

PREPARED FOR

Kentucky Office of Agricultural Policy and The Kentucky Agricultural Development Board

BY



KK&P

Founded as Karp Resources in 1990, Karen Karp & Partners (KK&P) is the nation's leading problem-solver for food-related enterprises, programs, and policies. Our personalized approach is designed to meet the unique challenges facing our clients. We apply a combination of analytic, strategic, and tactical approaches to every problem and deliver solutions that can be measured and are always meaningful.

Our Good Food Is Good Business division supports the healthy development, execution, and operations of food businesses and initiatives in the public and private sectors. Our services include strategic sourcing, feasibility analysis, market research, business planning, project management, and evaluation. Our Good People Are Good Business division builds leadership and organizational effectiveness in the food sector through talent and performance management, organizational assessment, capacity building, executive coaching, recruiting, and employee engagement services.

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mass economics

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Mass Economics works with public, private, and philanthropic institutions, and is nationally known for its work on economic cluster strategies, urban land issues, inclusive and equitable growth, and the creation of models that link economic and physical assets, such as innovation districts. We contribute to economic growth and equity in U.S. cities by leading transformative, large-scale economic development projects as well as building customized, local strategies for cities and neighborhoods. Our development strategies create jobs, strengthen innovation and entrepreneurship, rationalize urban land use, and link economic opportunity to the aspirations and needs of local residents. We are experienced in moving development strategies forward from conceptualization through implementation with a focus on locally-led engagement processes and the long-term sustainability of economic development initiatives. We are experienced in working with and alongside community stakeholders and leadership teams to support projects as they are built and scaled.

ACKNOWLEDGEMENTS

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BACKGROUND & PURPOSE

For 25 years, the Kentucky Agricultural Development Fund (KADF) has been instrumental in advancing Kentucky's agricultural economy, successfully diversifying market opportunities for farmers, and significantly reducing the state's economic dependence on tobacco.

This report provides the Kentucky Agricultural Development Board (KADB) with an evaluation of the effectiveness of its investments; analysis of the Fund's impact on the local, state, and regional agriculture and economies; and recommendations to optimize future investments.

The evaluation team blended quantitative analysis (of Fund data as well as publicly available economic and agricultural data, including benchmarking against peer states) with qualitative research methods including interviews, surveys, and site visits. In all, the evaluation weaves together diverse perspectives from hundreds of individuals who engage with the Fund. This evaluation focuses on the seven year period between 2015 and 2022 and marks the third such evaluation conducted over the Fund's 25-year history.

FINDINGS

Farmers across all 120 of Kentucky's counties, from the smallest operations to the largest, see the Fund as a cherished asset in the state's agricultural landscape.

For 25 years, the Fund has consistently adapted, developing new programs and adjusting funding priorities to meet the evolving needs of farms and food businesses.

In all, the Fund has succeeded in decreasing the agricultural economy's dependence on tobacco, diversifying market opportunities, and advancing KY agriculture.

The following sections detail how the Fund has reached agriculture ventures across its 3 primary elements: KADB County Programs, the Kentucky Agricultural Finance Corporation (KAFC) Loan Program, and KADB Projects.

KADF COUNTY PROGRAMS

The KADF distributed a total of \$129.4 million in County Program grants, with the vast majority (95%) allocated through the County Agricultural Incentives Program (CAIP). This amounted to \$122.4 million across 56,900 individual CAIP grants, reaching 115 out of Kentucky's 120 counties. The primary investment areas for CAIP grants were Animal, Large (31.7%), Fencing and On-Farm Water (25.1%), Forage and Grain Improvement (16.5%), and Farm Infrastructure (16.2%).

KAFC LOANS

The KAFC provided a total of \$140.1 million across 753 loans to 704 unique borrowers. These loans were facilitated by 56 unique lenders and distributed among recipients in 85 counties. The majority of loans were distributed through the Beginning Farmer Loan Program (\$110 million) and the second most through the Agricultural Infrastructure Loan Program (\$17 million). Geographically, producers in Central and Western Kentucky received the majority of loan funds, accounting for 52% and 43% respectively, while Eastern Kentucky received the remaining 5%. The majority of KAFC loans, totaling \$110.7 million, supported poultry (40%), beef (23%), and grain (16%) enterprise types.

KADF PROJECTS

The Fund disbursed a total of **\$120.9 million across 390 Project grants**, with entities in **91 counties** receiving at least one award. The University of Kentucky received the largest share of funding of any individual grantee over the 7-year period, totaling \$21.8 million across 12 unique project grants.

One strategy the Fund has taken is to **invest in industry associations**, to reach producer members and constituents. Through that approach, **3 pillar industry associations received over \$20 million across 13 grants** providing critical technical assistance, research, and producer education, among other supports.

Another strategy has been to **invest in intermediary organizations that provide small grants and loans** to farmers across the state. That strategy **extends the Fund's reach** to smaller scale farms across the state and to Eastern Kentucky producers. **Two intermediary organizations received over \$5 million** to that end.

According to KOAP data, KADF **projects impacted 102,352 farmers** over the 7-year period.

IMPACT HIGHLIGHTS

FROM 2015 TO 2022, THE KENTUCKY AGRICULTURAL DEVELOPMENT FUND...

Invested over \$390 million

into Kentucky producers, related businesses, and industry support organizations through grants and loans.

It supported nearly

160,000 producers in all 120 Kentucky counties,

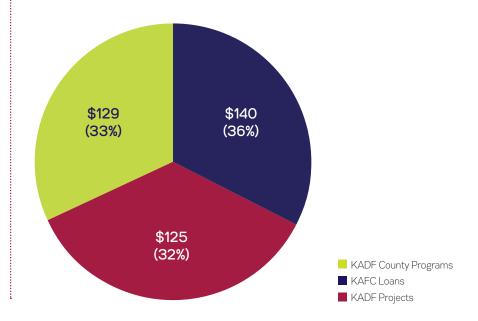
and leveraged more than

\$237 millionin producer contributions.

Investments were deployed in three key ways:

- Project grants
- County programs
- Low-interest loans through the Kentucky Agricultural Finance Corporation (KAFC)

KENTUCKY INVESTMENTS AWARDED 2015-2022





INVESTMENT IMPACTS WERE WIDE-RANGING, INCLUDING...

Project recipients in aggregate provided direct on-farm technical assistance to over 400 producers annually.

The Kentucky Center for Agriculture and Rural Development's efforts

supported

\$2.6 *million*

of annual economic impact

related to job growth.

Meat processing capacity in Kentucky expanded by

222% from 2020 to 2022,

increasing the state's monthly harvest capacity by over 4,500 head of beef.

Kentucky State University's Small Farm Grant Program had an estimated

net economic impact of nearly

\$4 million annually.

The Kentucky Department of Agriculture's Kentucky Proud program supported the **purchase of over**

\$1.8 million

in Kentucky grown products in 2021 alone.

RECOMMENDATIONS

The following recommendations—taken individually or together—aim to build upon the Fund's history and success, amplify its impact, extend its reach into every corner of the state's agriculture, broadcast its achievements, and strategically position it to identify and respond to agriculture and food system opportunities and needs with targeted investments.



Clarify and promote the Fund as a diverse portfolio of funding supports for farmers at various stages of business growth and development

The Fund supports a broad spectrum of producers and markets across the state's agricultural landscape. However, the complexity of KADF's components and communication efforts often make it challenging for prospective applicants and other stakeholders to understand how the Fund holistically supports their individual businesses or organizations and the state's economy, highlighting an opportunity for increased clarity and transparency through its website.



Secure and build the Fund's long-term sustainability

Given the anticipated reduction in settlement funds over time, strategic planning for the KADF's long-term financial sustainability and building the public's understanding of its economic development benefits is crucial to preserve its ability to adapt and continue supporting advancement within the agricultural sector.



Expand funding to intermediary providers of small grants, microloans, and complementary technical assistance

Intermediary agricultural support organizations expand KADF's reach and impact by leveraging existing community relationships and decentralizing administration, yet many of these organizations are unable to meet the demand for capital and technical assistance. Providing additional support to such organizations can further expand the Fund's impact.





Streamline county programs and revise oversight, eligibility requirements, and investment areas

County programs deliver crucial funding to support on-farm investments and shared equipment for thousands of individual producers across Kentucky, leveraging local administration to extend the Fund's reach statewide. Despite this success, concerns persist regarding program complexity, accessibility where administration is aligned with a single agricultural subsector, and whether the programs sufficiently drive agricultural advancement and innovation.



Equip the Board to assess and seize emerging investment opportunities

The Board would benefit from a clear, transparent process for assessing Project proposals to maximize investment impact. Such a process will simultaneously ensure the Fund continues to address widespread needs and seize transformative investment opportunities, while also leveraging the diverse perspectives of all Board members.



Reduce grantees' financial dependence on KADF, particularly those that receive large amounts of repeat funding

The Board's consistent funding for agricultural support organizations has cultivated an exceptional support ecosystem for Kentucky's farmers and ranchers. However, this approach has led to some organizations becoming significantly financially dependent on KADF, highlighting the need to limit large-scale repeat investments and incentivize grantee funding diversification to ensure the Board can continue supporting high-impact projects as KADF funds are expected to decline over time.



Overhaul grantee reporting requirements and internal data management systems

The Board's ability to comprehensively understand its investment impact is currently limited by inconsistencies in the impact data collected across the Fund's diverse funding areas. Standardizing data collection across all components, ideally aligning with USDA data categorization when possible, would enhance the Board's capacity to understand the Fund's overall impact, articulate its value, and inform future investment strategies.





BACKGROUND AND PURPOSE

In 2024, the Kentucky Office of Agricultural Policy and the Kentucky Agricultural Development Board (KADB) retained food systems consultancy KK&P to conduct an evaluation of KADB investments through the Kentucky Agricultural Development Fund (KADF) between 2015 and 2022. This evaluation report aims to provide the KADB with a comprehensive evaluation of the effectiveness of its investments; an analysis of their impact on the local, state and regional food system; and recommendations to optimize future investments. This evaluation is the third evaluation to have been conducted over the 25 years since the Kentucky Agricultural Development Fund was founded. The first two evaluations were conducted by the University of Kentucky which evaluated the Board's investments between 2001 to 2007, and 2007 to 2014, respectively.



METHODOLOGY

The KK&P team used a mix of qualitative and quantitative research methods in this evaluation, which are introduced below and described in more detail in each substantive section of the report.



INITIAL INTERVIEWS

KK&P began this evaluation by conducting 15 initial interviews with current and past KOAP staff, KADB and KAFC board members, and other stakeholders in the Kentucky agricultural community. These conversations focused on developing the evaluation team's understanding of the roles of various entities within the KADF investment ecosystem and understanding the Fund's objectives, impact, and opportunities for growth. In addition, KK&P reviewed the two prior evaluations of the Fund, KOAP Annual Reports, KADB Guidelines and Policies, and other background documents and relevant reports.

SURVEYS

KK&P distributed a series of four targeted surveys to Kentucky Agricultural Development Fund (KADF) recipients and key stakeholders to assess the Fund's impact and identify areas for improvement. These surveys were designed to help the evaluation team understand the perspectives, experiences, and priorities of Administrators of the County Agricultural Incentives Program (CAIP), KAFC lenders, recipients of funds for statewide programs, and KAFC borrowers, who engaged with the Fund between 2015 and 2022. Each stakeholder group received a customized survey tailored to their specific engagement with the Fund. Surveys were distributed online by KOAP staff and remained open for 3 to 5 weeks during October and November 2024.

INTERVIEWS & SITE VISITS

KK&P conducted 25 interviews and 7 site visits during the evaluation. The interviews focused on Project funds recipients and ranged from individual farm businesses to nonprofit organizations that act as intermediaries, providing pass through funding or technical assistance to a range of producers. The aim of the interviews was to gain a deeper understanding of the impact of the funds on the organizations and businesses, and on Kentucky agriculture as a whole. The list of interviewees was determined in collaboration with KOAP staff.

Site visits, too, were selected in collaboration with KOAP staff and were conducted in January 2025. The purpose of the site visits was to provide a more detailed understanding of the impact that select investments have had on advancing the goals of the Fund, and to gain a qualitative perspective on the impact of the KADB's investments to complement the quantitative data.

DATA ANALYSIS

KK&P, with project partner Mass Economics, conducted an analysis and mapping of the Fund's investments to identify longitudinal trends across the evaluation period. The analysis focused on KADF Projects and Programs, and KAFC loans. Data was provided by KOAP staff and analyzed by Mass Economics to develop a robust understanding of the impact of KADB investments during the evaluation period, including how funds have historically been distributed geographically, categories of investment types, scale of investment, types of recipients, and more.

In addition, Mass Economics utilized publicly available data from the USDA Census of Agriculture and the Bureau of Labor Statistics to situate the Fund in the broader context of agriculture, to identify high-level economic trends, and to conduct a peer state analysis.

In the following sections, key findings from across these methodological approaches are shared, organized by the sector of the Fund: KADF Programs (including county and state level programs), KADF Projects, and KAFC Loan Programs. Each section concludes with a summary of findings and the evaluation team's interpretation of what those findings mean for the Fund's strategic direction in the future.

EVOLUTION OF THE FUND

In 1998, the Kentucky Attorney General, along with the Attorneys General of 46 other states, five U.S. territories, and the District of Columbia, reached a settlement agreement with the four largest American tobacco companies for an amount of \$206 billion to compensate the states for smoking-related health care costs incurred through programs like Medicaid. Funds have been disbursed to the states in a combination of up front payments and ongoing annual payments calculated based on annual cigarette sales amounts and inflation rates. This agreement, known as the Tobacco Master Settlement Agreement (MSA), stipulated that funds were discretionary, allowing each recipient state to determine how to spend its allotment. The following graphic from the KOAP 2022 Annual Report provides an illustrative summary.

