installing a queen bee and a package of honey bees into a hive,
- 14 in value-added food production/home-based processing/microprocessing of food for retail sales,
- 9 in honey extraction/bottling for sales,
- 7 in using smart cell phones to accept debit/credit/EBT cards for payment

Objective1 activities for beginning farmers during Year 2:

- 1) a September 2013 Third Thursday workshop on the production of pawpaw, a fruit native to eastern and midwestern states,
- 2) a March 2014 Third Thursday workshop on managing vegetation to enhance goat production,
- 3) a July 2014 Third Thursday workshop on pond management for aquaculture, aquatic weed management, and disease management of aquatic animals,
- 4) a beekeeping field day in September 2013 for Hispanic farmworkers presented in Spanish,
- 5) three Good Agricultural Practices (GAP) training workshops in October 2013,
- 6) three small vineyard startup and management workshops in March 2014,
- 7) an edible mushroom production lecture, followed by hands-on mushroom kit management training in March 2014,
- 8) a workshop in beginning aquaponics in March 2014,
- 9) three value-added food production, home-based food processing, and microprocessing workshops during April 2014,
- 10) a honey extraction, processing, and packaging workshop in May 2014,
- 11) a tour of goat and sheep producers in June 2014, and

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12) 41 agricultural production demonstrations in horticulture, apiculture, and pastured poultry; these projects educated beginning farmers in organic production methods, commercial-scale black plastic mulching methods, small fruit production, beehive management, and small poultry flock management in conjunction with pasture management for poultry.

The following activities were accomplished under Objective 2 during Year 2.

Beginning farmers attending the March 2014 workshop on aquaponics were trained on how to develop financial statements. A Microsoft excel-based financial template was designed by the project team that allows farmers to enter transaction data for three years, which are automatically converted into three-year financial statements. This template was made available for download on the project's blog <http://farmingforcash.wordpress.com/>

The following activities were accomplished under Objective 3 during Year 2.

- 1) Beginning farmers received training on marketing of horticulture products in farmers' markets, CSAs, and wholesale markets in three workshops around Kentucky during October 2013
- 2) Beginning farmers learned about direct marketing of goats during the October 2013 Third Thursday workshop
- 3) Beginning farmers learned about pastured poultry marketing during the June 2014 Third Thursday workshop; they were taught by a veteran farmer, Mr. Andre Barbour, a project collaborator;
- 4) Beginning farmers learned about local marketing of fish to restaurants during the July 2014 Third Thursday workshop;
- 5) Beginning farmers learned about accepting debit, credit, and EBT cards using smart cell phones during three August 2014 workshops scheduled around Kentucky;
- 6) Beginning farmers learned about horticulture marketing by selling produce from demonstration farms to Good Foods Coop in Lexington, Kentucky, and at farmers' markets;
- 7) Beginning farmers learned about pastured poultry marketing to a contract-buyer in Kentucky, Marksby Farm; they learned from the experience of a beginning farmer that is currently contracting his birds with Marksby Farm;
- 8) Beginning farmers learned about aquaculture marketing by observing sales of live fish by a beginning farmer to an Asian grocer in Louisville, Kentucky; and
- 9) The project team assisted one beginning farmer open a new farmers' market (Twin Cities Farmers' Market) in Franklin County, Kentucky, that will host several beginning farmers enrolled in this project.

Accomplishments from Year 3:

Objective 1 accomplishments: 30 refugee beginning farmers were trained in limited land and water management and in the use of low-capital, low-input technologies. Through multiple workshops, these beginning farmers were trained in topics such as small-plot intensive farming, using 1,000 square feet at a time; which is very efficiently and requires low-investment. This technology further adds to land-use efficiency via management systems such as relay cropping of quick-growing vegetables on the same piece of land.

Efficient water management was taught via use of non-recirculating hydroponics systems to grow leafy greens. These systems use only a fraction of the water required for in-ground vegetables. Non-recirculating hydroponics requires no artificial energy such as electricity to run pumps or propane to heat buildings and uses inexpensive materials such as gallon milk jugs, 10 gallon to 30 gallon plastic totes, without daily weeding, insecticides, or mechanized equipment.

