An Evaluation of Agricultural Development Board Investments in Kentucky Agriculture 2007-2014:

KADF Projects, Programs, & the Kentucky Agricultural Finance Corporation

Executive Summary

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A total of $198 million was invested in programs and projects during the study period.

An Evaluation of ADB Investments in Kentucky Agriculture 2007-2014

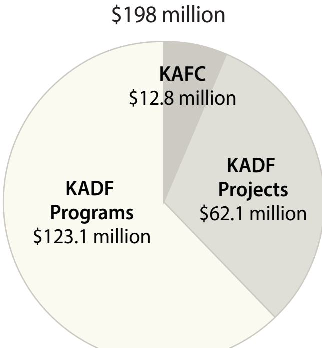
In 2000, the Kentucky General Assembly passed House Bill 611 which created the Kentucky Agricultural Development Board (KADB) and the framework for what is now known as the Kentucky Agricultural Development Fund (KADF). Funding for this program comes from Kentucky's annual share of the Tobacco Master Settlement Agreement (MSA) – which is a contract between cigarette manufacturers and 46 states that settled a number of lawsuits in which the states sought to recover the public health care costs associated with smoking. Other programs that are funded through Kentucky's share of the MSA include healthcare and early childhood development initiatives. Kentucky law provides that 50% of the total MSA funds are distributed through the KADB, which is administered by the Governor's Office of Agricultural Policy (GOAP). MSA funds are further divided primarily between two allocations: 1. County allocations, which are available to support county-level projects and programs, are subdivided among 118 county accounts based on their relative tobacco dependency in 2000; and 2. State allocations, which are available for the KADB to invest in projects and programs that have a regional or statewide impact. In addition to the KADB, the Kentucky Agricultural Finance Corporation (KAFC) – which is a low-cost capital access program for farmers and agribusinesses is also administered by the GOAP.

In November 2014, the KADB and GOAP contracted with the University of Kentucky to conduct a second study to evaluate the Agricultural Development Fund investments including projects, county programs, and the loans made by the KAFC. The first study was presented in 2007 and represented funds distributed from 2001-2007. This current study evaluates investments made from the latter half of 2007 through 2014.

This evaluation was based on the Board's overall investment philosophy and guiding principles for board action (http://agpolicy.ky.gov/board/pages/default.aspx):

> *The Board will invest these funds in innovative proposals that increase net farm income and effect tobacco farmers, tobacco-impacted communities and agriculture across the state by stimulating markets for Kentucky agricultural products, finding new ways to add value to Kentucky agricultural products and exploring new opportunities for Kentucky farms.*

Figure 1. Total Direct Investment by KADB, 2007-2014.



Specifically, this evaluation will examine the nearly $198 million that were directly invested in KADF projects and programs and the KAFC during the study period. The distribution of these funds across projects, county programs, and KAFC is presented in Figure 1. Of the total direct investment by KADB over the study period, 31.4% of funds were allocated for KADF Projects, 62.2% of funds were allocated for KADF Programs and 6.4% of funds were provided to KAFC.

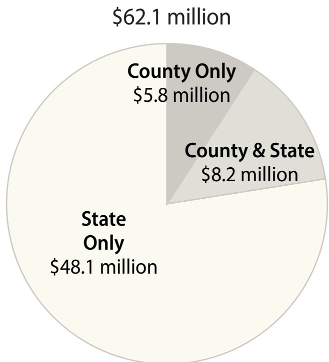
The overall goal of this evaluation is to assess the effectiveness and impact of the KADB investments awarded between 2007 and 2014. The evaluation results are presented in three parts: Part I addresses the impacts of KADF projects, which are those individually funded by the KADB. Part II examines KADF programs, which are a set of standardized programs administered through the counties. The evaluation of the KAFC investments is provided in Part III.

KADF Projects

Over the 2007-2014 evaluation period, the Kentucky Agricultural Development Board (KADB) invested just over $62 million in State, State & County and County-only funded projects. Figure 2 summarizes investments made in KADF projects between 2007 and 2014.

Figure 2 reveals that county-only projects comprise about 9.3% of total project funding (about $5.8 million). While most county-only funds are invested in the CAIP Program, County Agriculture Councils—which oversee the KADF money sent to counties as part of the Master Settlement Agreement—also have the option to solely fund project proposals with county KADF money as long as the KADB concurs with their decision. While these projects were not prioritized for interviews or site visits, GOAP did provide data related to the county-only projects. Over half of the funding was used to develop multi-purpose pavilions, youth agriculture programs, and commercial kitchens.

Figure 2. Total KADB Project Investments, 2007-2014.



Projects receiving some level of state funding comprise 90.7% of total project funding (about $56.3 million). Specifically, projects receiving funding from both the county and the state comprise 13.2% of total project spending and projects funded solely by the state represent 77.5% of total project expenditures. The evaluation of projects focuses on the use of these state investment dollars. The methodology and findings of these efforts are described below.

Evaluation Criteria for State-Funded Projects

The UK Evaluation Team results and conclusions are based on an analysis of project files supplied by the GOAP, 54 site visits and interviews conducted by the UK Evaluation Team, five expert group meetings and consultation with various persons with subject knowledge. Data were collected and site visits and interviews conducted during the summer of 2015 for all 15 large projects, 20 medium-sized projects and 19 small projects, which represent a 100%, 50% and 25% representation of the total number of projects in each size category, respectively. Therefore, the findings below should only be attributed to the representative sample of projects.

The $42 million invested in state and county projects has resulted in an estimated $86 million in additional farm income.

The project evaluation criteria focused on measuring the performance of funded projects in contributing to the overall KADB investment priorities: increasing farm income, stimulating new markets, affecting tobacco growers and tobacco impacted communities, adding value to Kentucky agriculture products and exploring new opportunities for Kentucky farms. In addition, the evaluation also tried to measure the likelihood that the projects would operate beyond the funding period. Figure 3 depicts the model that was developed to guide the evaluation project.

A representative sample from all projects was chosen to be visited and surveyed by the UK Evaluation Team. The team evaluated 15 of the 16 unique large size projects (>$500,000). The remaining large project was still in the construction phase. In addition, the team evaluated 50% of the medium projects ($100,000 - $499,000) and 25% of small projects (<$100,000). The selection process for the sample projects was proportional to the amount of overall project funds spent on the specific sectors of agriculture. In addition, the team also considered the types of projects funded and the different regions within the state. Figure 4 depicts the geographic distribution of projects in the sample.

A standardized questionnaire was used to identify and assess specific major impacts. Detailed questions were included in the interview form to assess outcome and impacts of all site visited projects. Expert groups were invited to review industry trends and project data, assist in the analysis of impacts as well as to assist in crafting recommendations to the KADB. The following conclusions and recommendations are based on the data from the GOAP files, site visits, and interviews and analysis by expert groups.

Figure 3. Evaluation Model.

Situation/Goals/Priorities

↓

Inputs
Grants and loans

↓

Outputs
What happened?

↓

Outcomes/Impacts
Quantifiable/qualitative impacts

↓

Sustainability
Likelihood of success post-funding

The overall impacts of the investments for projects are reported in three ways:

1. KADB's specific major impacts
2. Estimated impacts on key sectors
3. Project performance rankings

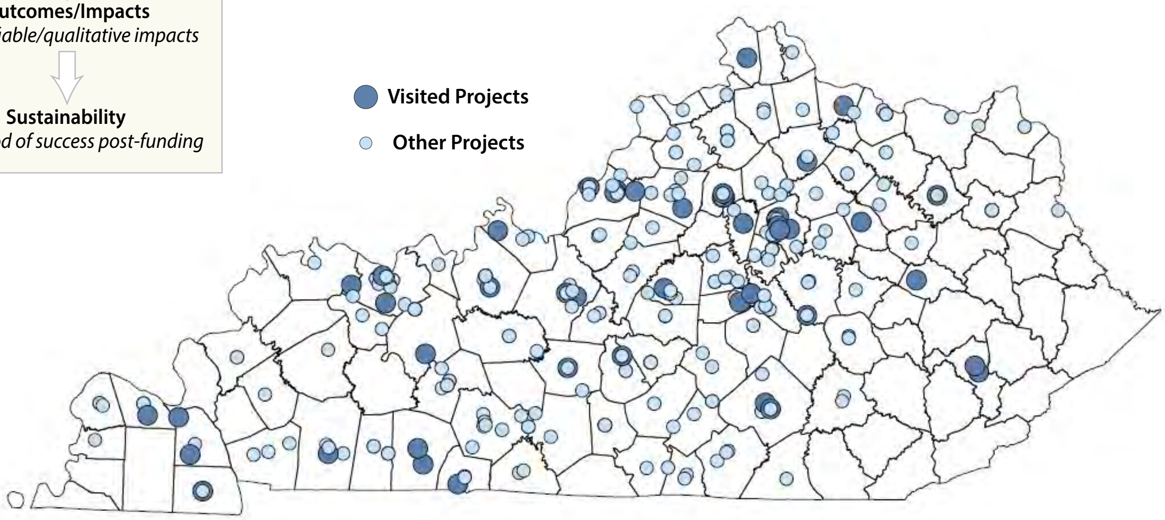


Figure 4. KADB Projects, 2007-2014.