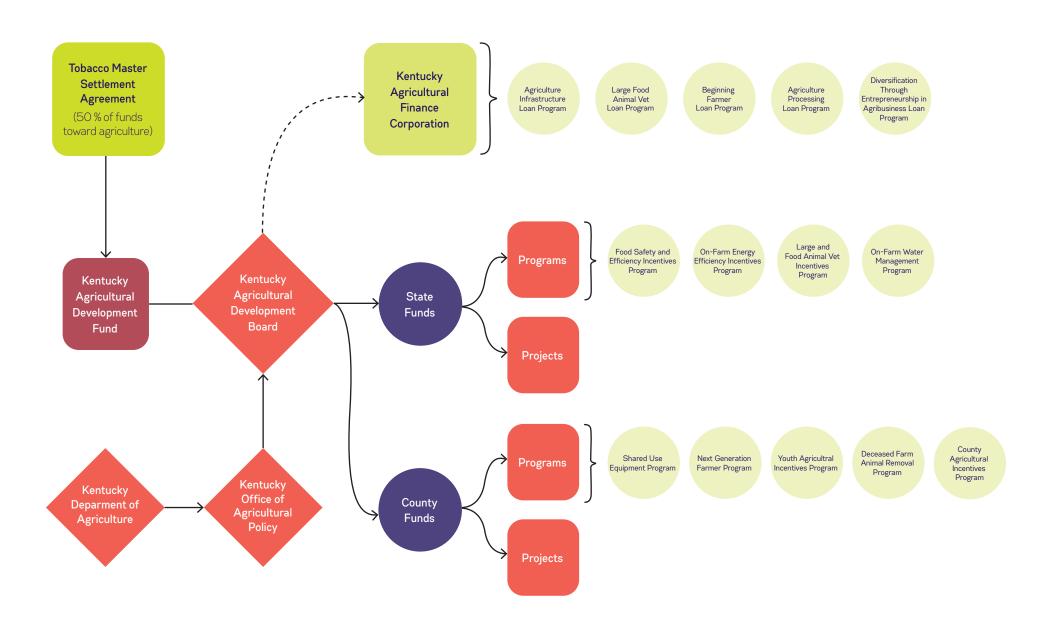


In 2000, the Kentucky General Assembly passed House Bill 611 establishing the Kentucky Agricultural Development Board in statute (KRS 248.701-727), to support the industry's transition away from tobacco production. House Bill 611 requires that KADF funds are allocated to two funding purposes: county level and statewide initiatives. Of the KADF funds, 35% are allocated to individual counties. A greater portion of funds go to counties with economies that were highly dependent on tobacco agriculture at the time of the Master Settlement Agreement, to ensure counties most impacted by the transition away from tobacco production would receive the most financial support to diversify away from tobacco. As a result, 118 out of Kentucky's 120 counties received a portion of the 35% allocation to the counties. The General Assembly established County Agricultural Development Councils in each county to provide local oversight and to identify the programs best suited to support agricultural development in their respective counties. Each county Council is comprised of 9 members who are tasked with helping producers access and obtain funding from the KADF. The remaining 65% of the Fund is allocated to statewide agricultural development projects and programs. The KADB is tasked with distributing both county and state funds with the goal to diversify Kentucky's agricultural economy, create new markets, and increase net farm income.

Over its 25 year lifespan, the Fund has responded to the shifting needs of farmers and agribusiness owners by developing and refining county and state programs. For example, in 2002, the KADB selected the Kentucky Agricultural Finance Corporation (KAFC) to provide below market-rate-interest loans to support beginning farmers, agricultural diversification, and infrastructure projects. In 2003, KAFC was awarded \$20 million from the KADB to establish a loan fund, and has received additional funding in subsequent years upon request from and approval of the KADB. And in 2007, the County Agricultural Investment Program emerged (now called County Agricultural Incentives Program), to provide farmers with access to smaller pots of funding to expand and improve their operations in specific ways.

In addition to the ways the funding offerings have evolved, since their inception, KADB and KADF have experienced some changes in their management. In 2010, the Kentucky General Assembly amended the composition of the County Councils from 8 to 9 members, and limited service to two consecutive two-year terms, but council members could be re-appointed after being off the council for one term. In 2021, Kentucky's General Assembly passed House Bill 3, which moved the administration of KADF from the Governor's Office to the Kentucky Department of Agriculture and renamed it the Kentucky Office of Agricultural Policy. KADB has also had to grapple with the declining funds. The amount of funding allocated to states from the MSA is based on tobacco sales and as tobacco consumption habits decline, so does the funding states receive from the MSA. The 2022 KOAP Annual report shows the payment to KADF of \$52,176,075, while the most recent allocation in 2024 was \$46,750,876.

KADB has succeeded in diversifying market opportunities and decreasing the agricultural economy's dependence on tobacco, positioning the organization to identify and pursue complementary investment objectives for the Fund.

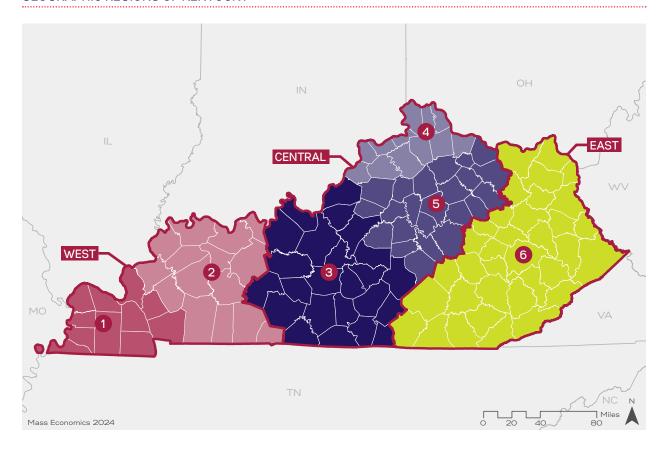


KENTUCKY AGRICULTURE

This section of the report introduces the character and landscape of Kentucky agriculture, providing context for the KADF's efforts and investments.

Kentucky's agricultural landscape is defined by distinct regional variations that reflect the state's topographical and historical diversity. From the flatlands of western part of the state to the rolling hills of central Kentucky and the rugged Appalachian terrain in the east, the nature and scale of farming differ significantly across the state.

GEOGRAPHIC REGIONS OF KENTUCKY



As visualized in the map above, the state is divided into six USDA Agricultural Districts (represented in different colors), each with unique patterns of land use and agricultural output. These districts are categorized into three broader regional groupings: West, Central, and East, demarcated by red boundary lines, reflecting relevant economic and ecological zones that shape farm operations.

This framework aims to capture the diversity of Kentucky agriculture and patterns that emerge across the West, Central, and East.

- The West (comprising Districts 1 and 2) is characterized by larger farms and a greater share of the state's farmed acreage relative to its number of farms, contributing 31% of Kentucky's total farmed land with an average farm size of 283 acres.
- Central (comprising Districts 3, 4, and 5) contains the majority of the state's farms (64%) by count, but features smaller average farm sizes, accounting for 55% of the state's total farmed acreage.
- The East (represented by District 6) region is characterized by more mountainous terrain and relatively limited arable land, resulting in fewer farms and the lowest share of farmed acres (among the three regions). Still, the Eastern region is home to 16% of the state's farms, representing 13% of the state's total farmed acreage.

The table below outlines the geographic distribution of farms and farmed acreage in Kentucky.

FARMS AND FARMED ACREAGE

Geography	Farms, 2022	Farms/Sq. Mi., 2022	% KY Farms, 2022	Farmed Acres (M), 2022	Farmed Acres % of Total, 2022	% KY Farmed Acres, 2022	Avg. Farm Acres, 2022
U.S.	1,900,500	0.5	N/A	880.1	39%	N/A	463
KY	69,400	1.8	N/A	12.4	49%	N/A	179
West	13,800	1.4	20%	3.9	64%	31%	283
Central	44,700	2.6	64%	6.9	62%	55%	153
East	10,900	0.9	16%	1.7	21%	13%	153

Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

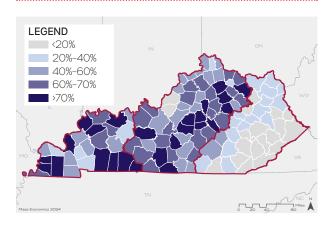
Kentucky has more than three times as many farms per square mile than the national average (1.8 versus 0.5), and the average farm in Kentucky is much smaller than the national average (179 acres compared to the national average of 463 acres). The difference is more stark at the regional level, with farms in the Central and Eastern regions averaging 153 acres each.

The maps and graph below further describe farm size and actively farmed land by county. Notably, the Western region is home to counties with the largest farms on average, while counties in the Central and Eastern regions typically have smaller average farm sizes, with most counties' average farm size falling below 181 acres. In many Western KY counties, over 70% of the total land base is in farming, reflecting large farm sizes, extensive cropland, and a notable agriculture industry concentration. The Central region's counties generally see 40–70% of land farmed, while the Eastern region's rugged terrain translates to lower levels of farmed acreage per county.

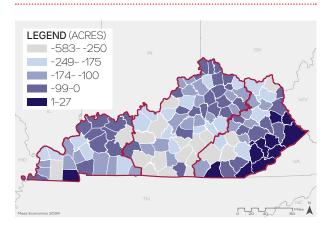
AVERAGE FARM SIZE (ACRES), 2022

LEGEND (ACRES) 50-127 127-155 155-181 181-256 256-1,170

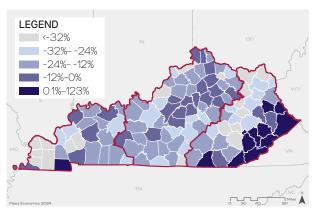
PERCENT FARMED ACREAGE, 2022



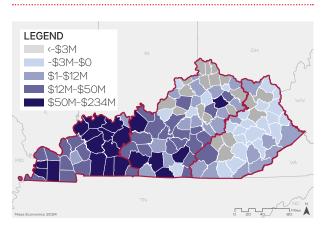
CHANGE IN NUMBER OF FARMS, 2002-2022



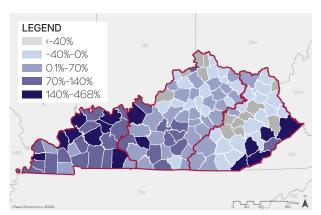
PERCENT CHANGE IN NUMBER OF FARMS, '02-'22



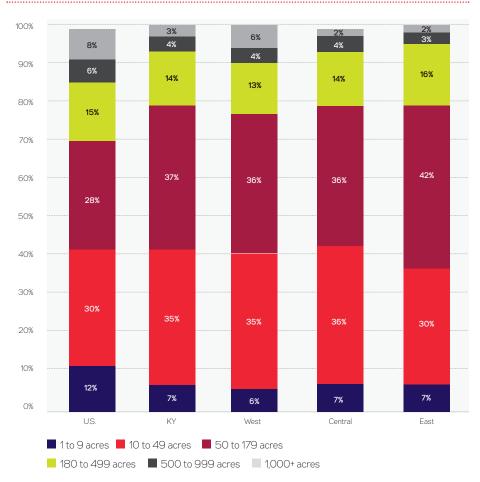
TOTAL SALES CHANGE, 2002-2022



TOTAL SALES PERCENT CHANGE, 2002-2022



FARMS BY FARM SIZE, 2022



Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

In the past 20 years, counties all over Kentucky have experienced significant changes in the number of farms. The maps on page 23 detail the change in the number of farms between 2002 and 2022 across the state. Some counties (largely in the Eastern part of the state) saw growth in farm numbers—between 2022 and 2017, Bell, Magoffin, Floyd and Letcher counties each increased their farm numbers by between 56 and 79%. Yet statewide, the overwhelming trend has been a steep decline, with many counties having lost more than a quarter of their farms. Counties in the West saw some of the largest absolute losses in farm numbers, with several losing more than 500 farms.

From 2002 to 2022, commodity sales trends, analyzed by both total sales and as a percentage of sales, reveal a general pattern consistent with farm industry consolidation in the western and south-central parts of the state. These areas experienced both growth in commodity sales and a decrease in the number of farms. In contrast, Kentucky's easternmost counties are simultaneously seeing an increase in number of farms and in commodity sales over the same period.

COMMODITY SALES PROFILE, 2022

Commodity	US	KY	KYLQ
Poultry (+Eggs)	14.1%	22.3%	1.6
Corn	16.3%	18.2%	1.1
Soybeans	10.2%	17.2%	1.7
Cattle	16.5%	13.5%	8.0
Equine	0.4%	9.2%	22.2
Other Field Crops	3.7%	3.5%	0.9
Wheat	2.6%	3.3%	1.2
Milk	9.7%	2.9%	0.3
Tobacco	0.2%	2.8%	15.5
Hogs	6.7%	2.6%	0.4
Specialty Animals	0.3%	1.9%	6.1
Horticulture	3.9%	1.3%	0.3
Vegetables	5.2%	0.7%	O.1
Fruits +Tree Nuts	5.1%	0.2%	0.0
Sheep + Goats	0.2%	0.2%	8.0
Berries	1.2%	0.1%	O.1
Other Grains	0.9%	0.1%	O.1
Aquaculture	0.4%	<0.1%	O.1
Barley	0.2%	<0.1%	O.1
Sorghum	0.3%	<0.1%	O.1
Cut Christmas Trees	0.1%	<0.1%	O.1
Rice	0.6%	0.0%	0.0
Cotton, Lint + Seed	1.2%	0.0%	0.0
Short Term Woody Crops	0.0%	0.0%	0.0
Total Sales (\$B)	\$543.1	\$8.0	NA

Notes: LQs > 1 shaded in light green; LQs > 2 shaded in dark green;

Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

Commodity sales data for 2022 show that Kentucky's agricultural profile is characterized by strong sales in poultry, corn, soybeans, and cattle. Kentucky also has a high location quotient (LQ) for equine (22.2) and tobacco (15.5) sectors, indicating these commodities are particularly important to the state's agricultural economy.¹

¹ A location quotient measures how much more (or less) common a commodity or activity is in Kentucky compared to the national average. If the LQ is above 1, it means Kentucky has a higher concentration of that commodity or activity than the rest of the country.