Objective 2 accomplishments: 18 female beginning farmers or partners of male beginning farmers were taught business planning as part of an Annie's Project workshop series during October, 2014. Training was in the five areas of farm risk management: production, marketing, financial, legal, and human. Annie's Project training also included business and financial planning and the participants were trained in completing Schedule F in their annual federal income taxes. All Annie's Project participants received a certificate of completion.

On July 11th 2015, the project director taught beginning farmers how to develop a two-page business plan as part of the 2015 Kentucky Farm Fest that is organized by the University of Kentucky Cooperative Extension Service.

Objective 3 accomplishments: Refugee beginning farmers received workshop-based training about the functioning procedures of farmers' markets in the United States, the cost of vending at farmers' markets, and the potential income from sales at farmers' markets. They were also instructed to grow specialty vegetables that are typical to their national or ethnic identity. Several beginning farmers were able to meet with a famous Kentucky chef Jeremy Ashby of Azur Restaurant, Lexington, Kentucky who purchases only locally-grown foods for his restaurant during October 2014. The beginning farmers gained insight into marketing of small quantities of fresh produce and meats to local restaurants.

Several beginning farmers participated in a workshop on April 6th, 2015 about USDA AMS funding availability with respect to their Farmers' Market Promotional Program (FMPP) and Local Food Promotional Program (LFPP). Beginning farmers were taught how to design successful proposals for the USDA AMS programs.

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

Professional development activities during Year 1 were made available via these workshops that captured the general distribution of the target audience:

- 1) Land acquisition for farming and NRCS programs suitable for beginning farmers
- 2) Beginning apiculture

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- 3) Aquaculture marketing
- 4) Beginning pastured poultry
- 5) Organic horticulture basics for beginning farmers
- 6) Selling food through Kentucky's farmers' markets and roadside stands
- 7) Poultry diseases and their management

Training opportunities provided to all participants during Year 1 were:

- 1) Design and construction of pastured poultry hoop houses
- 2) Installation of electric fencing
- 3) Installation of a simple, inexpensive, drip irrigation system that can operate under low water pressure
- 4) Installation of bees in bee hives
- 5) Pastured poultry management
- 6) Horticulture management, which included soil testing, soil amending, direct seeding using an Earthway seeder, weed management, harvesting and proper holding/handling of vegetables
- 7) Beehive management, including checking for mites, finding the queen bee to ensure health of the hive, understanding "bearding" of hives
- 8) Horticulture marketing through roadside stands at a church and at a farmers' market
- 9) Farm record keeping and cash flow statement development

During Year 2 the opportunities for training during the project period were:

Beginning farmers received hands-on training in small-scale agriculture. These opportunities included:

- 1) 15 horticulture production demonstrations out of which 12 demos using organic production methods, three demos used commercial-scale black plastic mulching methods to increase vegetable yields, and 5 demos investigated small fruit production to diversify offerings of horticulture producers at farmers' markets;
- 2) 16 apiculture demonstrations where beginning farmers learned how to install bees, manage hives, diagnose diseases and apply appropriate medications;
- 3) 10 pastured poultry demonstrations where beginning farmers learned poultry management and pasture management;
- 4) Hands-on training in starting and managing a mushroom kit for small-scale edible oyster mushroom production;
- 5) Development of a home-processing and microprocessing plan in collaboration with officers from the Kentucky department of Public Health;
- 6) Poultry processing certification training at the Kentucky State University, Mobile Processing Unit;
- 7) Hands-on training in extraction and packaging of honey;
- 8) Practical demonstration of a small-scale aquaponics facility;
- 9) Good Agricultural Practices (GAP) training and certification; and
- 10) Training and certification for sampling raw and cooked foods at farmers' markets and registered roadside stands.