Specific Major Impacts

Almost all of the project recipients (95%) indicated they had achieved "all or some" of their goals when interviewed. These findings are consistent with the UK Evaluation Team's conclusion that only a few projects were under- or non-performing. A summary of the impacts for the selected projects is provided below.

Table 1. Project Awards by Sector Summary, 2007-2014.

	Amount Awarded *(millions)*	Percent of Awards
Livestock	$15.6	37.0%
Marketing & Promotion	$9.4	22.3%
Horticulture	$8.7	20.6%
Education, Leadership, Technology	$5.5	13.0%
Grain & Forage	$3.1	7.3%
Total	**$42.3**	**100%**

- **New markets or expansion of existing markets** – An estimated 77 new or expanded markets have been created as a result of project funding. These include the MILK program administered by the Kentucky Dairy Development Council, value-added cattle marketing programs by the Beef Network, chia seed production and distribution, markets for Kentucky-grown wine grapes, and several new USDA-inspected slaughter plants that also market beef, pork, chicken, turkey, lamb and goat meat. The Kentucky Proud program's Udderly Kentucky Milk, Kentucky Proud Popcorn, and Kentucky Proud products are now sold in Kroger and Walmart stores. In addition, numerous county farmers' markets have been built or expanded and institutional markets (e.g., schools, hospitals and universities) are beginning to purchase locally produced meats and produce. Markets have also been expanded for produce sold to food banks, and meat, produce and dairy products sold to restaurants. A new grain terminal on the Ohio River was funded that lowered the grain transportation costs to area farmers and provided an additional marketing option for grain producers.

- **New products** – Over 465 new products have been created by Kentucky agricultural entrepreneurs working on funded projects. Some of the new products are being produced on a large-scale basis such as Udderly Kentucky Milk, Preferred Popcorn, Kentucky Proud Chicken, specialty vegetable and chicken meals tailored to the public school market, and smoked and cured meat products from all Kentucky-raised beef, pork and goat. Additionally, 66 operating wineries in Kentucky are producing dry, sweet and fruit wines, and the University of Kentucky's Food Systems Innovation Center has helped develop and test many value-added specialty food items. There were also a number of non-food outputs created by funded projects including feasibility studies on a large beef processing facility, bio-mass production for alternative energy use as well as energy efficiency audits for poultry and dairy farms.

Evaluated projects generated an estimated $2.03 for every $1 invested by the KADB.

- **Farm income generation** – The evaluated projects generated an estimated $2.03 in farm income for every $1.00 invested by the KADB. The estimated total farm income generated as a result of the projects funded during the 2007-2014 time period is approximately $85.9 million dollars. This is likely an underestimate as some projects did not have or provide farm income numbers. The livestock projects had the largest impact on additional farm income created at $44 million, followed by the marketing and promotion sector with $28.9 million.

- **New jobs** – Approximately 708 newly created jobs were related to KADB investments. The Kentucky Center for Agriculture and Rural Development (KCARD) was responsible for creating a large number of jobs by helping establish new businesses and expanding existing businesses. Two meat processors and one organic produce processing business also added a significant number of jobs.

- **Leveraged resources** – Most of the project participants contributed additional funds from outside sources to expand the scope of the projects. In large

Marketing projects generated $28.9 million in estimated total farm income and $3.07 return per dollar of KADB investment.

projects, $36.4 million from the KADB was matched with $38.9 million in participant funds—a $1.07 match for every dollar invested. The medium and small projects matched the KADF funds at a higher level with $1.54 and $1.91, respectively, for every $1 of KADF investment. The large projects tended to be farm commodity groups with associated non-profit organizations, or government and educational institutions.

- **Farmers, tobacco farmers and impacted communities** – The projects evaluated were estimated to have affected 33,958 farmers, of which an estimated 17,617 are current or former tobacco growers. Projects did not typically keep track of how many farmers had a history of tobacco production. Both beef cattle and dairy farmers were assumed to have a higher rate of historical tobacco production. Projects that affected these types of farm enterprises would also affect the rural communities where they live. Larger numbers of beginning farmers were affected by the marketing sector projects and the education, leadership and technical assistance related projects.

Specific major impacts by project sector and size are summarized in Table 2 below.

Estimated Impacts on Key Sectors

The sampled projects were a diverse set of investments with different goals and strategies. The UK Evaluation Team categorized projects by key sectors of the agricultural industry and analyzed their impact on that sector.

Marketing and Promotion – Just over $9.4 million dollars was invested in marketing and promotional projects. The Kentucky Department of Agriculture (KDA) was awarded funds to continue a multi-faceted approach to identify, promote, and market Kentucky Proud Products. According to a recent study, statewide brand recognition for the Kentucky Proud logo now stands at 69%. There is some continuing debate about the requirements for Kentucky Proud, particularly the difference between Kentucky-grown versus Kentucky-processed. A rating system may be a solution to clarifying this situation. KDA's Restaurant Rewards program is a success and has grown to include over 350 restaurants that generated an estimated $2.9 million dollars in new farm income. Tradeshow cost-shares, retail and special event promotions as well as a large advertising campaign round out the project that returned an estimated $2.94 in farm income for every $1.00 of KADF investment. Retail grocer promotional efforts were difficult to measure

Table 2. Projects, Specific Impacts by Sector and Size, 2007-2014.

	Number of projects	**Amount of Award** *(millions)*	**Amount Leveraged** *(millions)*	**Farm Income Generated[1]** *(millions)*	**Income Generated[1] per $1 of Investment**	**New or Expanded: Markets**	**Jobs**	**Products**
Projects by Sector								
Education, Leadership, Technology	*10*	$5.5	$7.7	$1.0	$0.17	14	215	365
Grain & Forage	*8*	$3.1	$6.4	$1.7	$0.56	2	7	1
Horticulture	*13*	$8.7	$6.6	$10.5	$1.20	18	113	7
Livestock	*18*	$15.6	$18.5	$44.0	$2.81	18	365	83
Marketing and Promotion	*5*	$9.4	$9.2	$28.9	$3.07	25	8	9
Impacts by Sectors	**54**	**$42.3**	**$48.3**	**$86.0**	**$2.03**	**77**	**708**	**465**
Projects by Size								
Large Projects	*15*	$36.4	$39.0	$76.1	$2.09	25	238	73
Medium Projects	*20*	$4.9	$7.5	$8.8	$1.79	35	440	386
Small Projects	*19*	$1.0	$1.8	$1.1	$1.15	17	30	6
Estimated Total Impact	**54**	**$42.3**	**$48.3**	**$86.0**	**$2.03**	**77**	**708**	**465**

[1] *Estimated*

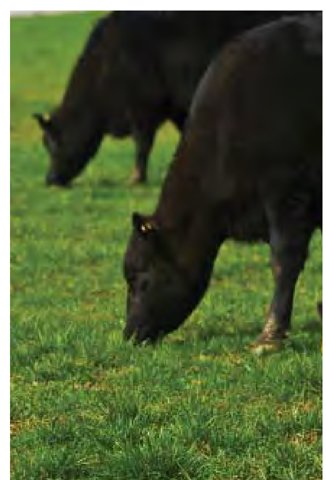
because sales information was not available. The broad media campaign was estimated using the ROI figure of $3.19 that was developed in the last KADF Evaluation for the Kentucky Proud state-wide branding program.