COMMODITY SALES LOCATION QUOTIENTS BY REGION, 2022

Geo	Equine	Tobacco	Specialty Animals	Soybeans	Poultry (+ Eggs)	Wheat	Corn	Other Field Crops	Cattle	Sheep + Goats	Hogs	Horticulture
KY	22.2	15.5	6.1	1.7	1.6	1.2	1.1	0.9	0.8	8.0	0.4	0.3
West	0.5	15.0	0.1	2.2	2.4	2.0	1.5	0.2	0.2	0.2	0.7	0.1
Central	48.2	17.0	13.3	1.2	0.6	0.5	0.8	1.6	1.4	1.3	0.1	0.5
East	3.0	3.0	1.1	1.2	1.4	0.4	0.6	3.1	1.9	3.3	0.1	0.6

Geo	Milk	Vegetables	Aquaculture	Berries	Barley	Other Grains	Cut Christmas Trees	Fruits + Tree Nuts	Sorghum	Rice	Cotton, Lint + Seed	Short Term Woody Crops
KY	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
West	0.1	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Central	0.5	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
East	0.2	0.9	0.1	0.5	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0

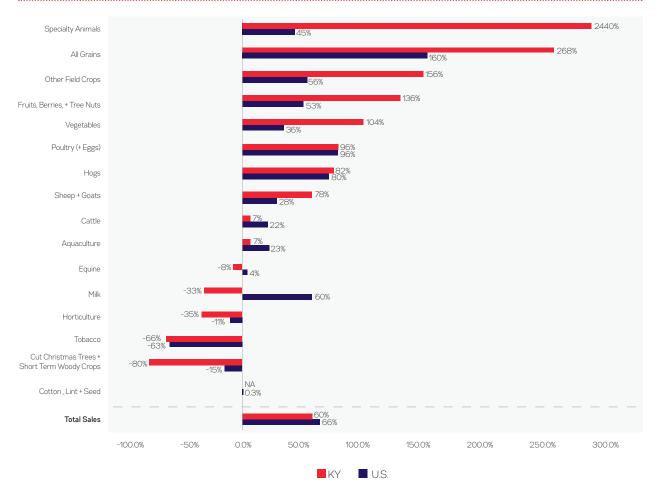
Notes: LQs > 1 shaded in light green; LQs > 2 shaded in dark green;

Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

All regions of the state show a strong specialization in tobacco production, with high LQs across all three regions (10.5 in the Central region, 8.7 in the East, and 7.9 in the West). Regional patterns show that the Central region also has significant sales in equine (48.2 LQ) and specialty animals (13.3 LQ). The Eastern region's sales are similarly concentrated in equine (3.0 LQ), but also in sheep and goats (3.3 LQ) and other field crops (3.1 LQ). In the West, there is a focus on poultry (2.4 LQ) and row crop production, particularly soybeans (2.2 LQ), supported by the region's relatively flat farmland.

Kentucky's total commodity sales increased by 60%, a growth rate that is 6% slower than the national average from 2002 to 2022. Over the same two decades, sales in the Specialty Animals category (a category that includes a wide mix of animals, including equine) grew at a rapid pace (2440%) far exceeding growth at the national average (45%). Other significant growth commodities—Grains (268%), Field Crops (156%), Fruits, Berries, and Tree Nuts (136%), and Vegetables (104%)—each substantially outpaced the national growth rates for their respective categories.

COMMODITY SALES CHANGE 2002-2022 (2022 \$)

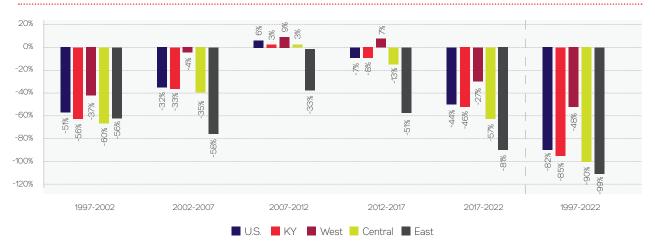


Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

As indicated by the strong location quotient, tobacco production remains a notable part of Kentucky's agricultural output, despite significant declines over the past 25 years. In 1997, total tobacco sales in Kentucky were \$1.5 billion (adjusted to 2022 dollars). By 2022, sales had fallen to \$225 million. The Central region saw the most pronounced decreases, while the East, although decreasing, continues to hold relatively stable tobacco production.

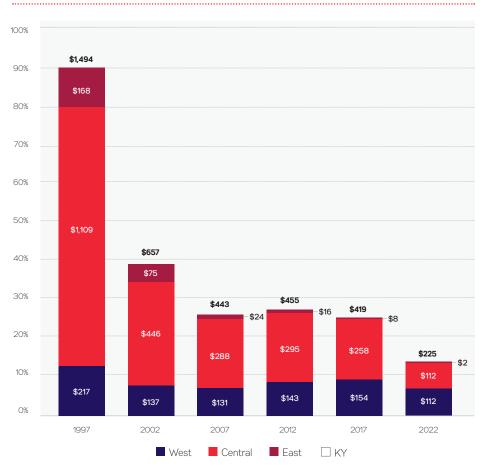
In addition to crop and commodity breakdown, the character of Kentucky farm marketing has experienced notable changes in recent decades and in the 7 year focus of this evaluation. In 2017, fewer than 6% of Kentucky farms sold their products locally (below the national average of 8%). From 2015 to 2020, Kentucky farms marketing local food grew by 27% (from 3,227 to 4,110), while across the nation local farm product marketing grew by just 3%. In that same time period, the number of farms selling value-added foods increased by 67% in Kentucky. Meat processing capacity alone in Kentucky grew 222% from 2020–2022, with capacity added for an additional 4,529 head of beef month.

TOBACCO SALES CHANGE (2022 \$)



Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

COMMODITY SALES CHANGE, TOBACCO

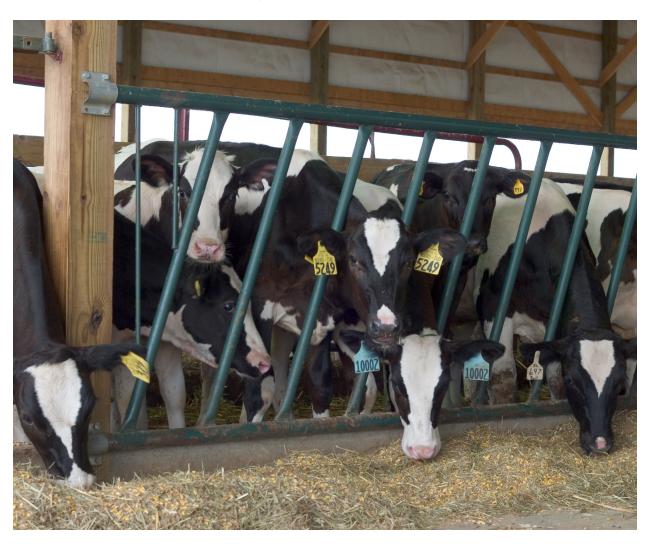


Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

Within the subset of farms that market locally, the number of farms in the 11–20 year age range doubled from 2015 to 2020, a sign that relatively new farm businesses are maturing and stabilizing.²

In 2024, over 300 farm leaders and stakeholders helped to shape the Strategic Roadmap for Kentucky Agriculture: 2025–2030. Their collaborative efforts produced nine central themes and 38 specific tactics aimed at advancing the state's agricultural future. The strategies aim to protect farmland, support generational farm transitions, and ensure agriculture remains a vital part of Kentucky's economy. There is an emphasis placed on building a skilled workforce, fostering innovation and diversification, improving supply chain efficiency, and increasing value-added opportunities. The roadmap also encourages deeper collaboration within the agricultural community and stronger public understanding of the role agriculture plays in food, health, and economic systems.

² Kentucky Center for Agriculture and Rural Development. "Kentucky Local Food System - An Inventory. 2023". December 5, 2022.





INTRODUCTION

During the 2015-2022 evaluation period, KADF funded both county-level programs (programs administered at the county level with impact in that specific county) and state-level programs (programs administered by KADB with impact in multiple counties). KADF Programs are distinct from Projects—which are analyzed in the next section of this report—in that they are designed to specifically address a challenge or serve a specific group, whereas the Projects are much more diverse and expansive in their nature.

The county-level programs included: Deceased Farm Animal Removal (DAR), Next Generation Beginning Farmer (NextGen), Shared-Use Equipment Program (SUEP), Youth Agricultural Incentives Program (YAIP), and the County Agricultural Incentives Program (CAIP). During the 7 years being evaluated, county-level program investments totaled \$129.4M.

Two state level programs were funded between 2015 and 2022: the On-Farm Energy Efficiency Incentives Program and On-Farm Water Management. These state-level program investments totaled \$3.7M.

This section of the evaluation report focuses primarily on the county-level programs as those are substantially larger than the state Programs, and the report focuses in greatest depth on CAIP, given its outsized role in KADF Program investments at the county level.

METHODOLOGY

In order to analyze the impact and efficacy of KADF county-level Program investments between 2015–2022, KK&P analyzed investment data, fielded a survey, and conducted in depth interviews. KK&P first examined county-by-county investment data (shared by KOAP) for DAR, NextGen, SUEP, YAIP and CAIP. The team then disseminated a survey to CAIP Administrators who served between 2015 and 2022, to understand their perspective on CAIP program challenges and opportunities. The survey was distributed online to KOAP staff and remained open for approximately 5 weeks during October and November 2024. Finally, interviews were conducted with current and past KOAP staff, KADB board members, CAIP administrators, and CAIP recipients.

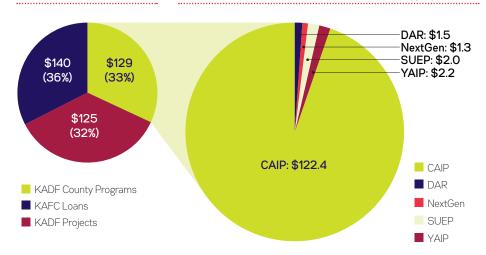


FINDINGS

ANALYSIS OF INVESTMENTS

KENTUCKY INVESTMENTS AWARDED 2015-2022

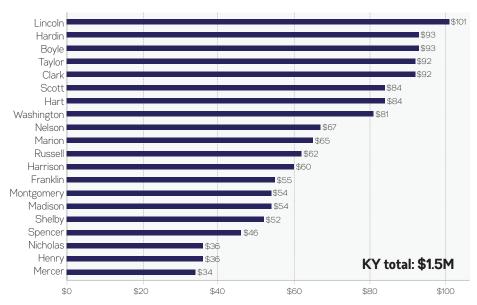
BREAKDOWN OF COUNTY PROGRAMS (\$M)



DECEASED FARM ANIMAL REMOVAL (DAR)

The DAR program supports the environmentally sound and cost effective disposal of deceased animals for livestock producers. Across the seven year evaluation period, \$1.5M (1.2% of county-level funds) were invested into DAR which supported the removal of 123,800 deceased animals from Kentucky farms. The dollar amount of grants awarded for DAR between 2015 and 2022 more than doubled compared to the prior evaluation period, which was \$669,353. DAR grants were awarded in 35 counties across Kentucky.

DAR: 2015-2022 (AWARD AMOUNT, TOP 20 COUNTIES, \$K)



Note: All dollar values reported in constant 2022 \$; Source: KY DAR Program Data, 2015-2022; Mass Economics analysis

NEXT GENERATION BEGINNING FARMER (NEXTGEN)

The NextGen program was created in 2017 to address the growing need for a specialized program to benefit producers between the ages 18 to 40 who have been engaged in an agricultural operation for a minimum of three years. From 2015 to 2022, \$1.3 million (1% of county-level funds) were invested in the NextGen program across 557 grants. NextGen grants leveraged \$2.4 million of producer contributions, with an average cost share award of \$2,392 and average farmer contribution of \$4,309.

NEXTGEN AWARD BREAKDOWN: 2015-2022

Geography	Count	Total Producer Contributions	Total Cost-share Awarded	Total Project Costs
Fleming	29%	6%	15%	10%
Washington	19%	27%	24%	26%
Henry	15%	23%	22%	23%
Nelson	12%	12%	7%	10%
Bracken	7%	9%	9%	9%
Hardin	6%	11%	8%	10%
Scott	5%	5%	5%	5%
Woodford	4%	5%	6%	5%
Anderson	2%	2%	2%	2%
Clark	1%	1%	1%	1%
KY	577	\$2.4M	\$1.3M	\$3.8M

Note: All dollar values reported in constant 2022 \$ Source: KY NextGen Program Data, 2015-2022; Mass Economics analysis

The NextGen program offers the same 11 investment areas as CAIP, from Fencing & On-Farm Water to Value-Added and Marketing to AgTech and Leadership Development and beyond (a full list is included in the CAIP section below). The vast majority of grants were directed to four investment areas:

- Large Animal (28.2%) which allows beginner farmers to purchase bulls or heifers for example
- Fencing & On-Farm Water (26.0%) which is often used to cover the cost of fencing materials and installation
- Farm Infrastructure (19.0%) which covers hay storage and barn repair among other things, and
- Forage & Grain Improvement (13.3%) covering the cost of seeds, wheat, augers, and more.

The number and amount of NextGen awards more than doubled between 2015 and 2022. NextGen grants were awarded in only 10 counties, a majority of which are in central Kentucky.