Opportunities for professional development during Year 2:

Beginning farmers were given the following educational opportunities during this project period:

- 1) Small fruit production, management, disease, and economics (September 2013; Farming For Cash workshop);
- 2) Pawpaw production, processing and value-added products (September 2013; Third Thursday workshop);
- 3) Apiculture management in Spanish for Hispanic beginning farmers (September 2013; Kentucky State University and University of Kentucky Extension workshop);
- 4) Horticulture marketing at retail and wholesale level (October 2013; Farming For Cash workshop);
- 5) Production and marketing of meat and dairy goats (October 2013; Third Thursday workshop);
- 6) Good Agricultural Practices (November/December 2013; Farming For Cash workshop);
- 7) Starting a commercial vineyard (March 2014; Farming For Cash workshop);
- 8) Disease management of goats (March 2014; Third Thursday workshop);
- 9) Production and marketing of edible mushrooms (March 2014; Farming For Cash workshop);
- 10) Aquaponics (March 2014; Kentucky State University Aquaculture Research Center/Farming For Cash workshop);
- 11) Value added products, home-based food processing, and microprocessing (April 2014; Farming For Cash workshop);
- 12) Health and food safety (May 2014; Third Thursday workshop);
- 13) Extraction and processing of honey (June 2014; Farming For Cash workshop);
- 14) Pastured poultry and poultry processing (June 2014; Third Thursday workshop);
- 15) Aquaculture production and marketing (July 2014; Third Thursday workshop); and
- 16) How to accept debit, credit, and EBT cards for food sales using a smart cell phone (August 2014; Farming For Cash workshop).

Opportunities for training during Year 3:

Beginning farmers were trained by professionals in the area of agricultural production, marketing, economics, risk, and management on a variety of topics during the third year of this project. The following is a list of the various training

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opportunities:

- 1) Beginning farmers who were women, and partners of male beginning farmers participated in an Annie's Project workshop series where they were taught agricultural risk management during October 2014, from professionals in the government, industry, and universities. Training topics included development of farm financial statements and business plans, completing Schedule F in federal income taxes, health insurance, how to have a diversified market using local marketing channels, etc.
- 2) Hydroponics and aquaponics production techniques were taught to 23 beginning farmers at a workshop during February 2015 by a noted expert, Mr. Charles Schultz.
- 3) Beginning farmers were invited during March 2015 to learn about small ruminant management during the Kentucky State University Third Thursday Thing workshops. Participants received training on topics such as genetic selection of Boer goats and the Kentucky Department of Agriculture's quality assurance program for goat and sheep producers.
- 4) In June 2015, beginning farmers participated in an organic hydroponics workshop where they learned about using organically-derived hydroponic fertilizers to grow a variety of vegetables using systems such as Nutrient Film Technique (NFT) and Bato buckets. Beginning farmers were also taught a lesson in botany where they learned about nutritional and pH needs of vegetables and how hydroponic fertilizers provide adequate nutrients to vegetables. This workshop was taught by an expert in horticulture, Dr. Barbara Liedl, West Virginia State University, a sister 1890 Land Grant University.
- 5) During June 2015, 20 refugee beginning farmers were taught about sub-acre, urban vegetable farming using the small-plot, intensive management system described above. They were also taught about local marketing through farmers' markets.
- 6) During July, 2015, low-input hydroponics was taught to 19 refugee beginning farmers at the International Center in Bowling Green, KY.
- 7) Refugee beginning farmers from Asia and Africa were taught how to use a rear-tine tiller to progressively break ground and mill the soil and prepare a fine seeding bed.
- 8) Refugee beginning farmers were taught about setting up a low-input hydroponics system by measuring hydroponic fertilizers that they can purchase from a variety of local distributors in order to prepare solutions with proper plant nutritional attributes and using rockwool cubes and net pots to start the hydroponics system for leafy greens.

Opportunities for professional development during Year 3:

- 1) Beginning farmers participated in a grant writing workshop during March 2015, taught by the project director, where they were exposed to USDA AMS local food marketing initiatives. They learned about USDA priorities about local food marketing such as food hubs and how to develop competitive proposals.
- 2) Beginning farmers participated in learning how to write proposals for the Value Added Producer Grant program during May, 2015. This professional development opportunity allowed them to learn some basic skills in grant writing which could benefit their farm business immensely in future.

How have the results been disseminated to communities of interest?