The Louisville Farm to Table Project (LFTT) funded a marketing liaison consultant to develop new marketing channels for local food producers to sell into the Louisville Metro area. New markets and marketing links were established with institutional buyers and independent restaurants. New farm income of $3.2 million in local food sales was documented by the project, making the LFTT project one of the highest returns on investment per dollar of KADF money spent—$9.70 of farm income per $1.00 of KADF invested. Overall, the marketing projects generated almost $28.9 million in estimated total farm income over the 7 year period, or $3.07 per $1.00 of KADF invested, the highest ROI of all the sectors funded. However, there is a cautionary tale as well. The Rebekah Grace Food & Supplements for Life, LLC project was funded to serve as a marketing outlet and distributor for Kentucky Proud local products. The company developed cash flow problems and subsequently ceased operations. Unfortunately some farmers suffered financially from the situation.

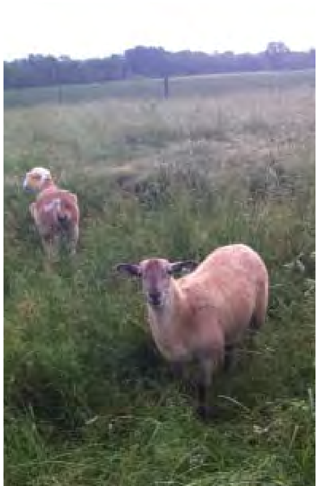
Horticulture – $8.7 million was invested in horticulture projects over the period, generating generate approximately $10.5 million in new farm income or $1.20 per $1.00 of KADF funding. The Kentucky Horticulture Council was funded to provide a comprehensive approach to help producers. This organization provided tradeshow and advertising money for marketing support and contracted with the University of Kentucky's Horticulture Department for Kentucky-specific horticulture crop research and on-farm demonstrations. Both the Kentucky Grape and Wine Council and the Kentucky Vineyard Society were funded at different times for a continued effort to grow the grape and wine industry. Information on the farm income impact of the Horticulture Council and the grape and wine funded programs was not available. An estimate was made by comparing the growth rate of Kentucky's horticulture industry compared to surrounding states. Better data collection from project participants would provide a more direct method to estimate the impacts. Kentucky Association of Food Banks provided a new and significant market for excess produce and often hard to sell second grade produce. Over $1 million in produce was purchased directly from Kentucky farmers over the period of the study. Several farmers' market investments encouraged local food sales.

Overall, the horticulture industry in Kentucky has continued to grow, particularly with vegetable sales to wholesale markets and farmers' markets. Wholesale sales through produce auctions and local food retailers have also grown. Wine grapes are increasing in demand as the state's many new wineries cannot find enough Kentucky-grown grapes to fill their needs. Kentucky cash receipts for farm sales of fruits, vegetables and nursery crops grew 18.5% with large growth in fruits (54%) and vegetables (67%) and very minor growth in nursery crops (3%).

Livestock – The largest impact of the $15.6 million dollars invested in the livestock sector came from the beef cattle and dairy industry. Both industries were awarded projects to carry out comprehensive programs that included educational programs for producers, on-farm consultations, targeted marketing programs, leadership development and young farmer programs. The Kentucky Beef Network received $7.1 million over the period and returned an estimated $27.7 million in additional farm income. The



Livestock projects had the largest impact on new farm income at $44 million.



Every $1 invested in all livestock projects has generated $2.81 in new farm income.

Kentucky's beef industry is strong and has grown 75% in terms of cash receipts from 2007-2014. Kentucky's cattle income growth is 11.2% above Tennessee and 27% more than Arkansas, two neighboring states with similar beef cattle numbers and farming traditions. Cattle numbers are up in Kentucky as is the state's reputation for producing quality calves. Additionally, the Kentucky Dairy Development Council was awarded $3.8 million to implement their programs. The MILK program increased production by offering Kentucky dairymen a premium above market price for every hundred weight (cwt) increase in milk produced over the 2007 base number. The MILK program was funded by milk processors in order to reduce the cost of shipping milk from outside of Kentucky. The industry paid over $5 million in production incentive payments to farmers and increased milk production by 4 million cwt over the production base.

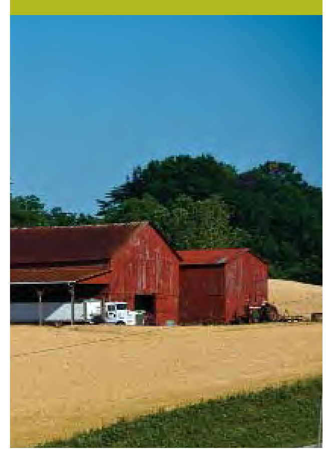
Other livestock industries are performing well in Kentucky. The Kentucky Sheep industry experienced a 41% increase in numbers over the last four years. Part of this growth is the rising interest in hair sheep breeds which are well adapted to the Southeast climate. Demand for lamb and goat is growing with the increased interest in locally produced food and the growing ethnic markets in the East and West coasts. Overall, KADB investments added to the growth of sales of Kentucky beef, pork, lamb, chicken, milk and their value-added products. The return on $1 of KADB livestock investment was $2.81 in farm income generated.

Education, Leadership and Technical Assistance – Nearly $5.5 million has been invested in education, leadership and technical assistance projects across the Commonwealth. Agricultural leadership development has been successfully taught and encouraged through Kentucky Agricultural Leadership Program. Their 271 graduates are prominent leaders in Kentucky agriculture and are strong financial supporters of the program. The Kentucky Center for Agriculture and Rural Development (KCARD) has continued to provide Kentucky agriculture-based businesses with one-on-one consulting services, management audits, feasibility studies, business plans, grant writing and board of director training. KCARD's technical assistance has contributed to the growth and diversity of the agriculture industry in Kentucky. Kentucky State University is developing the Center for Sustainability of Farm Families to act as a resource for small-scale producers and their enterprises. In

addition, the Food Systems Innovation Center at the University of Kentucky has provided assistance to develop 300 new products, helped 1,000 people with food product development or testing, and also provided training to entrepreneurs on wholesale marketing. Moreover, the Kentucky Agricultural Council developed and published a strategic plan, "A Pathway for Kentucky's Agriculture and its Rural Communities". The Education, Leadership and Technical Assistance sector has provided a high level of impacts other than monetary ROI. The sector created 215 new jobs, 365 new products, affected 3,725 farmers, including 1,675 tobacco farmers and 1,240 young or beginning farmers, hosted 4,913 educational program attendees, added value to 11 Kentucky agriculture products, and created 90 new businesses.

Education, leadership development and technical assistance projects created 215 new jobs, 365 new products, 90 new businesses and affected 3,725 farmers.

Grain and Forage – Almost $3.1 million was invested in grain and forage crop related projects. Grain production and income saw a large increase in recent years. Three projects related to grain were funded: a new river port terminal for grain, an in-depth series of educational workshops for corn growers and an energy efficiency project for a farmer-owned ethanol manufacturing plant. Forage crops have gained importance to support the beef, dairy, sheep and goat industries as those enterprises have grown. In Meade County, KADF funding helped create a River Port Authority, which was the catalyst for the development of a new grain buying and barge loading terminal on the Ohio River. The resulting new market for local corn and soybean production offered a significant transportation savings for local farmers as they haul their crops to a closer location for sale. The grain and forage investments generated an estimated total farm income of over $1.7 million, resulting in an estimated $0.56 return on $1.00 of KADB funding. The low ROI was the result of the large research project on switchgrass as a bio-fuel alternative energy source that did not reach the income generation stage. In addition, the River Port project required a large investment and only had one year to generate farm income results. The port is a longer term project that is expected to generate additional farm income.



Project Performance Rankings

A system was developed to rate the performance of all interviewed projects, utilizing data from the survey and expert group discussions. Each project was rated based on activities initiated, goals achieved, evidence of positive impacts, and sustainability. Table 3 (on the next page) lists the specific projects interviewed.

Table 3. Projects—Rated on Goals and Impacts (based on site visits the summer of 2015).