SHARED-USE EQUIPMENT PROGRAM (SUEP)

The SUEP was designed to enable farmers to access equipment that would otherwise be cost-prohibitive. Community organizations, such as a county Farm Bureau or a county Conservation District, apply for funds to cover the cost of cattle handling equipment such as corral panels and crowding tubs or horticulture equipment such as flail mowers and specialized harvesting equipment, for example. KADF county funds contribute up to 75% of the cost of a piece of equipment, and the organization contributes the remaining 25%. Farmers in the county are then able to lease the equipment from the organization. From 2015 to 2022, \$2M (1.5% of county-level funds) were invested in SUEP across 132 grants with an average grant size of \$16,000. The majority of grants supported farmers with the acquisition of four types of equipment: No-Till Drills (40), In-line Bale Wrappers (14), Lime Spreaders (11), and Pasture Renovators (10). SUEP grants were awarded in 45 counties across Kentucky.

SUEP TYPE OF EQUIPMENT BY COUNT: 2015-2022

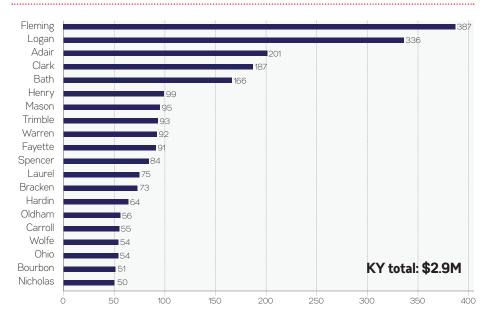
Type of Equipment	Count, 2015-2022
No-Till Drill	40
In-line Bale Wrapper	14
Lime Spreader	11
Pasture Renovator	10
Chute	7
Thistle Sprayer	7
Manure Spreader	6
Pasture Aerator	4
Weed/Wiper/Sprayer	4
Chain Harrow	3
Pasture Sprayer	3
Sprayer	3
Hay Wrapper	2
Post Driver	2
Post Pounder	2
Seeder	2
12 Other Unique Types	12

YOUTH AGRICULTURAL INCENTIVES PROGRAM (YAIP)

YAIP, another new program developed in 2017, encourages youth to engage in and explore agricultural opportunities and seeks to directly benefit individual students in agriculture. Investment areas include agricultural diversification, animal production, large animal, small animal, forage and grain improvement, showmanship, among others. Eligible applicants are between the ages of 9 and 18, and must apply with the mentorship of a 4-H Leader, Extension Agent,

Future Farmers of America Leader, or School Agriculture Teacher. From 2015 to 2022, \$2.2 million (1.7% of county-level funds) were invested in YAIP across 2,900 grants with an average grant size of \$759. The majority of grants were directed to three investment areas: Animal Production (52.2%), Large Animal (16.0%), and Small Animal (10.6%). YAIP grants were awarded in 43 counties across Kentucky.

NUMBER OF YAIP AWARDS, TOP 20 COUNTIES: 2017-2022



Source: KY YAIP Program Data, 2017-2022; Mass Economics analysis

COUNTY AGRICULTURAL INCENTIVE PROGRAM (CAIP)

CAIP launched in 2007 to address funding requests from producers whose needs did not align with the focus of existing program areas at the time, specifically the heavy focus on the beef industry and improving the genetics of herds, livestock handling and more. CAIP has given producers access to smaller pots of funding to expand and improve their operations in specific ways, such as purchasing cattle and cattle genetics, improving farm infrastructure such as hay or grain storage, and fencing improvements.

CAIP seeks to provide Kentucky agricultural producers with cost-share assistance on practices that increase net farm income, opportunities to trial new or innovative technologies, or investment in systems that improve farm efficiency and productivity. Counties are not required to participate in CAIP, yet of Kentucky's 120 counties, 115 participated between 2015 and 2022. CAIP offers a menu of investment areas that has changed over time in response to producer needs, and continues to be adapted on an annual basis.

Today, CAIP represents a significant portion of KADB's total investments. Of the \$122 million of KADF that went toward county initiatives during the 7 years being evaluated herein, 35% was distributed through CAIP. The \$122.4 million in CAIP investments represents 94.6% of county-level funds deployed between 2015 and 2022. Those funds were distributed across 56,900 individual grants. The average CAIP award was \$2,151. CAIP grants leveraged \$237.2 million of producer financial contributions, with an average producer match of \$4,169.

CAIP INVESTMENT AREAS OVERVIEW

Investment Area	Count, 2015-2022	Total Cost-share Contribution (2022 \$)	Total Cost-share Awarded (2022 \$)	Total Project Costs (2022 \$)
Animal, Large	31.7%	25.9%	33.0%	28.3%
Fencing & On-Farm Water	25.1%	18.9%	23.6%	20.5%
Forage & Grain Improvement	16.5%	14.8%	14.6%	14.7%
Farm Infrastructure	16.2%	28.6%	20.1%	25.7%
Agricultural Diversification	2.8%	2.7%	2.6%	2.7%
Animal, Small	2.8%	3.6%	2.1%	3.1%
AgTech & Leadership Development	2.1%	2.4%	1.7%	2.2%
Value-Added & Marketing	1.3%	1.2%	1.1%	1.1%
Innovative Ag Systems	0.7%	0.4%	0.6%	0.5%
Poultry & Other Fowl	0.6%	0.6%	0.4%	0.5%
On-Farm Energy	0.2%	0.9%	0.2%	0.7%
All	56.9K	\$237.2	\$122.4M	\$359.5M

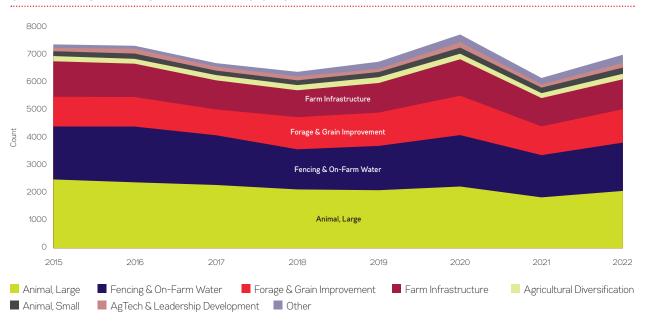
Notes: data exclude all records with \$0 for Cost-Share Awarded; All dollar values reported in constant 2022 \$ Source: KY CAIP Program Data, 2015-2022; Mass Economics analysis

CAIP has a menu approach where recipients can apply for funding in one of eleven investment areas:

- Fencing & On-Farm Water
- Forage & Grain Improvement
- Farm Infrastructure
- · Large Animal
- Poultry & Other Fowl
- Innovative Ag Systems
- Value-Added & Marketing
- Agricultural Diversification
- Small Animal
- · AgTech & Leadership Development
- On-Farm Energy

During the 7 years studied in this evaluation, as illustrated below, the majority of grants were directed to four investment areas: Large Animal (31.7%), Fencing & On-Farm Water (25.1%), Forage & Grain Improvement (16.5%), and Farm Infrastructure (16.2%). The largest category of funding, Large Animal, enables producers to invest in genetics or breeding, purchasing animals, handling facility improvements, for cattle and equine. The second largest category, Fencing & On-Farm Water, funds fencing needs or materials, as well as parts, equipment, contracted labor, drilling and equipment rental for the development and/or establishment of certain on-farm water systems. Together with Forage & Grain Improvement and Farm Infrastructure (the next 2 largest investment areas), the top 4 CAIP funding areas represented almost 90% (89.5%) of total CAIP investments between 2015 and 2022. Distribution of funds across CAIP investment areas remained relatively steady over the evaluation period, including across the COVID pandemic.

CAIP AWARDS BY INVESTMENT AREA: 2015-2022



Notes: data exclude all records with \$0 for Cost-Share Awarded; "Other" includes Value-Added & Marketing, Innovative Ag Systems, Poultry & Other Fowl, On-Farm Energy, none of which made up over 2% of the total in any year Source: KY CAIP Program Data, 2015-2022; Mass Economics analysis

A range of entity types serve as the CAIP program administrator in different counties. CAIP Administrators receive funding from the KADB, solicit grant applications from across their county, and evaluate proposals, among other duties. To illustrate this range, in 2022, there were a total of 92 CAIP program administrators. County Conservation Districts were the most prevalent administrator organization type and in 2022 administered CAIP in almost half of the program's participating counties. County-level Cattlemen's Associations also played a large role, administering the CAIP program in almost 30% of participating counties.

SURVEY + INTERVIEW RESULTS

SURVEY RESPONDENT CHARACTERISTICS

KOAP staff supported distribution of the CAIP administrators survey to all entities that administered CAIP at any time between 2015 and 2022. The evaluation team received received 75 responses to the CAIP Administrators survey, with 66 unique counties across Kentucky represented (in some cases more than one representative from a county responded to the survey). Almost half (48%) of respondents represented counties in Central Kentucky, while 32% were from Eastern Kentucky counties, and 20% from Western Kentucky. Over 60% of respondents were Administrators from Conservation Districts, 15% were from Cattlemen's Associations, 5% were from Farm Bureaus, and 3% were from Extension offices. More than half of respondents (56%) indicated that they have been with their organizations more than 10 years, under a third (28%) have been in their role a year or less.

CAIP Administrator Type	Survey Respondents
Conservation Districts	47
Cattlemen's Association	11
Farm Bureau	2
County Extension Offices	4
Other	11
Total	75

KEY THEMES

The following themes emerged from CAIP Administrator survey responses in combination with interviews with current and past KOAP staff, KADB board members, CAIP administrators, and CAIP recipients.

company] started with [a] CAIP grant, making value-added beef products and now operates a full-scale meat processing plant."

Administrators believe that the CAIP program's most important impacts are helping farmers to diversify their operations and to add value to their agricultural products.

- 50% of CAIP administrator respondents reported that the CAIP program
 has helped farmers innovate and explore new opportunities for their
 operations and 48% reported that the program has helped farmers
 diversify their operations. In addition, 56% agreed or strongly agreed that
 County Agricultural Development Councils prioritize the diversification of
 agriculture.
- 46% reported that the CAIP program helps farmers add value to their agriculture products as one of the top two most important impacts of the program.

Stakeholders believe that CAIP has been responsive to changing producer needs but should promote on-farm innovation and financial viability in the future.

- The majority of CAIP administrators (93%) believe that CAIP is currently
 meeting producers' needs as those needs change, and 59% believe that
 helping farmers innovate and explore new opportunities for their operations
 will be an essential aspect of the program in the future. Another 45% believe
 the CAIP program will help farmers become more financially viable in the
 same time period.
- Conversations with stakeholders throughout the evaluation re-affirmed the importance of CAIP supporting innovation rather than offsetting the cost of businesses as usual, and many believe the program is not effectively driving innovation.

Having different types of CAIP administrators in different counties—and having some administrators that are aligned with one specific agricultural sector rather than the industry as a whole—impacts producers' perception of who is eligible for CAIP funding.

 Kentucky agricultural stakeholders often shared a perception that a county CAIP administrator's alignment with a specific agricultural sector limits access to and awareness of funding opportunities for local producers outside that subsector. This is because administrators focused on a single subsector tend to be less effective at marketing opportunities to the broader agricultural community, fostering a perception that funds are only available to producers within their target subsector.

tier system definitely increases the workload on the administrators exponentially due to having to go line by line on receipts to get correct percentages."

CAIP administrators are divided in their perception of the administrative burden associated with administering CAIP, but they universally believe that local administration is key to the program's success.

- When asked if there is a significant administrative burden to administering CAIP, respondents were split with 44% agreeing and 53% disagreeing. Neither administrator type, years in their role as CAIP administrator, nor geography was correlated with respondents' view of the administrative burden. Specifically, the tier cost-share system was mentioned several times as a component of CAIP that increases the administrative burden.
- When asked if administering CAIP at the county level—rather than at the state level—is critical to the program's success, a majority strongly agreed (63%) or agreed (32%), while only 5% disagreed.

Stakeholders believe the impact of County funds could be magnified by streamlining across all county programs, narrowing the pool of eligible recipients, and limiting who is eligible and how much funding individual applicants may receive year over year.

- Many stakeholders, including some administrators, believe the CAIP program provides the same producers funding repeatedly, rather than prioritizing a broader range of farmers or achieving key Fund priorities like innovation.
- Stakeholder interviews and CAIP administrator survey responses called for modifications to the program including lifetime limits or other more stringent parameters around eligibility.

CAIP is the only program available that covers things that are niche practices or beginning practices. The production ag farmers are eligible for federal and state programs for much higher dollar amounts. I would like to see CAIP focus on helping beginning farmers and/or niche practices and eliminate eligibility for 'big' farmers."

SUMMARY + STRATEGIC DIRECTION

Over its 25 years, KADB has responded to the needs of farmers and agribusiness owners by developing and refining county and state programs in response to producers' needs. The creation and ongoing evolution of KADB's County Agriculture Incentives Program (CAIP) is a prime example of this responsiveness, and receives most of the funding allocated to county programs, \$122.4 million (94.6% of county-level funds). While CAIP has provided large numbers of producers with much needed funds to support on-farm improvements, there is an opportunity to refine the program and its focus to increase its impact.

Evaluation research suggests that CAIP has become too broad and fragmented, resulting in a program that targets numerous, diverse areas– from fencing and farm water systems, to forage and grain improvements, and projects to invest in poultry and other fowl and beyond– and that CAIP's broad scope dilutes its overall impact. Narrowing the focus of CAIP's priorities– including both what and who can be funded by the program– may reduce the breadth of categories of investments while positioning the program to impact a greater number of producers in a more meaningful way.