Results were disseminated using the following methods during Year 1:

- 1) Evening workshops were scheduled every month at three locations across Kentucky, which allowed participants with day-jobs to attend for professional development.
- 2) Invitations were extended to each participant to attend the Kentucky State University Third Thursday Thing workshops and training sessions. These invitations included meeting agendas and directions to the meeting site.
- 3) On-farm agricultural demonstrations were conducted in multiple Kentucky counties that included community gardens in urban areas.
- 4) Regular emails were sent by project team members using MailChimp to keep participants aware of upcoming events and changes in the project implementation plan.
- 5) A project blog site was created and constantly updated and participants were encouraged to visit the blog for finding uploaded answers to general questions about the program, and specific questions about management and disease issues.
- 6) Each participant was called via telephone 2-3 days prior to training sessions/workshops to encourage their involvement in the program.
- 7) Participants involved in demonstration projects were periodically interviewed via telephone to discuss problems that they were facing, and provide options and solutions with assistance of production and economics/marketing experts.

During Year 2 the following activities were conducted for program result dissemination:

- 1) A project blog was created that was updated monthly with project description, training/workshop information, downloadable fact sheets, and beginning farmer training videos;
- 2) All beginning farmers with email addresses were emailed monthly by project team members to keep them updated about upcoming workshops, other training opportunities including on-farm demonstrations;
- 3) All beginning farmers who were involved in an agricultural demonstration project were given telephone calls by project team members to provide mentoring and support;
- 4) All beginning farmers who have registered to this project were telephoned 2-3 days before a meeting was scheduled;
- 5) A smart cellphone app was created for dissemination of results; this app linked training videos, fact sheets, program calendar, and project team contact information for the user; this app could be downloaded through the project blog via a QRL

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link and in a printed brochure that advertised this project. The app is also available here:

<http://ibuildapp.com/projects.php?filter=featured&searchText=farming+for+cash&searchCat=-1&page=1>;

6) YouTube videos were created along with a special Farming for Cash channel on YouTube

(<https://www.youtube.com/user/farmingforcash>); these videos had 176 views from people in the United States and from 26 other countries; these videos contain project results; and

7) Five fact sheets focusing on the project results were written and will be available for download from the project's blog and app.

During Year 3 the following avenues of outreach were used to disseminate our results and news of our project:

1) We maintained our project blog (<https://farmingforcash.wordpress.com/>) with news about this project, including upcoming workshops and training opportunities that the project team members have designed and scheduled by the Kentucky State University 1890 Land Grant Program.

2) All email correspondence contained information about this project and our project blog.

3) On July 11th 2015, the project director met with beginning farmers and members of the community during the 2015 Kentucky Farm Fest, which was organized by the University of Kentucky Cooperative Extension Service. This forum afforded the opportunity to disseminate information about this project to the public.

4) This project resulted in 2 journal publications (in review) and 3 extension fact sheets that will help disseminate NIFA and Kentucky State University's role in beginning farmer training in the USA.

5) Several YouTube videos were prepared by the project team, based on materials discussed in the workshops and uploaded to our Farming for Cash YouTube channel.

6) Beginning farmers that registered to this project were contacted via telephone and email to advertise any upcoming workshops and/or other training events.

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	0.1	0.1	0.5	0	0.7
Professional	0.1	0	0	0	0.1
Technical	0.9	0	0	0	0.9
Administrative	0	0	0	0	0
Other	0	0	0	0	0
Computed Total	1.1	0.1	0.5	0	1.7

Student Count by Classification of Instructional Programs (CIP) Code

Undergraduate	Graduate	Post-Doctorate	CIP Code
1			26.01 Biology, General.
	1		01.01 Agricultural Business and Management.

Target Audience

During the first year of this project the target audience were a total of 122 beginning farmers, who were officially enrolled in our program. This includes women farmers (53%), Caucasian farmers (69%), African-American farmers (25%), and Asian farmers (3%). This audience includes Caucasian and African farmers that are considered refugees in the United States. These participants represent beginning farmers from 34 out of 120 counties in Kentucky. The majority of our audience were new to farming: 14% have never farmed before in their life, but are willing to consider farming as a future livelihood option; 24% have been farming for 1-3 years; and 23% have been farming for 3-5 years. Most of our participants (74%) own land