Rating	Award Recipient	Project Description	Award
★★★★★	The Kentucky Beef Network	Cattle Industry Development	$7,090,931
★★★★★	KY Dairy Development Council	Dairy Industry Development	$3,796,448
★★★★★	Kentucky Center for Agriculture & Rural Development (KCARD)	Business & Entrepreneurial Support	$1,479,000
★★★★★	KY Ag Leadership Program	Agriculture Leadership Development Course	$1,000,000
★★★★★	UK Research Foundation - Food Systems Innovation Center	Value-Added Food Product Laboratory & Development Center	$358,904
★★★★★	O'Bryan Grain Farm	Innovative Hog Production Facility Construction	$352,155
★★★★★	Louisville Metro - Farm to Table	Regional Food Systems	$330,000
★★★★★	KY Association of Food Banks	Food Distribution & Commodity Purchasing	$302,000
★★★★★	Kentucky Sheep and Goat Development Office	Sheep and Goat Industry Development	$185,000
★★★★★	Marksbury Farm Foods, LLC	Value-Added Meat Processing	$175,000
★★★★★	Webb's Properties, LLC	Value-Added Processing	$125,000
★★★★★	Dossey Vineyards, LLC	Processing, Storage, & Handling Facility Expansion	$52,000
★★★★	KY Dept. of Agriculture	KY Proud Program	$8,725,037
★★★★	KY Horticulture Council	Horticulture Industry Development	$6,882,023
★★★★	Meade County Riverport Authority	Construction of Regional Port Facility	$2,000,000
★★★★	KY State University	Small Farmer Grants, Organic Farming, & Aquaculture Research	$998,000
★★★★	JD Country Milk	Milk Processing Facility Expansion	$487,982
★★★★	Kentucky Horse Council	Comprehensive Statewide Equine Survey Publication	$300,000
★★★★	UK Research Foundation - Center for Crop Diversification	Web-based Crop Diversification & Marketing Information Resource	$113,347
★★★★	Trunnell's Farm Market, Inc.	On-Farm Retail Facility Construction	$74,553
★★★★	Kentucky Corn Growers Association	Corn Growers Educational Workshops	$35,483
★★★★	Kentucky Specialty Grains, LLC	Chia Feasibility & Market Development	$33,850
★★★	KY Grape & Wine Council	Grape and Wine Industry Research and Extension	$805,000
★★★	Kentucky Poultry Federation	Poultry House Energy Research	$683,634
★★★	Kentucky Forage and Grassland Council	Biomass and Hay Production Research & Demonstration	$581,972
★★★	Wolfe County Fiscal Court - The Chop Shop	Value-Added Meat Processing	$350,000
★★★	The Weekly Juicery	Value-Added Facility Construction & Improvements	$310,000
★★★	Commonwealth Agri-Energy, LLC	Cost-Saving Energy Upgrade	$220,000
★★★	KY Agricultural Council	Strategic Planning	$200,000
★★★	Kentucky Pork Producers Association, Inc.	State Fair Cooking Facilities	$164,900
★★★	Kentucky Goat Producers Association	Forage Research for Goat Production	$154,748
★★★	UK Research Foundation- Princeton, Kentucky	Grain Crops Research	$125,667
★★★	Owen's Garden Center	Retail Facility Construction & Expansion of Greenhouses	$94,470
★★★	Murray State University - Arboretum	Arboretum Construction for Education	$80,000
★★★	Harrison County Extension	Farmer's Market Pavilion Construction	$75,000
★★★	Nonprofit Dynamics, Inc.	Feral Hog Control	$55,782
★★★	Beaver Dam Farmer's Market	Farmer's Market Pavilion Construction	$50,000
★★★	Logan County Farmer's Market	Farmer’s Market Pavilion Construction	$26,962
★★★	Hart County Chamber of Commerce	Farmer's Market Pavilion Construction	$18,300
★★★	Mountain Cattlemen's Association	Farmer's Market Marketing	$4,394
★★★	Whitley County Farmer's Market	Farmer's Market Pavilion Construction	$1,809
★★	Specialty Food Group	Meat Processing Equipment	$1,008,140
★★	UK KY Entrepreneurial Coaches Institute	Entrepreneur Development Program	$883,545
★★	The Beef Connection	Beef Production Data Management	$500,000
★★	Kentucky Community & Technical College System (KCTCS)	Computers & Training for Farmers	$267,757
★★	Morehead State University	Commercial Kitchen Development	$90,000
★★	Water Works Farm, Inc.	Free Range Poultry Production, Distribution, & Management	$87,000
★★	The Campbell Farm Wool Art Center, LLC	Agri-Tourism	$50,000
★★	Media Working Group, Inc.	Film Documentary	$50,000
★★	Gateway Regional Agri-Tourism Association, Inc.	Regional Marketing Effort	$50,000
★★	Bracken County Agriculture Advancement Council, Inc.	Biofuel Pellet Mill Feasibility Study	$35,000
★★	Kentucky Cattlemen's Association	Large Animal Veterinarian Incentive	$1,000,000
★	Rebekah Grace Food & Supplements for Life, LLC	Regional Food Marketing & Distribution	$250,000
★	South Kentucky Rural Electric	Beef Processing Plant Feasibility Study	$130,000

★★★★★ All goals accomplished; evidence of sustained positive impacts; indications that benefits are greater than ADB investment.
★★★★ All goals accomplished; clear, documented positive impacts.
★★★ Most or all goals accomplished; evidence of positive impacts.
★★ Most or all project activities or goals attempted; limited evidence of positive impacts.
★ Few or no goals accomplished; no impacts.

Conclusions

1. The KADF investments in projects have had a significant positive impact on agriculture and agribusiness. From 2007 to 2014, the $42.3 million invested has resulted in an estimated $86 million in additional farm income. On average, every $1.00 invested from the KADF in projects resulted in $2.03 of additional farm income.

2. The KADF succeeded in diversifying Kentucky agriculture away from a dependence on tobacco production. The beef, poultry, dairy, swine, grain, produce, sheep, wine and grape industries have all grown and become more important for Kentucky agriculture. The KADF is a successful program that continues to create diversified opportunities for Kentucky farms and farmers.

3. Since the beginning of the KADF, there has been an emphasis on providing assistance to farmers with a history of tobacco production. This was in response to the deregulation of tobacco production and the decreased reliability of tobacco as an income-generating enterprise for a broad section of Kentucky farms. Today, the KADF has succeeded in bringing other enterprises to the forefront. In light of this fact, tobacco production history should not be a significant factor in KADF program requirements.

> **Recommendation**: In order to continue the diversification and expansion of Kentucky agriculture, KADF funding should become available to a wider range of farmers. Additional application points and increased loan amounts based on past tobacco production present an uneven playing field which may hinder growth in non-tobacco enterprises. The scoring system for the KADB Project applications should be revised so that one type of farming (or history of farming) is not favored over another.

4. "Is Kentucky agriculture ready to take things to the next level?" was a question that emerged in more than one expert meeting. There have been strategic planning processes undertaken for Kentucky agriculture by several different organizations; however, the execution of these plans was not evident, primarily because there was not a single entity responsible or funded to implement the identified strategies.

> **Recommendation**: It is recommended that leadership entities for Kentucky agriculture continue to plan for the future by engaging in strategic planning on behalf of all farm and agribusiness enterprises. Adequate resources should be devoted to the coordination of the plan and the execution of prioritized strategies.

5. Kentucky agricultural producers have hit a glass ceiling trying to sell to conventional markets, national distributors and traditional grocery chains. There is a pivotal opportunity now to capitalize on new markets for Kentucky farm products. These new market channels could include large institutions like universities, hospitals, schools, etc. For the KADF to help develop these markets, it must recognize that infrastructure is not the sole answer.

> **Recommendation**: The KADB should consider funding projects that include reasonable salaries for qualified people to build new markets and coordinate opportunities for farmers to reach consumers through innovative market channels.

6. KADB has regularly funded organizations that take a comprehensive approach to developing specific sectors of agriculture. Examples include the Beef Network, the Dairy Development Council, the Horticulture Council and the Sheep and Goat Development Office. Great strides have been made in these

Comprehensive approaches have been effective and have produced broad positive impacts.

KADB investments were estimated to have affected 34,000 farmers.

sectors by offering production and management education, combined with on-farm consultations, practical research, CAIP cost-share programs and targeted marketing opportunities.

Recommendation: Continue to fund coordinated multi-faceted projects that affect targeted sectors of Kentucky agriculture. However, because their outcomes are complex, the KADF should implement more rigorous monitoring and evaluation to better measure the impacts of these organizations' diverse programming.