In addition, defining more specifically who the CAIP program seeks to serve and then tailoring the eligibility requirements to ensure the program serves said audience is a key opportunity. Evaluation research suggests there is a need to limit the amount of total funding any individual can receive (or the total number of times an individual can receive CAIP funds), to keep the program from functioning as a subsidy. In addition, stakeholders raised concerns regarding net worth, wealth and operational scale of some CAIP funding recipients. If the program seeks to support smaller scale producers, start-up or early stage businesses, or other producers for whom small farm investments will have outsized impact, CAIP recipient net worth or farm income limits should be imposed.

Lastly the CAIP administrators play a critical role in promoting, supporting, and facilitating access to the program. Their broader organizational allegiances and priorities impact producers' perceptions of who and what the program was designed to fund. Concerns regarding different types of administrators were raised in surveys and interviews, in particular the Cattlemen's Associations, and how producers not affiliated with cattle may be less inclined to apply for funding in counties where CAIP is so administered. Standardizing CAIP program administration across all participating counties could encourage a more diverse set of producers to apply.



INTRODUCTION

During the 2015-2022 evaluation period, the Kentucky Agricultural Development Board (KADB) invested a total of \$120.9 million in KADF Projects, 31% of the Fund's total investments in that time period. KADF Project grants support a variety of initiatives, ranging from supporting the development and maintenance of Farmers' Markets to investing in organizations that provide targeted technical assistance to small farmers across the state. Projects are categorized as having statewide impact, county and state impact, or county-only impact. Of the total Project grants awarded, \$55.3 million went to Projects with a statewide impact.

According to the KOAP, Projects should "positively affect the economic status of farmers and the targeted agricultural community." Project grants are also expected to demonstrate the following:

- Economic/commercial viability and feasibility of the proposed project
- · Ability to be self-sustaining within a reasonable period of time
- Significant impact on farm income for multiple producers, will have high potential for growth, and will have potential to include more farmers in the future

Prospective applicants may request grant funding for up to 50% of the new project costs incurred.

While Project funds are not targeted to any particular production sector, producer type, or area of focus, over the course of the evaluation period, several distinct "Project Guidelines" were released. These Guidelines provided additional guidance to prospective applicants on the Board's interests and funding priorities, and also served as a resource for Board members to reference during the application review process. During the evaluation period, Guidelines were developed for the following Project types: Garden Project, Farmers' Market Project, Community Gardens Project, Demonstration Farms Project, and On-Farm Water Management.

¹ Most county-only Project funds are invested in the CAIP Program, but the County Agriculture Councils are allowed to fund Project proposals with county KADF money as long as the KADB concurs with their decision. The evaluation team did not receive data on these projects, so these were not prioritized for interviews or site visits.

METHODOLOGY

In order to analyze KADF Project investments between 2015 and 2022, KK&P examined investment data, disseminated a survey to Project fund recipients, and conducted interviews and site visits. KOAP shared data on KADF Project investments, including select annual and tri-annual project reports submitted by grantees. KK&P developed a survey to understand Project recipients' perspectives on the impact of the KADF Project investments between 2015 and 2022. The survey was distributed online by KOAP staff and remained open for approximately 5 weeks during October and November 2024. To complement and enhance survey findings, interviews were conducted with current and past KOAP staff, KADB members, and KADF Project recipients. The evaluation team also conducted in-person site visits with farms, nonprofits, and other businesses that received Project funds in order to provide a more detailed understanding of the impact that select investments had on advancing the Fund's goals, and to serve as a qualitative complement to the quantitative data analysis.

The evaluation team's analysis focused on the top 18 Project fund recipients (by funding amount), for a total of 74 grants, comprising 76% of the Fund's investments in Projects between 2015 and 2022. This approach was chosen because the top 18 recipients received the majority of funds distributed over the evaluation period and access to impact data was inconsistent across the funded Projects. In order to understand the aggregate impact of the Projects evaluated, the research team examined key sectors in which Project funds were frequently invested over the course of the evaluation period including Education, Leadership and Technical Assistance; Livestock (Beef and Dairy); Horticulture; Marketing and Promotion; Grain and Forage; and Other. These categories were utilized by the University of Kentucky in the prior evaluation of the Fund and were utilized here to have continuity with the 2007-2014 KADF evaluation report.

Project Spotlights, which are included throughout the Estimated Impact on Key Sectors section, seek to provide a more in-depth look at the impact of Project funds, highlighting the myriad ways the Fund supports a diverse range of agricultural ventures and sectors. When possible, Project impact metrics are presented, such as new markets created, existing markets expanded, new products launched, farm income generated, and new jobs created.

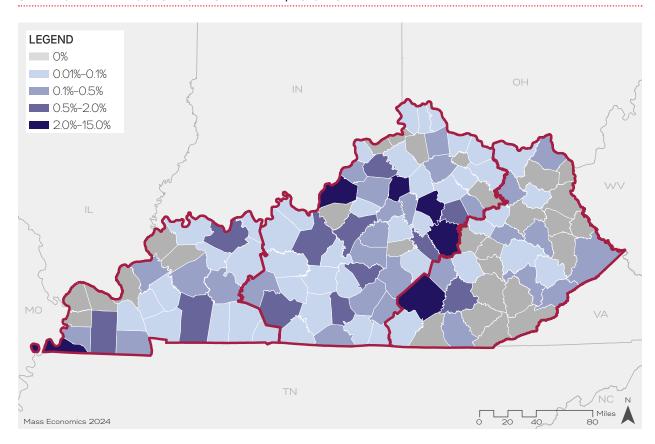
² Grantees submit Project reports three times per year via a tri-annual report, with the level of detail provided varying significantly. Some grantees provided an annual report, while others did not; cumulative reports covering the entirety of the grant timeline are not requested of grantees; and while grantees are asked to report on a few standard impact metrics, some grantees do so and others do not.

FINDINGS

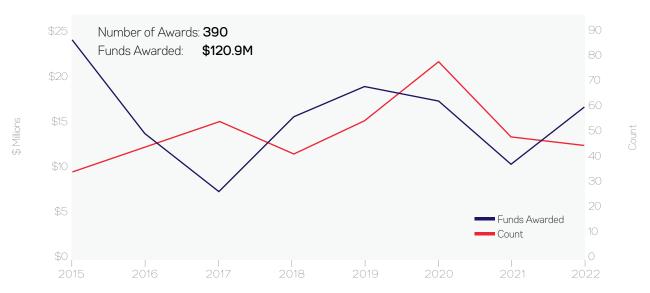
ANALYSIS OF INVESTMENTS

Between 2015 and 2022, KADF Project investments totaled \$120.9 million across 390 grants, representing 31% of the Fund's total investments in that time period. Comparatively, during the prior evaluation period between 2007-2014, KADB invested just over \$62 million in state, county & state, and county-only funded Projects with Projects receiving some level of state funding comprising 90.7% of total project funding (about \$56.3 million). The map below shows the geographic distribution of project grant recipients. It is important to note that this map underestimates Project award reach, as many grantee activities extend far beyond the county in which their business or organization is based. In addition to the funds depicted in the map below, 46% of Project funds are awarded to entities and initiatives serving the state as a whole.

SHARE OF KADF PROJECT FUNDS AWARDED. 2015-2022



KADF PROJECT INVESTMENTS



Notes: data exclude all records with \$0 funds awarded; All dollar values reported in constant 2022 \$. Source: KADF Data, 2015-2022; Mass Economics analysis

Given the complexity of the data, as described above, the evaluation of Projects focused on the use of these state investment dollars for the top 18 recipients (a total of 74 grants), by dollar value of funds received, listed on the next page.

The University of Kentucky received the most Project funding between 2015 and 2022, totaling \$21.8 million across 12 grants. The Kentucky Department of Agriculture, Kentucky Dairy Development Council, Kentucky Beef Network, and Kentucky Horticulture Council received \$35.3 million in Project funds,



KADF: TOP PROJECT RECIPIENTS, \$ VALUE 2015-2022

Recipient	Single/ Multi County	Count, 2015-2022	\$ Value, Share	\$K Value (2022\$)	Avg Value, \$K (2022 \$)
University of KY	Multi	12	18.1%	\$21,800	\$1,820
Kentucky State Fair Board	Single	5	12.4%	\$14,900	\$2,988
Kentucky Department Of Agriculture	Multi	6	11.2%	\$13,600	\$2,264
Kentucky Dairy Development Council, Inc.	Multi	4	6.7%	\$8,100	\$2,032
Kentucky Beef Network, LIC	Multi	4	6.1%	\$7,400	\$1,842
Kentucky Horticulture Council	Multi	5	5.2%	\$6,200	\$1,250
Kentucky State University	Multi	5	3.8%	\$4,600	\$913
KY Center For Agriculture And Rural Development, Inc.	Multi	4	3.1%	\$3,700	\$926
U.S. Geological Survey Ohio-Kentucky-Indiana Water Science Center	Single	2	1.5%	\$1,800	\$903
Community Farm Alliance, Inc.	Single	5	1.2%	\$1,400	\$282
Kentucky Highlands Investment Corporation	Single	2	1.1%	\$1,300	\$635
Marksbury Farm Foods, LLC	Single	5	1.0%	\$1,200	\$244
Kentucky Exposition Foundation, Inc	Single	1	0.9%	\$1,100	\$1,080
Bluegrass Agtech Development Corp	Single	1	0.8%	\$1,000	\$1,000
American Farmland Trust Inc	Multi	2	0.8%	\$909	\$454
Berea College, Grow Appalachia	Single	3	0.7%	\$837	\$279
Summit Meat Processing	Single	4	0.7%	\$829	\$207
Trackside Butcher Shoppe, LIC	Single	4	0.6%	\$766	\$191
Creation Garden, Inc.	Single	2	0.6%	\$684	\$342

accounting for almost 30% of funds. Many of these top 18 project Fund recipients are featured in spotlights that appear throughout this section, which illustrate the range of undertakings Project funds supported and the range of producers that benefited. In addition to the Big 4, it is important to note that a number of entities on this list serve as intermediaries, or organizations that re-grant KADF funding to smaller producers—so while they appear on this list as a single large recipient, they are in fact leveraging KADB fund to reach large numbers of farmers across a range of geographic regions.

As depicted in the table below, according to data collected by KOAP, 102,352 farmers were impacted by KADF Projects between 2015 and 2022. It is important to note only 61% of Project fund recipients included 'farmers impacted data' in their annual or tri-annual reports. While the lack of consistently robust data gathered on each Project's impact makes aggregate impact data elusive, the Project Spotlights provide a more in-depth narrative that, when taken together, illustrates the breadth and depth of Project reach and impact.

KADF PROJECTS: FARMERS IMPACTED 2015-2022

Stat	Value
Total Number of KADF Awards	390
Number of Awards with Farmers Impacted Data	236
% of Awards with Farmers Impacted Data	61%
Number of Awards with Farmers Impacted > 0	179
% of Awards with Farmers Impacted > O	46%
Total Farmers Impacted *	102,352
Average Farmers Impacted / Year **	12,794

^{*}Total Farmers Impacted can include duplicates if a farmer was impacted by more than one project or by the same project in multiple reporting periods. Approximately 19.7K of the farmers impacted are from the "Western Kentucky State Fair" project.

SURVEY + INTERVIEW RESULTS

RESPONDENT CHARACTERISTICS

The evaluation team received 66 responses to the KADF project recipients survey representing 27% of the total unique project recipients (293) between 2015 to 2022. Respondent entities were headquartered in 38 counties across Kentucky, which represents over 40% of the counties to which Project funds flowed. About three-quarters (76%) of survey respondents were located in Central Kentucky counties, 15% in Eastern Kentucky counties, and only 9% in Western Kentucky. Most respondents' organizations (74%) were well established and have been in operation for over 10 years, and nearly a quarter (23%) are newer organizations that launched over the past 2 to 10 years. Just over half of respondents had received only 1 project grant (53%), 40% received between 2 and 4 grants, and fewer than 10% received 5 or more grants between 2015 and 2022. The majority of respondents (59%) received less than \$100,000, about a quarter received between \$100,000 and \$500,000, and just under 15% received more than \$500,000.

Grant Recipient Type	Respondents (%)
Nonprofit	39%
Farm	27%
Processor	21%
Government	12%
University	8%
Other (including schools)	23%

^{*}Note that several respondents identified as more than one recipient type.

^{**} This reflects a simple average of Total Farmers Impacted over the 8 years 2015-22. Notes: data exclude all records with \$0 funds awarded; All dollar values reported in constant 2022 \$. Source: KADF Data, 2015-2022; Mass Economics analysis

KEY THEMES

funds are vital for innovation and growth in the beef industry, we would not be as advanced as we are without the funds."

Stakeholders see KADF Project funds as critical to the success of Kentucky agriculture now and into the future, and they see increased net farm income as the Projects' most notable impact.

- Throughout interviews, site visits, and survey responses, there was a strong consensus that the KADB's project investments have strengthened the agricultural sector.
- All survey respondents said KADF project funds are a critical driver of the Kentucky agricultural economy and nearly all (98%) reported that project funds help farmers innovate and prepare for the future of Kentucky agriculture.
- Half of all survey respondents cited increased net farm income for local farmers as a primary impact of the KADF Project funding. The next most commonly referenced impacts were that Project funds added value to

Kentucky agriculture products (29%) and provided support for agricultural entrepreneurship (23%).

 Interviews and site visits with Project fund recipient farm businesses and organizations that work directly with farmers often shared that Project funds have helped to achieve one of KADF's goals, increased farm income for the state's producers. Funding from KADF has allowed our organization to work with more than 400 farmers across Kentucky to increase their farm revenue and has also helped us secure more than \$2 million in federal and private funding to enhance Kentucky's farm economy."

 Project funds' impacts are magnified by recipients' ability to leverage those funds to secure additional grant funding.

Intermediaries play a critical role in expanding the Fund's impact and geographic reach, and demand for intermediaries' services is increasing.