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suitable for farming activity; only 27% reported that, in the past, they have either borrowed or leased land for farming. Water access is just as vital to farming as land access; 64% of the audience reported that their only water access for farming was city water and 21% reported that they had pond, stream, or well water available for farming. Our audience had a high variability of the amount of time that they are willing to devote to farming activities. These data are important to show the relative likelihood of full-time and part-time operators, among the beginning farmers enrolled in our program. The reported data show that 30% were willing to enter farming as a full-time profession (more than 40 hrs per week), and approximately half of them were willing to devote 11-40 hrs/week on farming; the remainder of participants were either investigating farming without commitments to entering the profession or were interested in micro-scale, hobby farming.

During the second year of this project the target audience included African-American beginning farmers, military veteran beginning farmers, socially-disadvantaged beginning farmers, Hispanic beginning farmers, and refugee beginning farmers. A total of 73 beginning farmers have been registered and trained during the second year; however, many additional unregistered beginning farmers received training through workshops sponsored by this project. Over half of the enrolled beginning farmers are socially-disadvantaged farmers, with 23% African-American beginning farmers. These beginning farmers were trained through multiple workshops and farming/marketing demonstration projects. One notable event during the first project year involved an African-American beginning farmer who received a pastured poultry supply contract from Marksbury Farm, a high-end meat processor, distributor, and purveyor in Kentucky.

The target audience for the last year (i.e., the third year) of this project was two distinct groups of beginning farmers in Kentucky. The first group represented socially-disadvantaged and limited-resource beginning farmers, which included African American and female beginning farmers. These beginning farmers were taught a variety of topics during the third year of this project, including hydroponics, aquaponics, "organic" hydroponics, local marketing, farm risk management, management of small ruminants, etc.

The second group was refugee beginning and aspiring farmers that were recruited with the help of a community-based organization called International Center, located in Bowling Green, Kentucky. These refugee beginning and aspiring farmers represented nations such as Myanmar, Afghanistan, Cameroon, Congo, and other African nations. These participants lived in urban housing and were typically struggling in finding employment in the United States. They were taught about low-tech, low-investment urban farming methods via monthly workshops. They learned about income possibilities via small-scale horticulture and low-input hydroponics, in combination with local marketing. They were impressed to witness the effectiveness of non-recirculating hydroponics systems to grow leafy green vegetables, the corresponding low management requirements, and the quick returns, so that they can have monthly harvests and sales. These beginning farmers were provided a plot of land by the International Center with a greenhouse where they started to practice the farming methods that were discussed in the workshops. We trained a total of 30 refugee beginning and aspiring farmers during the last year of this project.

Products

Type	Status	Year Published	NIFA Support Acknowledged
Journal Articles	Under Review	2015	YES

Citation

Dasgupta, S., and R. C. Bryant. 2015. Costs of pastured broiler operations using data from small-scale farms. Journal of Extension.

Type	Status	Year Published	NIFA Support Acknowledged
Journal Articles	Under Review	2015	YES

Citation

Dasgupta, S., R. C. Bryant, and A. Velasquez. 2015. Local markets for whole catfish and fresh fillets in Kentucky. Journal of Extension.

Type	Status	Year Published	NIFA Support Acknowledged
Other	Published	2014	YES

Citation

Dasgupta, S. and R. C. Bryant. (2014) Selling fish to independent restaurants. Factsheet of the College of Agriculture, Food Science, and Sustainable Systems, Kentucky State University Experiment Station Number: KYSU-000045.

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Type	Status	Year Published	NIFA Support Acknowledged
Other	Published	2014	YES

Citation

Bryant, R. C. and S. Dasgupta. (2014) How can farmers accept debit, credit, and EBT cards in direct-to-consumer markets? Factsheet of the College of Agriculture, Food Science, and Sustainable Systems, Kentucky State University Experiment Station Number: KYSU-000044.

Type	Status	Year Published	NIFA Support Acknowledged
Other	Accepted	2013	YES

Citation

Dasgupta, S. (2013) Acquiring farmland: help for beginning farmers. Fact sheet of the College of Agriculture, Food Science, and Sustainable Systems, Kentucky State University.