7. The expert meetings and project interviews indicated a concern that the Kentucky Proud program may have diluted the effectiveness of their brand by not requiring a product be made with a majority of Kentucky-grown ingredients. A rating system that gives a higher score for an all in-state product could provide a boost to consumer confidence in the label and add confidence in the Kentucky Proud label.

Recommendation: A four-star certified rating system should be considered. A product that is born, raised, processed and marketed by a Kentucky company would earn a 4 star while a product made in Kentucky but not with Kentucky ingredients earns 1 star.

8. The Restaurant Rewards Program (RRW) has been a successful stimulus to increase purchases of locally grown foods by restaurants (meat & produce). An estimated $2.9 million dollars of locally produced food has been marketed during the eight year evaluation period. The monetary incentive accomplishes this without the need for coordination beyond the administration of the cost-share program itself.

Recommendation: Continue the RRW program and consider developing other incentive-based programs, such as a grocer's rewards program and a school lunch rewards program.

9. The current project funding approach of the KADB provides very little direction to potential applicants about what types of projects could be funded, the amount of funds available, or any specific areas of interest that the Board would like to see proposals to address. A Request-For-Proposal (RFP) approach would more clearly delineate the opportunities available through the KADF and the application process.

Recommendation: The KADB should consider publicizing the availability of KADF grants with an RFP approach that identifies the types of proposals the KADF would consider, available funding, and any special areas of interest the Board would like to address. Furthermore, the KADB should carefully define which projects are eligible for grants versus loans.

10. In evaluating the project and program records the GOAP has collected, the evaluators noticed that some of the required reports, including annual reports, do not have enough summary information to quantify the impacts of the program. In some cases the GOAP required form does not specifically ask for the information needed or the applicant did not provide the information even when asked.

Recommendation: Provide funded projects with a standardized spreadsheet that clearly identifies the items that need to be summarized and reported on annually. The matrix provided should offer a way to estimate the return on investment for the KADF money. No project final reports should be accepted if they are incomplete.

KADF Programs

In addition to projects, KADF has also funded several state-level and county-level programs. Table 4 summarizes investments made in KADF programs between 2007 and 2014. Data on County Agricultural Investment Programs (CAIP) were derived from aggregated data for each approved award, while data detailing other programs were provided directly from the Governor's Office of Agricultural Policy (GOAP).

CAIP comprised 86% of KADF program funding between 2007 and 2014. The Kentucky Agricultural Relief Effort (KARE) program was the second largest initiative accounting for 9%. Two notes about the KARE program: 1) While KARE was technically a county cost-share program, it was kept separate from CAIP because it was a one-time initiative offered in 2008 to help farmers recover from the previous year's poor weather conditions, and 2) Investments were awarded to the counties themselves and then distributed to producers within the county explaining why the average amount per award is significantly higher than other programs.

Table 4. KADF Program Statistics, 2007-2014.

	Investments	Awards	Average/ Award	Investment Distribution	Rank	Counties
County Agricultural Investment Program (CAIP)	$106,460,981	61,038	$1,744	86.5%	1	108
Kentucky Agricultural Relief Effort (KARE)	$10,918,948	118	$92,533	8.9%	2	118
On-Farm Energy	$3,674,707	361	$10,179	3.0%	3	61
Shared-Use Equipment	$1,389,645	119	$11,678	1.1%	4	50
Deceased Farm Animal Removal (DAR)	$669,353	126	$5,312	0.6%	5	49
Total	**$123,113,634**	**61,762**				

119 shared-use equipment grants were awarded in 50 distinct counties.

The On-Farm Energy program has invested over $3.6 million in Kentucky farm families to provide incentives for making energy-efficiency improvements for existing equipment or facilities. Through 2014, 361 on-farm energy efficiency grants were awarded in 61 distinct counties. Grants were provided directly to farm operations and required a 50/50 match. As energy efficiency investments often require high up front costs that take many years to recover, this program is an effective use of state funds that helps to increase the sustainability of agricultural production on family farms.

The Shared-Use Equipment program has invested over $1.3 million in purchasing eligible equipment that impacts a large number of producers who cannot individually take on full ownership expenses. Through 2014, 119 shared-use equipment grants were awarded in 50 distinct counties. These grants were administered to a local organization and required a 50/50 match. The program is an important resource to introduce new forage production techniques and livestock management practices. Purchasing specialized new equipment is cost prohibitive. Because these funds allow producers to purchase equipment that they would not be able to purchase otherwise, these grants have been highly successful in helping Kentucky farmers. The UK Evaluation Team considered this an excellent use of state funds for agricultural development.

The Deceased Farm Animal Removal (DAR) program has invested over $600,000 in facilitating the coordination of environmentally and economically sound disposal of deceased livestock for Kentucky producers. Through 2014, 126 DAR grants were awarded in 49 distinct counties. These grants were administered to a local government agency, provided up to $7,500 in funding, and strongly encouraged—but did not require—producer contribution and regional coordination. Given that improper disposal of deceased livestock often has negative environmental externalities, this program can help prevent economic damage that reaches beyond an individual farm. Thus, this is an effective program that adds value to Kentucky agriculture and natural resources.

Table 5. CAIP Program Statistics, 2007-2014.

Major Programs	Investments	Awards	Average/ Award	Investment Distribution	Rank	Award Distribution	Rank	Counties
Large Animal	$30,924,804	19,174	$1,613	29.0%	1	31.4%	1	107
Farm Infrastructure	$28,470,356	11,268	$2,527	26.7%	2	18.5%	3	105
Fencing & On-Farm Water	$22,482,220	13,618	$1,651	21.1%	3	22.3%	2	106
Forage & Grain Improvement	$13,601,101	10,023	$1,357	12.8%	4	16.4%	4	106
Minor Programs								
Agricultural Diversification	$5,904,610	3,232	$1,827	5.5%	5	5.3%	5	103
Technology & Leadership Development	$2,870,788	2,091	$1,373	2.7%	6	3.4%	6	94
Small Animal	$1,262,520	1,179	$1,071	1.2%	7	1.9%	7	90
Poultry & Other Fowl	$558,247	247	$2,260	0.5%	8	0.4%	8	51
On-Farm Energy	$267,071	123	$2,171	0.3%	9	0.2%	9	47
Value-Added Marketing	$119,263	83	$1,437	0.1%	10	0.1%	10	47
Total	**$106,460,981**	**61,038**	**$1,744**					**108**

The primary focus of the evaluation of the KADB programs focused on CAIP Investments. Investments from the County Agricultural Investment Program (CAIP) were typically small, averaging $1,744 per award. In total, the Kentucky Agricultural Development Board (KADB) granted over $106 million in CAIP investments across more than 61,000 awards and 24,500 unique farms. Producers were required to invest at least an equal amount, though the average award was matched 179% by the producer. The remainder of this section provides more detail on our analysis of CAIP investments between 2007 and 2014.

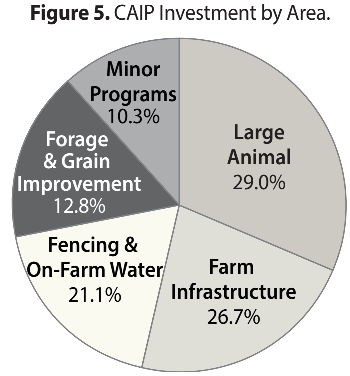
CAIP Methodology and Data

CAIP Data were compiled from program reports completed by producers or farm representatives often assisted by county Cooperative Extension agricultural agents. These reports were submitted electronically to and compiled by the GOAP using Microsoft Excel. While data were only compiled by program area through 2012 due to diverse output measures, data measures and input procedures were made more consistent starting in 2013, allowing all CAIP reports to be compiled in one table. This streamlining of the CAIP reporting system was a recommendation from the previous evaluation and should be continued. Additionally, the UK Evaluation Team coordinated a meeting of eleven experts to discuss CAIP investments offered to farmers.