- Kentucky State University, Kentucky Center For Agriculture And Rural Development, Inc., Kentucky Highlands Investment Corporation, Berea College, and Grow Appalachia are all examples of the 14 Projects recipients who function as intermediaries, and who received in aggregate \$10.4 million in Project funds between 2015 and 2022.
- Funding a broad range of intermediary organizations effectively expands
 the KADF's reach to diverse geographies, producer types, and farm sizes, as
 evidenced by site visits and interviews.

 Nearly all intermediary organizations that the evaluation team interviewed reported higher producer demand for capital (in the form of small grants) and technical assistance than the organizations have capacity to provide.

66 We have seen an incredible impact on the state's farm economy due to the KADF. As an organization that works across multiple states with other programs, Kentucky has by far the most robust farm support ecosystem in comparison to surrounding states. The Fund has had a significant impact on the farmers we work with and has enhanced our technical service to small farms."

Concerns around grantee sustainability were raised, including the need for larger entities to diversify funding and rely less on KADF Project funds, year over year.

- In interviews and site visits, grantees expressed awareness that KADF funds are limited in nature and hold a desire for equitable distribution of funds across cornerstone organizations.
- While Kentucky agricultural organizations understood the importance of maintaining a diversified portfolio of funders to avoid over-reliance on the KADF, some expressed concern about fundraising challenges, particularly with 2025 reductions in USDA and other federal funding opportunities.
- Across the board, recurring Project fund recipients indicated that they
 would benefit from clearer communication about the KADF's expectations
 for diversifying funding and the extent to which fiscal reliance on the KADF
 must be reduced.

There is an opportunity to increase the Fund's focus on projects that support small farms and smaller scale projects.

In interviews and site visits, many Project recipient organizations reported collaborating with each other to support small and mid-size farmers with distinct but complementary resources and services. There was broad appreciation for how the Fund's aggregate investments create a supportive ecosystem, particularly for small farmers accessing critical services.

66 Adjust the selection criteria to favor innovative, niche agricultural projects such as agroforestry, organic farming, or urban agriculture. These projects, though often smaller in scale, have significant potential for local economic and environmental impact."

 Despite this, several interviewees and survey write-in responses recommended further increasing the Fund's focus on projects that support small farms and smaller scale projects (including orchards, urban farming, agroforestry, small processing, and more).

Some Project recipients indicated a need for increased transparency about the application process, scoring criteria, and funding priorities and decisions.

- Across all forms of stakeholder engagement, both longstanding and recent Project fund recipients noted a desire for increased transparency throughout the application process.
- Some applicant organizations also expressed confusion about how Board priorities change over time and sought clearer, up-to-date information on these priorities.
- respondents strongly agreed and 55% agreed that KADB's criteria and reasons for approval or rejection of project applications is clear to applicants. These contrasting results might reflect a bias in the sampling or an unwillingness to be as candid given the survey was disseminated by KOAP.

for funds has been different each funding cycle, and at times we have been asked to request funds from counties where farmers could have also used those funds for on-farm impact. We have also seen a small handful of organizations apply for funding and have received inconsistent feedback."

ESTIMATED IMPACTS ON KEY SECTORS

In order to understand the aggregate impact of the KADF Projects, the research team organized projects into categories including Education, Leadership and Technical Assistance; Livestock (Beef and Dairy); Horticulture; Marketing and Promotion; Grain and Forage; and Other (these categories are consistent with those used by past evaluations of the Fund). The top 18 Project fund recipient organizations (by dollar value) evaluated during this time period, received a total of 74 grants constituting 76% of KADB's total Project investments (\$91.5M out of \$120.9M), as illustrated in table on the following page.

These top 18 recipients received 74 grants constituting 76% of KADB's total project investments (\$91.5M out of \$120.9M).

Recipient	# of Grants	Award Amt (\$M)	Investment Category
University of KY	12	21.8	Multiple
Kentucky State Fair Board	5	14.9	Other
Kentucky Department Of Agriculture	6	13.6	Marketing and Promotion
Kentucky Dairy Development Council, Inc.	4	8.1	Livestock (Beef and Dairy)
Kentucky Beef Network, LLC	4	7.4	Livestock (Beef and Dairy)
Kentucky Horticulture Council	5	6.3	Horticulture
Kentucky State University	5	4.6	Education, Leadership and Technical Assistance
Kentucky Center For Agriculture And Rural Development, Inc.	4	3.7	Education, Leadership and Technical Assistance
U.S. Geological Survey Ohio-Kentucky-Indiana Water Science Center	2	1.8	Other
Community Farm Alliance, Inc.	5	1.4	Horticulture
Kentucky Highlands Investment Corporation	2	1.3	Education, Leadership and Technical Assistance
Marksbury Farm Foods, LLC	5	1.2	Livestock (Beef and Dairy)
Kentucky Exposition Foundation, Inc	1	1.1	Other
Bluegrass Agtech Development Corp	1	1.0	Education, Leadership and Technical Assistance
American Farmland Trust Inc	2	910	Grain and Forage
Berea College, Grow Appalachia	3	837	Education, Leadership and Technical Assistance
Summit Meat Processing	4	829	Livestock (Beef and Dairy)
Trackside Butcher Shoppe, LLC	4	766	Livestock (Beef and Dairy)
Total for Top 18 Recipients	74	\$91.5	

Notes: Only the top 18 recipients are shown; there are an additional 250 recipients (not shown) for a total of 268 recipients from 2015 to 2022; data exclude all records with \$0 funds awarded; All dollar values reported in constant 2022 \$
Source: KADF Data, 2015–2022; Mass Economics analysis

The table that follows illustrates commodity sales growth in agriculture from 2002 to 2022, by commodity and by region of the state. It provides context for the sections that follow which focus in on Project impacts on Livestock, Horticulture, and Grains & Forage sectors.

AGRICULTURAL PRODUCTION: COMMODITY SALES GROWTH

	Growth 2002-2022 (2022 \$)*			Change 2002-2022 (2022 \$M)**						
	U.S.	KY	West	Central	East	U.S.	KY	West	Cental	East
Specialty Animals	45%	2440%	135%	2888%	217%	\$528.5	\$ 147.3	\$ 0.9	\$145.7	\$0.6
All Grains	160%	268%	207%	535%	457%	\$103,702.1	\$2,260.0	\$1,419.9	\$786.3	\$54.0
Other Field Crops	56%	156%	120%	168%	127%	\$7,246.8	\$169.8	\$18.7	\$132.7	\$18.4
Fruits, Berries, + Tree Nuts	53%	136%	30%	167%	277%	\$11,769.0	\$13.1	\$1.0	\$9.1	\$3.0
Vegetables	36%	104%	82%	99%	154%	\$7,391.0	\$30.2	\$6.8	\$15.2	\$8.1
Poultry (+ Eggs)	96%	96%	86%	193%	12%	\$37,526.1	\$872.0	\$649.5	\$216.4	\$6.2
Hogs	80%	82%	199%	-50%	-64%	\$16,181.4	\$93.2	\$120.1	-\$25.0	-\$1.8
Sheep + Goats	28%	78%	68%	70%	159%	\$251.1	\$6.0	\$0.8	\$3.9	\$1.2
Cattle	22%	7%	15%	7%	-3%	\$15,975.6	\$69.5	\$21.5	\$50.9	-\$3.0
Aquaculture	23%	7%	43%	-49%	-59%	\$427.5	\$0.2	\$0.9	-\$0.5	-\$0.1
Equine	4%	-8%	-30%	-7%	-61%	\$90.8	-\$63.2	-\$3.9	-\$53.7	-\$5.6
Milk	60%	-33%	10%	-37%	-78%	\$19,839.6	-\$115.5	\$5.0	-\$101.6	-\$18.9
Horticulture	-11%	-35%	-13%	-37%	-49%	-\$2,572.2	-\$54.8	-\$2.5	-\$45.6	-\$6.8
Tobacco	-63%	-66%	-18%	-75%	-98%	-\$1,644.9	-\$431.9	-\$24.6	-\$334.2	-\$73.0
Cut Christmas Trees + Short Term Woody Crops	-15%	-80%	-89%	-79%	-45%	-\$96.2	-\$1.3	-\$0.4	-\$0.9	\$0.0
Cotton, Lint + Seed	0%	NA	NA	NA	NA	\$21.1	\$0.0	\$0.0	\$0.0	\$0.0
Total Sales	66%	60%	117%	28%	NA	\$216,637.4	\$2,994.5	\$2,213.8	\$798.6	-\$17.8

 $^{^{\}star}$ Commodities that grew faster than the U.S. shaded in green

Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

^{**}Commodities that increased are shaded in green



EDUCATION, LEADERSHIP AND TECHNICAL ASSISTANCE

Of the Projects evaluated between 2015-2022, 15 grants went to organizations providing education, leadership and/or technical assistance for a total of \$11.4 million. Institutions and organizations such as Kentucky State University, Kentucky Center For Agriculture and Rural Development, and Berea College's Grow Appalachia focus heavily on technical assistance and capacity building work with small farmers. In addition, several of these organizations work together with other grantee organizations who provide complementary support services like Community Farm Alliance and University of Kentucky's Food Connection, to create an ecosystem of farm support to the state's small and mid-size farms.

In addition, membership organizations, such as Kentucky Dairy Development Council, Kentucky Horticulture Council and Kentucky Beef Network, utilized a portion of their Project funds to advance education and technical assistance programming for their members. For example, KDDC's Project funds support their Young Producers Education, Leadership, and Fellowship Peer Groups, in which they host a series of 5 meetings annually across the state, which range from facilitated meetings on specified topics to farm tours. The aim of the Group is to help young dairy farmers grow in their profession. KDDC also provides continuing education programs through regional meetings, state dairy partner meetings, summer and fall tours, and dairy field days, working to build connections across the dairy sector and increase the knowledge base of dairy farmers in Kentucky.

Kentucky Center for Agriculture and Rural Development

NAME OF GRANT	Kentucky Center for Agriculture and Rural Development Technical Assistance
GRANT PERIOD	2020-2021
SECTORS IMPACTED	Multiple
FUNDING ALLOCATED	\$900,000

PROJECT SUMMARY

The KCARD Technical Assistance grant provided continued support for KCARD, a nonprofit dedicated to agricultural and rural business development, to provide business advisory and consulting services to agricultural producers across the state of Kentucky. KCARD has been awarded funding multiple times by the KADB over the years to provide technical assistance to Kentucky agribusinesses, including but not limited to those who are direct recipients of KADF funding. As with prior rounds of funding, the 2020-2021 project aimed to promote farm business growth and success, and to create jobs and economic opportunities in agriculture. KCARD's services are offered statewide, and the organization supports farmers of all scales in the vast majority of Kentucky counties each year. Specific technical assistance offerings include business planning, marketing strategy, financial planning and evaluation, and grant writing. KCARD staff consult with producers in several ways including one-on-one consultations, workshops, and a range of other educational offerings.

This Project reached a broad range of businesses across sectors including horticulture, meat processing, poultry, eggs, dairy, and other sectors. KCARD also supported farms and local food buyers, large and small, by facilitating connections between the two. For example, in 2020, KCARD connected a new food retail location with over 15 local food producers. In the same year, KCARD helped a commercial vegetable operation to connect with a regional food hub to increase sales.

KADF's \$900K investment in KCARD- and the Fund's prior and continued investments in the organization— have contributed to positioning the organization as a widely trusted and accessible resource to the agriculture business community, working effectively to expand the capacity of food and agriculture businesses across the state, generating millions of dollars in returns for the Kentucky agricultural economy.

IMPACT METRICS

~1,900+ farmers impacted

110 counties impacted

~150+ jobs created

\$2.6 million: Annual economic impact of project-related job growth:

\$7 million: New federal grant awards accessed by KCARD clients

89% of the entities assisted by KCARD that progressed past the seed/development stage were still in business (as of December 31, 2021)

^{*}The spotlight and its associated impact metrics reflect achievements from calendar years 2021 and 2022.

Kentucky State University

NAME OF GRANT	KSU Mini Grant Program
GRANT PERIOD	2022-2023
SECTORS IMPACTED	Multiple, small scale farmers
FUNDING ALLOCATED	\$990,000

PROJECT SUMMARY

KSU's Small-Scale Farm Grant Program was originally launched in 2012 with support from KADB, and this project was the fifth round of KADB funding to support the mini grant program and associated activities. In addition to providing grants to farmers, the project provided technical assistance to grant recipients, by extending KSU's Extension Associate position based in Quicksand, KY. It also funded demonstration projects at farms and community organizations designed to increase food system resiliency. Priority investment areas for the Small-Scale Farm Grant Program have included aquaculture, organic systems, food insecure areas, value-added processing, agroforestry, and farmer education. This round of project funding specifically aimed to support limited-resource and low-income farmers statewide, those with less than \$250,000 in annual farm revenue. Individual farms were invited to apply for up to \$5,000, while nonprofit groups and projects that support groups of farmers could apply for up to \$15,000. Individual farmers were also invited to apply for up to \$500 for educational training or materials.

From 2022 to 2023, Kentucky State University reviewed at least twelve rounds of Small Scale Farm Grant program applications from Kentucky producers and approved over 240 grants (approximately 65% of applications) to farms, processors, and other food system organizations. Of the more than \$1.5M requested by applicants, the Small-Scale Farm Grant program funded projects totaling over \$860,000. Approximately one-third of the approved applications (80 out of 245) came from within economically disadvantaged counties designated by the Appalachian Regional Commission, resulting in \$315,000 worth of mini grants for producers in those counties. The largest number of approved applications were approved within the Value-Added Processing (73) and Food Insecure Areas (69) totalling over \$320,000 in each priority area respectively. Producers used their mini grant funds to support the acquisition of cold storage, electric fencing, as well as processing, product display, and other equipment. In addition to mini grants, KSU awarded demonstration funds to businesses and nonprofits leading community-focused projects. Demonstration projects included an alley cropping system that incorporates crops used to produce multiple value-added products for emerging and existing markets, beekeeping equipment to support immersive hive tours to foster a deeper understanding of beekeeping within the public, and others.