Type	Status	Year Published	NIFA Support Acknowledged
Other	Accepted	2013	YES

Citation

A database of beginning farmers in Kentucky, that includes information about their agricultural interests, their access to land, water, and electricity, and their willingness to participate in full-time or part-time farming, and demographics.

Type	Status	Year Published	NIFA Support Acknowledged
Conference Papers and	Accepted	2014	YES

Citation

Bryant, R. C., Dasgupta, S., Tiu, L. and Caporelli, A. (2014). Restaurant perceptions of locally grown freshwater seafood in Kentucky and Ohio. World Aquaculture Society meeting, Book of Abstracts, p. 55.

Other Products**Product Type**

Data and Research Material

Description

Obtained data on fruit and vegetables that were in high, medium, and low demand by patrons of farmers' markets in Kentucky

Product Type

Data and Research Material

Description

Obtained data on the amounts of fruits and vegetables that farmer-vendors sell annually at farmers' markets in Kentucky. This database also has information on the best-selling, and poor-selling fruits and vegetables.

Product Type

Data and Research Material

Description

Recorded production data and created a photographic chronology of growing leafy greens in a low-input hydroponic system.

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Product Type

Audio or Video

Description

We developed a video about a low-tech method of storing delicate vegetables for up to 3 days. We were inspired by veteran produce farmers to consider this technique. Many beginning farmers do not afford expensive, mechanized produce coolers. However, produce cooling and storage is essential if farmers lack sufficient labor to harvest their crops just before the day of sales. Such farmers must harvest a little every day during a week and store the vegetables for midweek or weekend sales. This video shows how farmers can use soft drink ice-chests and alternate layers of ice and newspapers to keep leafy greens, and other vegetables, cool, moist, and fresh for 3 days.

Product Type

Audio or Video

Description

A video of a hydroponics and aquaponics workshop that was presented to beginning farmers during February 2015. This workshop was taught by an expert in this field, Mr. Charles Schultz.

Product Type

Audio or Video

Description

A video of organic hydroponics production systems, presented by Dr. Barbara Liedl was completed.

Product Type

Audio or Video

Description

A video on the regulatory process of becoming a certified organic horticulture farmer.

Product Type

Audio or Video

Description

A video on integrated pest management using organic practices in horticulture for beginning farmers.

Product Type

Educational Aids or Curricula

Description

A Microsoft excel-based template for beginning farmers to automatically complete three cash flow statements, income statements, and balance sheets was developed and distributed through the project's blog. This also allowed beginning farmers to evaluate the effect of loans on their income capacity. This educational aid can be downloaded from: <http://farmingforcash.wordpress.com/fact-sheets/>

Product Type

Audio or Video

Description

An instructional video for beginning farmers was developed and uploaded on YouTube and the project's blog. Video topic: growing edible mushrooms. <http://farmingforcash.wordpress.com/farming-for-cash-youtube-channel/>

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Product Type

Databases

Description

A database of pastured poultry weekly feed intake and average bird body weight was obtained from cooperating beginning farmers. These data would be used to predict the cost of poultry production.

Changes/Problems

No major changes from the original grant program were instituted.

During Year 1, beginning farmers involved in poultry production for meat sales discovered that live sales of birds were more profitable than

sales of processed birds. This is particularly true when poultry flocks are very small in size. Other beginning poultry producers prefer to use custom processors with USDA certification in Kentucky. Consequently, there has been low interest in hand processing of poultry among beginning farmers. This has made training beginning farmers regarding how to processing poultry, of low priority in this project.

During Year 2 one minor change was that only a handful of beginning farmers received training as commercial poultry processors at the Kentucky State University Mobile Processing Unit (MPU). This is because most beginning farmers that were interested in poultry production found it convenient and economically expedient to have their birds custom processed and packaged for sales. The savings associated with farmers butchering and processing their own birds at the MPU was insufficient for them to seek this type of processing training.

At the beginning of Year 3, there was hope of teaching viticulture to beginning farmers by working with a local wine-grape producer. However, that farmer was unavailable during Year 3 and viticulture training during the third year was not provided. The Master Beekeeping Program was not available to beginning beekeepers during Year 3, as hoped for by the end of Year 2 of this project.