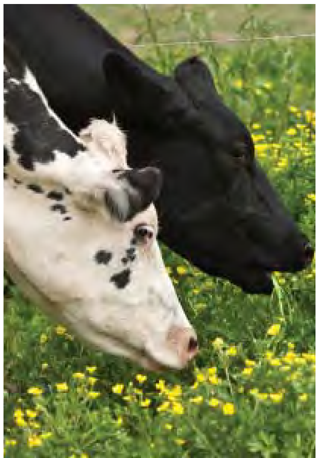
Overview of CAIP Investments

Table 5 presents some general statistics for the CAIP programs between 2007 and 2014. Programs are listed in nominal order based on the total amount of CAIP investments and number of awards disbursed. Table 5 also displays the wide variety of CAIP investments made in this time period. Individual investment areas are categorized as being a major or minor program. The distribution of investments across program areas is summarized in Figure 5.

Figure 5. CAIP Investment by Area.



Starting in 2009, the GOAP asked CAIP participants about their previous participation in the program. Seventy one percent of the participants claimed that they had previously applied for CAIP funding, and 67.6% of participants claimed that had previously received CAIP funding. In response to a subsequent question, 55.4% claimed that they would have made their investment without the CAIP funding. By program area, the average percentage of investment that would have been made without the CAIP funding ranges from 34.9% (Value-Added Marketing) to 67.8% (Agricultural Diversification); all remaining program areas fall between 52.2% and 58.5%. Interestingly, the only year in which less than half of recipients claimed that their investment would have been made without the CAIP funding was 2013, in which only 6.0% of recipients made this claim.



Investments from the County Agricultural Investment Program were typically small, averaging $1,744 per award.

Participants of the CAIP expert meeting agreed that KADF has positively impacted Kentucky agriculture by increasing safety in livestock handling methods, changing Kentucky farmers' perceptions of profitable opportunities, encouraging best management practices, protecting natural resources and diversifying Kentucky agriculture. When asked what could be improved about the CAIP programs, experts concurred that the application process needs to be more transparent and should be more inclusive. Some argued that the CAIP scoring system puts many groups at a disadvantage, including beginning farmers, young farmers, part-time farmers, and non-priority groups (e.g., small animal producers). For CAIP to become more inclusive, county councils must also change their mindset about CAIP money being strictly for tobacco producers and full-time farmers.

Geographic Distribution of CAIP Investments

Figure 6 displays the geographic distribution of total CAIP investments by county. The map indicates that CAIP investments are focused in North Central Kentucky and less so in West Central Kentucky. Several counties in far Western and Eastern Kentucky did not receive any CAIP investment funding. This is due to the KADF legislation that allocated Master Settlement Agreement (MSA) funds for agriculture based on the historic amount of tobacco production in each county.

Of Kentucky's 120 counties, 108 received CAIP funding. Across Kentucky, the average distinct farm received 2.4 awards over the time period. One county awarded each distinct recipient farm an average of 4.2 awards, though only 10% of recipient counties awarded each distinct recipient farm more than 3.0 awards, on average.

CAIP Investments by Program Area

Major CAIP investments comprised almost 90% of all CAIP investments across four program areas: Large Animal (29%); Farm Infrastructure (27%); Fencing & On-Farm Water (21%); and Forage & Grain Improvement (13%).

Large Animal was the largest category of CAIP investment, constituting almost one-third of total CAIP investments. These funds were primarily used to support beef and dairy cattle, including the purchase of bulls, heifers, and cattle genetics. A large number of investments were used for cattle and other livestock facilities. Infrastructure improvements, such as cattle handling facilities and equipment, have made Kentucky farms safer for farmers, employees, veterinarians and residents. Improved on-farm facilities have also made it possible for farmers to implement better animal management practices which, in turn, resulted in a significant improvement in the quality of cattle marketed and increased income from sales. The infrastructure investments also lessened the negative environmental impacts of animal agriculture as well.

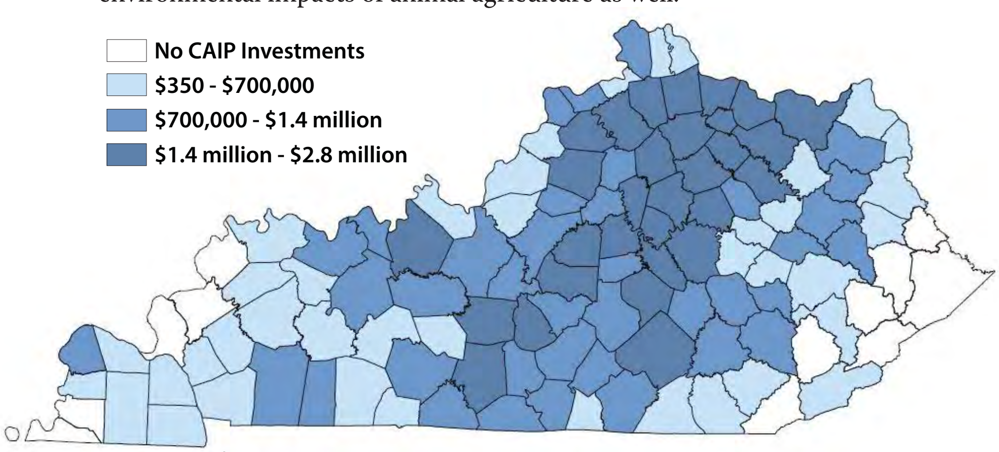


Figure 6. CAIP Investments by County, 2007-2014.

Second, Farm Infrastructure awards constituted over one quarter of CAIP investments. About one half of these awards were used to purchase or enhance hay, straw, or grain storage facilities. Many awards allowed farmers to purchase grain and other commodity handling equipment as well, which are often associated with safety improvements on the farm.

Third, Fencing & On-Farm Water investments comprised over one-fifth of CAIP investments. Over one half of these investments were awarded for fencing or fencing improvement. Another large portion of these investments were devoted to helping secure on-farm water either through a nearby spring, pond, or hookup to the county water supply and adding livestock watering points throughout the farm pasture layout.

Finally, Forage & Grain Improvement was the smallest of the CAIP major programs. Most of these investments were used for forage and pasture development, though investments also helped fund commodity handling and forage equipment, filter fabric pads, and subsurface drainage. It is unknown from award descriptions how many of these projects support sustainable grazing practices, such as rotational grazing. Participants of the CAIP expert meeting agreed that pasture management and rotational grazing are underutilized even as they are one of the strongest factors toward increasing net farm income with livestock production. Forage best management practices can increase farm income and need to be encouraged to improve Kentucky farm profitability. The program guidelines should support the goal of the award and be tailored toward the desired outcome of management and production improvements to increase profitability and sustainability of Kentucky agricultural businesses.

While some investment areas have adopted new names, comparisons can be made between current major programs versus those from the previous evaluation (2001-2006). Large Animal continues to be the most well-funded investment area, though it now combines several previous model programs. Forage Improvement programs have received fewer funds than earlier and Farm Infrastructure and Fencing & On-Farm Water programs have received more.

Minor CAIP investments are those seven program areas that separately made up less than 10% of total KADB investments, and thus include Agricultural Diversification (6%); Technology & Leadership Development (3%); Small Animal (1%); and Value-Added Marketing, Poultry & Other Fowl, and On-Farm Energy (less than 1%). Collectively, these seven program areas comprise approximately 11% of all CAIP investments. Relative to model programs highlighted in the previous evaluation, new investment areas like Technology & Leadership Development, On-Farm Energy and Value-Added Marketing have emerged to reflect an evolving agricultural economy.

Conclusions

1. The KADF investments through the CAIP program and other KADF programs have had a significant positive impact on agriculture and agribusiness in the state. In addition, the KADF investments are successfully diversifying Kentucky agriculture following the tobacco buy-out. The KADF investments also are giving viable options to Kentucky farmers, including former tobacco farmers. In fact, today there is sense that KADF funding is more about supporting agricultural diversification and less about supporting the tobacco growers' loss of income. Interviews and the expert group discussions questioned whether CAIP programs should be targeted to a wider distribution of farm types.

New investment areas Technology and Leadership Development, On-Farm Energy and Value-Added Marketing have emerged to reflect an evolving agricultural economy.

Of Kentucky's 120 counties, 108 received CAIP funding.

Recommendation: GOAP should have a strategic discussion about leveling the playing field for CAIP applicants. If it is determined that CAIP funding is primarily to support agricultural diversification, then points awarded based on past tobacco history should be minimized or discontinued. If agricultural diversification is the goal, then the scoring process should not favor one type of farming over another.