Through the Small-Scale Farm Grant program, complementary technical support from KSU's Extension Associate, and demonstration projects, KSU has provided support for small farms to innovate and grow their businesses while also helping to expand KADF's reach into underresourced communities (with a focus on Eastern Kentucky counties). The project has also connected numerous farmers with Kentucky State University Extension programs, strengthening professional relationships that will benefit these farms beyond the timeframe of the funded project.

IMPACT METRICS

245 farmers impacted

71 counties impacted

~3,500 average grant size

^{*}The spotlight and its associated impact metrics reflect achievements from calendar years 2022 and 2023, excluding November 2022 due to incomplete reporting data received by the evaluation team.

Kentucky Highlands Investment Corporation

NAME OF GRANT Kentucky Highlands SOAR Farm Loan Fund		
GRANT PERIOD	2015-2022	
SECTORS IMPACTED Multiple, small scale farmers		
FUNDING ALLOCATED	\$1.27 million	

PROJECT SUMMARY

The SOAR Farm Loan Fund is a revolving loan fund designed to provide small, low interest loans to support small and emerging producers in eastern and southern Kentucky. Created in 2015 with initial funding from KADF, the Fund's goal is to support and educate growers to develop a strong local food system in Appalachia. Focused on providing Kentucky producers the opportunity to grow their business in Appalachia, KHIC also partnered with Grow Appalachia (who received \$50K of these Project funds) to ensure that borrowers had adequate access to technical support. Borrowers can receive a maximum loan amount of \$7,500 with a fixed interest rate of 1%. Loans typically last 5 years, and interest-only payments are due the first year of the loan, after which the loan begins to amortize. The SOAR Farm Loan Fund has made a total of \$1,973,288 in loans from the initial KADF funding, which includes interest earned on the loans and the funds received from KADF.

The SOAR Farm Loan Fund has supported an array of producers including a small dairy farmer in Whitley County who used the funds to winterize and heat their milking room, purchase a new hay feeder and purchase a refrigerator for additional milk storage, as well as an organic vegetable and fruit operation in Greenup County who constructed a small pond for irrigation and upgraded their greenhouses.

The SOAR Farm Loan Fund has expanded KADF's geographic reach significantly. By deploying capital in high need areas of Appalachian Kentucky, the geographic footprint of the KADF has expanded significantly through KHIC's Loan Fund. In addition, by supporting smaller scale producers with smaller loans, KHIC has expanded KADF's capital to have a high impact for producers where small dollars go further.

IMPACT METRICS

225 farmers impacted

50 Appalachian counties impacted

50% increase in demand for loan from 2021-2022

*KHIC does not collect impact data from their borrowers



LIVESTOCK (BEEF + DAIRY)

Of the Projects evaluated between 2015–2022, 21 were solely focused on strengthening the beef or dairy industry for a total \$17.5M, with recipients including farmers/producers, processors, councils, and trade associations. Within the beef industry, recipients included Kentucky Beef Network, Trackside Butcher Shoppe, Marksbury Farm Foods, and Summit Meat Processing. Investment in the state's dairy industry was made primarily via the Kentucky Dairy Development Council.

In 2020, the KADB developed the KADF Meat Processing Investment Program (MPIP) in response to Covid-era meat shortages in the grocery store and extended processing wait times, providing funding for meat processors who were already or planned to become USDA certified to incentivize the development of infrastructure and capacity to process Kentucky beef, dairy, pork, lamb, goat, and poultry products. Through MPIP, the KADB invested over \$4.7 million dollars into the capacity and expansion of meat processing facilities across the state. Stakeholders noted across the evaluation that these investments have dramatically increased meat processing capacity within Kentucky, providing smaller and mid-size livestock farmers with new and

expanded processing opportunities to meet consumer demand and reduce wait times. In its first year, MPIP investments supported a 68% increase in the number of animals processed by meat processors funded through the program.³ According to one MPIP grant recipient, "The impact from the Board's investments has been huge for us and all our customers. As we continue to expand, we'll continue to support local farmers."

As of 2022, cattle was one of the top four commodities in the state, making up 13.5% of the commodity sales in Kentucky. In the table above, the column on the far right includes location quotients (LQs), a metric used to describe a place's industrial specialization or its relative strengths and weaknesses compared to other places. A location quotient of 1 indicates that a state is roughly on par with the nation as a whole. While Kentucky does not have a specialization in cattle compared to the U.S., there has been an increase in the commodity sales growth across the state.

Of the Project funds evaluated for dairy, Kentucky Dairy Development Council was the largest recipient of Project funds. KDDC initiatives supported daily activities of Kentucky dairy producers and their programs assisted with the improvement and modernization of dairy management practices, including supporting improvements in animal genetics through testing, enhanced reproductive performance, and helping producers to elevate milk quality standards. Furthermore, KDDC increased producers' alternative revenue streams by supporting dairy producers to create cross-bred calves that are better suited to the beef marketplace. The development of the industry is also prioritized through educational resources and networking events for both new and established producers. KDDC's focus on enhancing producer efficiency and modernizing dairy management practices supported Kentucky in achieving the distinction of being the #1 state in the nation for increased milk production per cow for the fifth year running in 2022.

As illustrated in the table on page 54, commodity sales for milk have declined by a third in Kentucky over the last two decades, at the same time that milk commodity sales increased nationwide by 60%. The evaluation team heard from stakeholders that consolidation in the dairy industry—from agriculture to hauling to processing—creates obstacles for producer profitability in Kentucky and around the country. Stakeholders also described that the state's dairy farmers have limited access to processing facilities for value–added dairy production and associated technical assistance to take advantage of value–added opportunities. Nevertheless, milk sales account for 2.9% of the commodity sales and remain an important part of Kentucky's agricultural economy.

 $^{3 \}quad \text{https://apps.legislature.ky.gov/CommitteeDocuments/166/13456/Oct%2014\%202021\%20KADF\%20} \\ \text{Meat\%20Processor\%20Investment\%20Update.pdf}$

Kentucky Beef Network

NAME OF GRANT	Statewide Beef Industry Initiatives			
YEARS	2019-2020			
SECTORS IMPACTED	Cattle			
FUNDING ALLOCATED	\$1,600,603			

PROJECT SUMMARY

The Kentucky Beef Network, a division of the nonprofit Kentucky Cattlemen's Association, received 4 grants over the 2015-2022 evaluation period, each dedicated to helping cattle producers to grow their businesses and increase profitability. The KBN partners with University of Kentucky Extension to offer diverse programs to producers of all sizes across the state including Linking Environment and Farming (LEAF), Master Cattlemen, Master Grazer, Field Associate support, and Cow/Calf Profitability Conferences which provide producer training and education, marketing, and other support. In their 2019-2020 project, the KBN introduced new profitability-focused programming, such as the Post Weaning Value Added Program (PVAP) and Value Chain Market Access program in addition to the aforementioned core programs offered in prior years. The new programs encouraged cow-calf producers to capture added value through Beef Quality and Care Assurance (BQCA) certification and diversified marketing strategies. Continuation of core programs focused on providing educational opportunities for existing and beginning cattlemen across the state.

UK Extension Specialists, KBN staff, and field associates participated in County Cattlemen's meetings and Extension programs, collectively providing training for an estimated 23,040 individuals in 2019 alone. KBN programs helped Kentucky cattlemen increase their economic returns. For example, the new PVAP program helped producers receive a return of \$65/head on average (303 total head) in 2019. Additionally, the well established BQCA program added \$5 per head to cattle sold with an estimated economic benefit of over \$1.5M based on 8,732 producers trained. KBN's Field Associates provided technical assistance and training to beef farmers in 68 counties through over 100 farm visits.

KBN and UK Extension programs helped train the next generation of cattlemen and supported established beef producers to improve animal health, genetics, forage, and marketing strategies. These diverse programs combine to create a unique ecosystem of support for Kentucky beef producers.

IMPACT METRICS

12,708 farmers impacted

117 counties impacted

103 farm visits by Field Associates

^{*}The spotlight and its associated impact metrics reflect achievements from Calendar Year 2019 only.



HORTICULTURE

Of the Projects Funds evaluated, one Project solely focused on the horticulture industry. The Kentucky Horticulture Council (KHC) was awarded a total \$1.08 million for a grant focused on strengthening value chains in horticulture. In addition to this direct investment, several of the Project fund recipients support small farmers in horticulture through their technical assistance work, including organizations like Grow Appalachia which supports farmers in the development of high tunnels systems, KCARD which provides business planning services, and UK's Food Connection and Community Farm Alliance which supports horticulture producer marketing efforts and market access.

With KADF Project funding, Grow Appalachia's Eastern Kentucky Direct Integrated Grower Support Program (EKY-DIGS) helps small horticulture growers in southeast Kentucky to develop production plans, gain access to free soil tests, and receive on-farm consultation with production advisors. As Eastern Kentucky's tobacco production has declined, many former tobacco farms have pivoted to high tunnel production. This shift from tobacco production outdoors to cultivating diverse crops under controlled conditions presents significant challenges for new growers, including pest control, water management, new crop rotations, and others. Grow Appalachia has been instrumental in bridging this knowledge gap, offering technical training not only to farmers transitioning to high tunnel production but also to regional Natural Resources Conservation Service and UK Cooperative Extension field staff. Through the work of Grow Appalachia, KADF funds have significantly boosted the Eastern region's horticultural knowledge and training capacity. Kentucky now has the highest number of high tunnels in the Southern U.S. with over 1,500 high tunnels funded through the Natural Resources Conservation Service.⁴

⁴ Rudolph RE, Bajek V, Munir M. 2023. Effects of soil solarization and grafting on tomato yield and southern root-knot nematode population densities. HortScience. 58(11):1443–1449. https://doi.org/10.21273/HORTSCI17396-23.

Vegetable sales have increased significantly across each region of Kentucky over the past two decades, for a total of 104% increase across the state as a whole. In addition, Kentucky's growing specialization in vegetable production based on commodity sales has grown significantly since 2002, up by 57% statewide and 231% in the Eastern part of the state, further illustrating the successful diversification of Kentucky's agricultural economy.

COMMODITY SALES (INDUSTRY SPECIALIZATION)* CHANGE OVER TIME, 2002-2022

	KY	West	Central	East
Specialty Animals	1,724%	24%	2,572%	286%
Other Field Crops	70%	8%	122%	157%
Fruits, Berries, + Tree Nuts	61%	-45%	127%	337%
Vegetables	57%	3%	91%	231%
All Grains	48%	-9%	217%	279%
Sheep + Goats	45%	0%	71%%	256%
Hogs	5%	27%	-64%	-65%
Poultry (+ Eggs)	4%	-27%	93%	1%
Tobacco	-5%	68%	-13%	-90%
Equine	-8%	-48%	16%	-34%
Cattle	-9%	-28%	13%	41%
Aquaculture	-10%	-11%	-47%	-41%
Horticulture	-24%	-25%	-8%	1%
Milk	-57%	-47%	-49%	-75%
Cut Christmas Trees + Short Term Woody Crops	-75%	-90%	-68%	14%
Cotton, Lint + Seed	NA	NA	NA	NA

Notes: Commodities with positive LQ growth shaded in green

Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

Stakeholders noted horticulture is a critical facet of the agricultural economy, but faces important challenges in Kentucky. First, producers and technical assistance providers believe that horticulture and vegetable production are not recognized as viable enterprises that contribute to the economy, especially when compared to sectors such as beef or poultry. Not only do they contribute to the economy as evidenced above, but growers who have traditionally produced tobacco, and have the labor and skills to manage crew, are able to diversify into horticulture. As such, horticulture provides additional value to the agricultural economy. And second, as the horticulture sector continues to grow, infrastructure and processing facilities remain a bottleneck in Kentucky. Additional investment in infrastructure will be needed to support the growing industry. The Fund's investments in horticulture play an important role in supporting the producers' diversification and adding increasing value to Kentucky's overall agricultural economy.

^{*}The commodity sales growth and specialization growth in the category "Specialty Animals" is driven by equine products which includes horse breeding fees, stud fees, semen, and other equine products

Kentucky Horticulture Council

NAME OF GRANT	Strengthening Horticulture Value Chains in Kentucky
YEARS	2019-2020
SECTORS IMPACTED	Horticulture
FUNDING ALLOCATED	\$1,086,723

PROJECT SUMMARY

The Kentucky Horticulture Council, a statewide nonprofit dedicated to advancing the horticulture industry, first received funding from the KADF in 2001 and has received continuing support ever since. KHC's 2019-2020 project provided continued support for horticulture sector producers (including field and greenhouse producers of fruits, vegetables, nursery products, and more) across the state with technical assistance, education, and research focused on improving crop value and increasing farm revenue. The four KHC program areas supported by the grant included: 1) Technical Assistance and Education Resource Development, 2) Development and Evaluation of Production and Marketing Systems, 3) Market Research, Analysis, and Marketing Education, and 4) Sustainable Market Access and Demand.

KHC and project partners (University of Kentucky Extension and Department of Agricultural Economics) provided over 580 growers with on-farm production related technical support, supported 49 agronomic research trials, and demonstration plots on wide-ranging topics relevant to horticulture crop growers, conducted consumer and buyer market research to identify emerging opportunities including price analyses of farmers' market and produce auctions, and offered food safety training for growers including supporting the development of 21 comprehensive food safety plans with new farmers. Across KHC's programming in 2019-2020, over 4,611 horticulture crop producers were engaged in thorough consultations, presentations, field days, farm tours, and other methods.

Kentucky horticulture growers, from start-ups to well-established businesses, have improved production efficiency, met new market opportunities, and increased profitability with support from KHC and UK Extension programs.