2. There is a widespread agreement that the CAIP application process needs to be more transparent. Uncertainty about the scoring criteria provides a disincentive to those unfamiliar with the program and is discouraging to applicants who apply and do not receive cost-share funds.

Recommendation: The KADF should consider reforming the CAIP application process so that the scoring criteria and selection is more transparent. How applications are scored and who the targeted audience is should be clearly stated. Also, the KADF should consider how the county council's ability to set the maximum funding for specific program areas may create bias against those involved in activities regulated as Minor CAIP investment areas.

3. Of Kentucky's 120 counties, 108 received some CAIP funding. About 10% of recipient counties gave each distinct recipient farm more than 3.0 awards, on average, and one county gave each distinct recipient farm an average of 4.2 awards.

Recommendation: While the exception, this latter statistic suggests it would be prudent to look into repeat awards and whether such selection is luck, the nature of the current application, or—at worst—evidence of favoritism to certain farmers.

4. With the expansion of Kentucky's livestock sectors, CAIP investments to forage, fencing, and on-farm water are highly valued. These investments could yield a greater impact if GOAP encouraged rotational grazing—a forage best management practice with much potential to increase the profitability and sustainability of Kentucky livestock farms—and timely notification of award recipients to align with the planting of fall seeded forage crops.

Recommendation: The KADF should consider how to promote rotational grazing, perhaps by developing a rotational grazing CAIP program linked to fencing and forage cost-share efforts. The KADF could also change application scoring to prefer graduates of the Master Grazer educational program. Finally, GOAP should push counties to meet deadlines that notify successful applicants in enough time for them to plant in the most desirable time frame.

5. There is a perception that Minor CAIP investment areas are more competitive due to a lack of funding. However, applicant data are not currently complied that could compare demand for the Minor CAIP programs versus what is actually being funded.

Recommendation: GOAP should collect and compile data on CAIP applicants' program interests. These data can be used to better track demand for CAIP investment areas. Additionally, GOAP could compare CAIP applicants to the average Kentucky farmer using demographic statistics from the US Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS) to ensure that they are marketing to and awarding their target population.

The Kentucky Agricultural Finance Corporation

There are four primary KAFC loan programs funded by the Kentucky Agricultural Development Fund (KADF): the Agricultural Infrastructure Loan Program (AILP), the Beginning Farmer Loan Program (BFLP), the Agricultural Processing Loan Program (APLP), and the Large/Food Animal Veterinary Loan Program. There are two other lesser awarded loans dedicated to diversity through entrepreneurship (DEAL) and new agricultural enterprises (NAEL). Between January 2007 and June 2015, the KAFC approved a total of 533 projects and committed over $63.5 million in payouts to borrowers.[1] While these funds were derived from a variety of sources, $12.75 million originated from a direct investment by KADB to the KAFC during the evaluation period.

There has been a substantial amount of leveraging for the KAFC loan funds.

Table 6. Kentucky Agricultural Finance Corporation Loan Statistics as of June 2015.

KAFC Program	Loan Amounts	% Value of Portfolio	Project Costs	% Funded by KAFC
Ag Infrastructure Loans	$20,044,482	33%	$61,741,690	32.5%
Beginning Farmer Loans	$28,653,037	47%	$96,546,458	29.7%
Ag Processing Loans	$8,484,582	14%	$38,016,778	22.3%
Vet Loans	$979,253	2%	$2,979,299	32.9%
New Ag Enterprise	$1,750,000	3%	$8,852,906	19.8%
Diversification Entrepreneur Loan	$489,500	1%	$1,358,350	36.0%
Total*	**$60,400,854**	**100%**	**$209,495,481**	**28.8%**

** Excludes Metco loans*

[1]There is an overlap in the evaluation of the KAFC between the 2008 UK Evaluation and this current one. However, more data provide a better opportunity to highlight trends and gaps. These loans account for approximately $7.3 million in AILP loans and $1.7 million in BFLP loans.

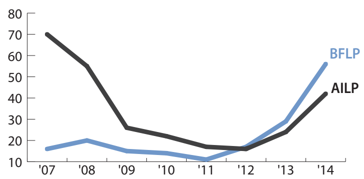


Figure 7. Number of AILP and BFLP Loans by Year.

Table 6 provides a summary of the total value of all KAFC loans closed between January 2007 and May 2015 across the state, and Figure 8 illustrates the allocation of loans over time. Figure 7 suggests that, starting in 2011, the number of loans per year for the BFLP has steadily increased since the 2008 recession. In addition, there was a sharp decline in AILP loans from 2007 to 2012, but the number of loans has also started to increase over the last several years.

Table 7 provides an overview of agricultural sectors supported through the KAFC loans for the two largest loan programs in the portfolio: AILP and BFLP. The large majority of AILP loans were allocated for grain and tobacco farms primarily for the construction of dryers, bins, farm shops and barns. BFLP loans were awarded to beginning farmers aiming to produce poultry, beef and grain. The BFLP loans were used to purchase farmland, procure equipment, and build poultry houses and barns.

Table 7. Loan Purpose for KAFC's Two Largest Programs.

Loan Category	**Number of Loans** *(minimum of 5)*
AILP: *292 loans, 54.7% of total*	
Grain (dryers, bins, farm shops)	87
Tobacco (barns)	84
Poultry (broiler houses, energy efficiency improvements)	45
Dairy (barns, equipment)	25
Beef (barns, farm shops, bins)	17
Forage (bins and barns)	10
Equine (barns, arena)	10
Horticulture (greenhouse, retail market)	5
BFLP: *198 loans, 37.1% of total*	
Poultry (barns, equipment, broiler houses)	51
Beef (farmland, barns, equipment)	47
Grain (farmland, barns, farm shop)	42
Tobacco (farmland, barns)	20
Swine (barns, equipment, land)	14
Dairy (cattle, land)	5

Evaluation Criteria and Approach

To evaluate the effectiveness of the KAFC loan programs, the UK Evaluation Team examined the list of all 533 loans from January 2007 through May 2015. KAFC provided the UK Evaluation Team data that detailed the applicant name, loan amount, location, enterprise type, description, and net worth of every approved loan over the time period. The UK Evaluation Team developed and distributed a questionnaire to all loan recipients. A separate survey was also developed for lenders and distributed through email. In total, the UK Evaluation Team received 16 borrower and 24 lender surveys. While this is a relatively low response rate, there was a great deal of consistency in responses within both samples. Additionally, the UK Evaluation Team conducted interviews with a sample of the largest lenders in the state.

Analysis of Impacts by Loan Program

The estimated impacts of the KAFC loan program were based on the data for all 533 loans, survey responses from a small sample of borrowers and lenders, and site visits and interviews with lenders across Kentucky.

Agricultural Infrastructure Loan Program

The AILP was the most used loan program both in number and value of loans. These loans were primarily used for barns, bins, farm shops, and equipment. Through the survey, the borrowers responded that the primary reason for using the KAFC loan program was to save on interest payments and to leverage additional credit by combining with the KAFC loan. Respondents were asked to identify the proposed impacts of the KAFC investment using a 1 to 4 Likert scale (1 = no effect and 4 = large effect) for the following 10 criteria. Table 8 summarizes these results.

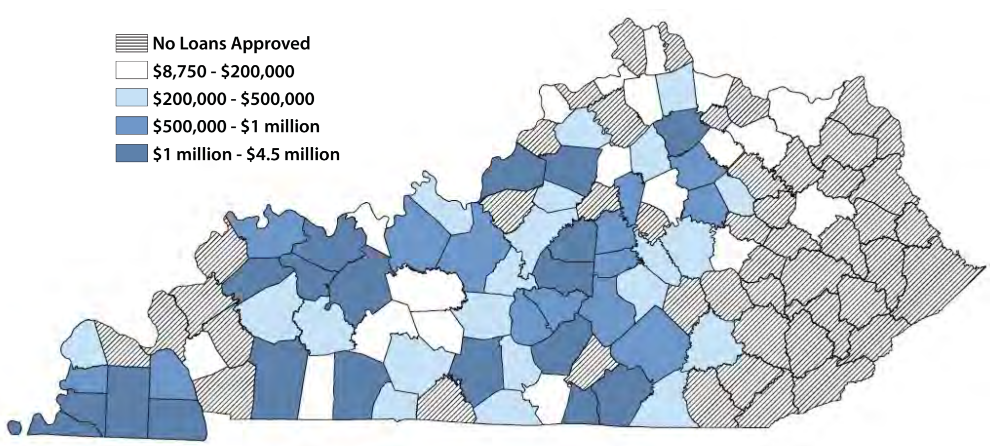


Figure 8. Total KAFC Loans by County, 2007-2015.

Table 8. Survey Responses by KAFC Borrowers.

Impacts of the KAFC Investments	Average Response
Enhanced an existing farm enterprise	3.5
Provided support for agricultural entrepreneurship	3.2
Enhanced the viability of young or beginning farmers	3.2
Enhanced the viability of part-time farmers	3.2
Added value to KY agriculture products	3.0
Increased your farm income	3.0
Expanded an existing market for KY ag products	3.0
Developed a new agriculture related business	2.8
Created a new market for KY agriculture products	2.5
Created new jobs in the local economy	2.5
Developed new products	1.7

When borrowers were asked, "Would this loan have happened without the KAFC program?," 100% of the AILP borrowers said yes. At the same time, all respondents stated that the KAFC loan was still a critical component to financing the project. Most respondents also stated that the loan had a positive impact on the business, but only one respondent described that impact.

Across all 292 AILP loans, the average loan was approximately $68,000. This represented 3% of the net worth of the average borrower. To mitigate outlier bias, the ratio of median AILP loan to median net worth was 4.5%. The average and median net worth of an AILP borrower was $2 million and $1.1 million, respectively. Twenty loans were executed to families where the net worth of the operation was greater than $5 million.

The 2007 evaluation of the KAFC AILP suggested that this loan program could be a duplication of conventionally available farm credit. Feedback from the borrowers and an analysis of all of the loans suggests that this is likely still true.

Beginning Farmer Loan Program

The Beginning Farmer Loan Program (BFLP) assists individuals with farming experience who want to develop, expand, or buy into a farming operation. Applicants are evaluated based on education and farm experience, current involvement in farming and an available support system either through a family member or formal mentor.

The KAFC completed 198 BFLP loans between January 2007 and June 2015. The majority of the loans were used to purchase land, equipment, and barns. The average BFLP loan amount was $144,000 and the average net worth of the borrower was $200,000. There is a net worth cap on this loan at $500,000.

The Beginning Farmer Loan Program provides access to capital that traditional lenders are not able to offer.

Two beginning farmers who received loans completed an extensive survey as well as 14 lenders who have experience working with the BFLP program. Both farmers and 11 of the 14 lenders stated that the loan would NOT have happened without the KAFC backing. There were several factors that explained why KAFC was a pivotal part of the investment including:

- Other banks would not grant the loan due to lack of cash flow by borrower
- Loan was too risky for conventional lenders
- KAFC can waive Farm Service Agency (FSA) guarantee fees
- Many borrowers lacked a down payment, but could borrow a down payment from the KAFC

While there were only two responses to the borrower survey for beginning farmers, both respondents answered the impact questions the same suggesting

The Vet Loan Program is a successful new program that allows large animal veterinarians an opportunity to start a new clinic or buy into an existing one.

that the BFLP is designed to support entrepreneurship in agriculture and increase farm income. Both borrowers also stated that the KAFC loan was crucial for the enhanced viability of young or beginning farmers.

The lenders were all very pleased with the program. They saw the BFLP as an easy process that opens the doors for borrowers that would not have access to capital outside of KAFC. Furthermore, many of the lenders stated that this was a program that enhanced the viability for young, beginning and part-time farmers. Some lenders suggested that the net worth cap of $500,000 is limiting for those whose wealth is locked up in land.

Agricultural Processing Loan Program

The Agricultural Processing Loan Program (APLP) was designed to provide opportunities to companies and individuals in Kentucky interested in adding value to Kentucky-grown agricultural commodities through further processing. Upon further review, it is not entirely clear that the commitment to processing Kentucky-grown commodities is mandatory. There were 12 APLP loans made between January 2007 and May 2015 with only three loans occurring prior to 2011. The APLP loans were used for several meat processing enterprises, cheese making, and processing bundled firewood, among other projects. The APLP financing accounts for only 2.8% of all KAFC loans, but 13.3% of the value of the total KAFC portfolio. The average loan was $707,000, which is significantly higher than the other loan programs.

Only two of the 15 lenders surveyed made an APLP loan. One of the lenders suggested the risk for these projects is high, and they would not have made the loan if not for the KAFC. The other lender stated that the applicant that he worked with could have received a conventional loan but was capitalizing on the lower interest rate. Both lenders stated that projects within this category can significantly impact new products and markets for agriculture.

The one APLP borrower stated that the project was too large to finance without KAFC's investment. As a result, the company has opened a Kentucky Proud market that features its own products in addition to an assortment of other Kentucky made products including ice cream, cheese, canned vegetables, honey, and jams and jellies. This company was able to double their annual sales.

Large/Food Animal Veterinary Loan Program

The Large/Food Animal Veterinary Loan program is designed to assist individuals licensed to practice veterinary medicine in Kentucky who desire to construct, expand, equip or buy into a practice serving large animal producers including goat, sheep, swine, and other smaller food animals. In total there have been 11 vet loans awarded between September 2009 and July 2014. The average loan is approximately $89,000 and the average net worth for those borrowers is $138,000. There is a net worth cap on this loan at $500,000. Borrowers used these funds to primarily buy into a practice or start their own clinic. Other used the funds for equipment and buildings.

The two borrowers who participated in the Vet program provided very favorable feedback. Both respondents said that they could have gotten financing elsewhere but it would have taken longer, been a bit more of a hassle, and would have cost more through higher interest rates. The Scott County Clinic, which had been closed previously, reported 8 jobs as a result of this investment as well as being able to obtain state-of-the-art technology and an essentially full pharmacy. Both respondents also suggested that KAFC needs to improve the marketing of this program.

Conclusions

1. The BFLP is highly regarded and, more often than not, is a critical component to accessing financing that allows recipients to purchase land to develop into or buy a new farm enterprise. Some lenders have suggested that they would like to see the net worth ceiling raised beyond the current $500,000 cap. They say high land valuations and accumulated equity in farm equipment may be excluding some applicants. However, other lenders say they think the guidelines are good, do not need revision and are helping the target audience of young and beginning farmers. An analysis of the BFLP shows that only 17% of the borrowers had a net worth within $100,000 of the net worth ceiling of $500,000.

> **Recommendation**: Maintain the current net worth ceiling of $500,000 for BFLP borrowers. The program is highly regarded by borrows and lenders and a large majority of the beginning and young farmer borrowers have a net worth well under the maximum.

2. The AILP loan appears to be geared towards experienced enterprises with significantly high net worth that are accessing funds at below market rates. Almost all of the AILP loans could have been financed through conventional ag lenders. The current AILP portfolio is very risk-averse.

> **Recommendation**: Staying true to the intent of the KADB, this program should focus more on those loans that could not happen without KAFC involvement while at the same time maintaining a reasonable level of risk. Consider implementing a net worth ceiling on this program and reallocating funds for more entrepreneurial on-farm or value-added activities.

3. KAFC activities are heavily concentrated in Western Kentucky. However, there appears to be a lot of smaller scale farmers and new value-added enterprises emerging in Eastern Kentucky.

> **Recommendation**: Focus outreach efforts and expand KAFC opportunities to other parts of the state. Loan programs might have to be geared more towards new market development. Loans could focus more broadly on livestock, horticulture, and agri-tourism.

4. There were only five Diversification through Entrepreneurship in Agribusiness (DEAL) loans awarded from 2010 to 2015. This program, designed to diversify agriculture, is at the heart of the mission of the KADB. There are coordinated efforts in many parts of the state to nurture new entrepreneurs to improve the regional food system.

> **Recommendation**: Following on the prior recommendation, focus outreach efforts to better market the DEAL program.

5. The Large/Food Animal Veterinary Loan Program emerged from the recommendations of the previous KADB evaluation. This is a relatively small, but successful program and highly valued by those who have used it. The benefits to the farming community from these small businesses will be substantial.

> **Recommendation**: Keep looking for niche areas where the KAFC's lower cost of accessing capital and ability to shoulder additional risk will incentivize entrepreneurs, producers, and businesses to enter the agricultural industry.

Community and Economic Development Initiative of Kentucky

University of Kentucky
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