IMPACT METRICS

4,611 farmers impacted

96 counties impacted

1,125 site visits and one-on-one consultations with growers

49 research projects supported

21 food safety plans developed with growers

19 completed GAP audits for farms

^{*}The spotlight and its associated impact metrics reflect achievements from calendar years 2019 and 2020.



MARKETING AND PROMOTION

Of the Project funds evaluated, 6 grants were awarded specifically for marketing and promotion totaling \$13.6M. The Kentucky Department of Agriculture's Kentucky Proud Program has been a recipient of Project funds since 2008, focusing on promoting Kentucky-grown products, building a connection between consumers and Kentucky farmers, and supporting local food systems more broadly. In addition to the statewide reach of Kentucky Proud, several additional Project grants supported the expansion of markets for Kentucky producers including Community Farm Alliance's Farmers' Market Support program and University of Kentucky's Food Connection.

The Food Connection hosts three Value Chain Coordinators positioned around the state who serve as a critical link between producers and buyers, with a particular focus on facilitating market relationships between Kentucky producers and wholesale buyers including schools, hospitals, and other institutions. The program, launched in 2016, has facilitated over \$5.8 million in farm gate receipts among 180 Kentucky growers, which has led to 22 jobs created at these farms.

Kentucky Department of Agriculture, Kentucky Proud

NAME OF GRANT	Kentucky Proud Program
YEARS	2021-2022 Ongoing
SECTORS IMPACTED	Agriculture, Food service, Retail
FUNDING ALLOCATED	\$1,424,430

PROJECT SUMMARY

The Kentucky Proud Program, led by the Kentucky Department of Agriculture (KDA), is designed to promote the state's locally grown products, connect consumers with Kentucky farmers, and support local food systems. Kentucky Proud was originally launched in 2002 and has received significant support from the KADB since 2008. Kentucky Proud boosts the agricultural economy in Kentucky through targeted marketing, advertising through event sponsorship, and direct support for businesses and nonprofits.

The program includes four components that aim to increase consumption of Kentucky grown products: Point of Purchase Cost-Share Grants, Branding and Advertising, Buy Local, and Farm to Fork. In 2021, KDA distributed over \$250,000 in KADF funds to a wide range of grantees- including farmers' markets, restaurants, on-farm markets, and other retail business types- to support advertising, marketing, and other activities to educate consumers at the point of purchase. KDA's Branding and Advertising Program helped Kentucky Proud surpass 11,000 member businesses (farms, restaurants, distributors, wineries, etc.) through event and venue sponsorship, sub-branding efforts like Homegrown by Heroes and Appalachian Proud, and other initiatives. In the same year, the Buy Local program helped to stimulate nearly \$1.8 million of Kentucky Proud purchases by participating restaurants, caterers, schools, and other food service providers. Lastly, the Farm to Fork program which partners with organizations to raise funds for community charities while promoting Kentucky's local food movement, reimbursed over \$6,000 of local food and marketing related expenses for community organizations that hosted 15 Farm to Fork events in 2021.

Over time, the Kentucky Proud program has achieved widespread brand recognition by Kentucky consumers and elevated appreciation for Kentucky agricultural products at restaurants, school cafeterias, farmers' markets, retail stores, and other food businesses. In every county in the state, Kentucky Proud is building a stronger and more connected food system.

IMPACT METRICS

11,000+ farms, producers, and businesses impacted

120 counties impacted

132 Buy Local registered businesses

\$1.8 million+ total Kentucky Proud purchases in 2021

\$61,257 funds raised for charity (Farm to Fork)

\$1,924,891 total matching expenditures

^{*}The spotlight and its associated impact metrics reflect achievements from calendar years 2019 and 2020.

Community Farm Alliance

NAME OF GRANT	Kentucky Farmers Market Support Program
YEARS	2020-2022
SECTORS IMPACTED	Multiple
FUNDING ALLOCATED	\$270,102

PROJECT SUMMARY

The grant provided continued support for CFA's Kentucky Double Dollars and Farmers Market Support Programs which was originally launched in 2016 with support from the KADF. Over the years, these programs have simultaneously increased sales for Kentucky's small-scale farmers, increased access to locally grown foods for community members, and leveraged federal food and nutrition benefits for the benefit of Kentucky farmers and eaters. The Kentucky Double Dollars Program incentivizes the purchase of Kentucky-grown produce, meat, eggs, and dairy by individuals enrolled in the Supplemental Nutrition Assistance Program (SNAP), Women, Infants and Children Farmers' Market Nutrition Program (WIC FMNP), and Senior Farmers' Market Nutrition Program (SFMNP).

Kentucky Double Dollars benefits can be redeemed by participants at farmers' markets and retail locations across the state. In 2022, food assistance program participants benefited from increased purchasing power at farmers' markets (45) and other food retail locations (7) selling In 2022, 80% of farmers who responded to a CFA survey reported that the KDD program helped them increase farm revenue.

Kentucky-produced food products at markets across 40 Kentucky counties. In total, CFA distributed over \$285,000 in vouchers between 2020 and 2022. Among Kentucky Double Dollar participants who completed an impact survey over the same period, eighty-eight percent (88%) of respondents agreed or strongly agreed that the KDD increased their vegetable intake and eighty-two percent (82%) agreed that the program increased their fruit consumption.

The Farmers Market Support Program provides Kentucky farmers' markets the tools, resources, network development, and technical assistance necessary to build and grow sustainable and profitable markets. CFA received a total of 129 technical assistance inquiries from farmers' markets over the grant period. Additionally, CFA affiliated Farmers Markets reported over 280 new farmers markets vendors in 2022 alone.

The KADB's investment in CFA has benefited the bottom line of hundreds of Kentucky's family farms, while increasing access to healthy, fresh food for community members experiencing food access barriers.

IMPACT METRICS

985 farmers impacted

86 counties impacted

\$285,448 KDD redemptions

283 new farmers market vendors at CFA-affiliated farmers markets

^{*}The spotlight and its associated impact metrics reflect achievements from calendar years 2019 and 2020.



GRAIN & FORAGE

Of the top 18 Project funds awarded during the evaluation, \$15 million was awarded to University of Kentucky to construct their Grain and Forage Center of Excellence. The Center's purpose is to help Kentucky farmers feed the world sustainably, protect the environment, expand the Kentucky economy and pass their farms to the next generation. The Center's buildings were destroyed by a 2021 tornado, but recovery efforts have occurred in the years since, enabling the continuation of field research trials. In addition, two grants were awarded to American Farmland Trust totaling \$900K focused on grain. While a smaller number of grants went to the grain industry through Project funds, as discussed in the next section, KAFC invested \$23 million in loans for grain enterprises.

Commodity sales for grains have increased by over 250% in Kentucky over the last two decades, at the same time that grain commodity sales increased nationwide by only 160%. Grain sales in the state account for three quarters (75%) of the state's total increase in agricultural sales from 2002 to 2022, led by increases in particularly in the western and central parts of the state. The evaluation team heard from stakeholders in the sector that despite these increases in sales, producers are struggling with higher input costs. Grain growers receive significant marketing, production research, and other support from commodity groups who have relied primarily on checkoff dollars to support their work.

American Farmland Trust

NAME OF GRANT	Kentucky Commercial Rye Cover Crop Initiative
YEARS	2020-2021
SECTORS IMPACTED	Grain
FUNDING ALLOCATED	\$275,000

PROJECT SUMMARY

The Kentucky Commercial Rye Cover Crop Initiative, led by the nonprofit organization American Farmland Trust (AFT), focuses on re-establishing cereal rye as a commercially viable grain crop and increasing cereal rye cover crop adoption in Kentucky. The initiative was launched with financial support from the KADF and aims to determine the best practices for growing high-quality cereal rye in the state and to build a network of farmers and buyers to strengthen Kentucky's agricultural supply chain. The 2020-2021 project was the first of several rounds of KADF funding that has supported the initiative.

Farmers receive funding to support rye cultivation and a Commercial Rye Cover Crop Management Plan that provides clear guidance on how to successfully plant, fertilize, and harvest rye. To ensure the initiative's long-term success, a steering committee of agricultural and industry leaders, coordinated by AFT, guides its focus on rye agronomy, distribution, and marketing. The initiative also builds broader public awareness and momentum through events like the Henry County On-Farm Field Day and national media coverage from news outlets such as PBS.

The impact of the Kentucky Commercial Rye Cover Crop Initiative extends beyond farmers, shaping the world of researchers and grain buyers in Kentucky's distilling, brewing, and baking industries. Between 2020 and 2021, 27 farmers across 21 counties participated, planting over 700 acres of cereal rye with an average yield of 71.2 bushels per acre. Production related to the initiative contributed to more than \$94,000 in cereal rye sales.

By bolstering local rye production, Kentucky reduces dependence on imports, keeps food dollars within the state, and meets the demand for locally sourced ingredients. At the same time, it provides Kentucky farmers with a profitable, water-quality benefitting, and soil-enhancing crop.

IMPACT METRICS

27 farmers impacted

21 counties impacted

712 acres of cereal rye

\$94,386.27 value of cereal rye sold

11 million+ views in media reach

^{*}The spotlight and its associated impact metrics reflect achievements from April 2020 to October 2021.

SUMMARY + STRATEGIC DIRECTION

Project funds support a wide array of organizations, businesses, agriculture industry sectors, and producers across the state. Project funds are seen as a critical driver of long-term impact on the Kentucky agricultural economy and are heavily valued for the support they provide to small and large organizations that support producers across the state.

Across the board, intermediaries- organizations that receive KADF Project funds and in turn administer small grant and loan programs and technical assistance – were cited as foundational to expanding the Fund's reach and impact. Across the evaluation, stakeholders described small farms as the lifeblood of Kentucky agriculture, and they described KADB's support of intermediaries as a way to increase the Fund's reach across the state as an effective strategy. A clear need to continue and expand investment and technical assistance for small farms was noted across the interviews and survey responses.

In addition, as illustrated in the estimated impacts on key sectors sections above, Project funds support an array of commodities that contribute to Kentucky's agricultural economy. In particular, during the evaluation period, Project funds heavily support the cattle industry, notably through the Meat Processing Improvement Program. While the Fund has supported horticulture, as the sector continues to grow, there are opportunities, such as supporting value-added processing in that sector, that will ensure producers are able to get their products to market, meet demand, and capture the highest possible value for those products.

Grantees' long-term financial independence and sustainability was another key concern raised by stakeholders, especially for the organizations that have received funding continuously over the lifetime of the Fund. In light of the declining sales from tobacco consumption, a more conservative approach to supporting recipients that receive repeat funding will contribute to the sustainability of the Fund.

In addition, there is a clear need to enhance transparency and communication with applicants regarding evolving KADB funding priorities. Stakeholders repeatedly mentioned uncertainty regarding how and why decisions were made by the Board. Having a clear set of public-facing evaluation criteria for Project applications would help applicants clearly understand Board priorities and design their proposals accordingly.



INTRODUCTION

In 2002, the KADB recommended that the Kentucky Agricultural Finance Corporation (KAFC) focus on meeting the agriculture sector's unique capital access needs by providing low-interest loans to support beginning farmers, agricultural diversification, and infrastructure projects. In 2003, KAFC was awarded \$20 million from the KADB to establish a loan fund, and has received additional funding each year.

Over the last two decades, KAFC has played a critical role in providing producers and processors access to low-interest capital, and has demonstrated its tremendous value in Kentucky's agricultural sector. KAFC provides five distinct loan programs: Agricultural Infrastructure Loan Program, Agricultural Processing Loan Program, Beginning Farmer Loan Program, Diversification Through Entrepreneurship in Agribusiness Loan Program and the Large/Food Animal Veterinary Loan Program.

The KAFC loan program is administered in close partnership with a network of lending organizations (such as agricultural lenders, agricultural credit associations and banks) across the state. Interested applicants begin their KAFC loan application process by working with a partner lender and once they are approved for a loan with said lender, the lender applies for KAFC funds on behalf of the borrower. Once approved by KAFC for a loan, borrowers must identify a mentor who will support the borrower's business plan objectives and meet with the borrower at least once a year during the term of the loan.

During the 7 year evaluation period, KAFC provided over \$140 million in loans to producers across the state. The geographic distribution of lender partners across the state makes the loan fund more accessible, and leverages local trusted partnerships between farmers and lenders.

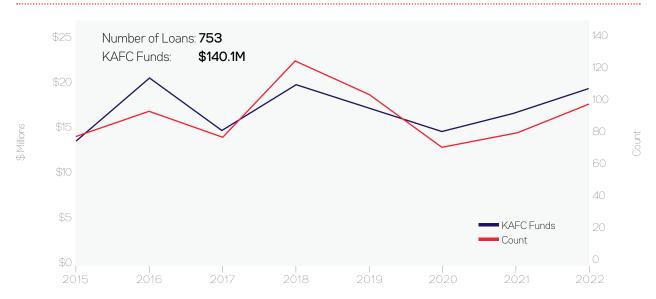
METHODOLOGY

In order to analyze KAFC investments between 2015 and 2022, KK&P examined loan data, disseminated surveys, and conducted interviews. KOAP shared data on KAFC investments, including net worth of the business receiving the loan, the partner lender that pre-approved the loan, type of loan by KAFC program (Beginning Farmer Loan Program, etc.), size of loan, and the agricultural enterprise type (grain, poultry, horticulture, etc.). KK&P developed two distinct surveys to understand the impact of KAFC investments and the experience of administering and/or accessing investment. One survey was for KAFC lenders and one for KAFC borrowers who engaged with the Fund between 2015 and 2022. Surveys were distributed online only by KOAP staff and remained open for approximately 5 weeks during October and November 2024. Interviews were conducted by the evaluation team to complement and enhance survey findings, and interviewees included current and past KOAP staff, KAFC board members, and KAFC lenders.



FINDINGS

KAFC INVESTMENTS 2015-2022



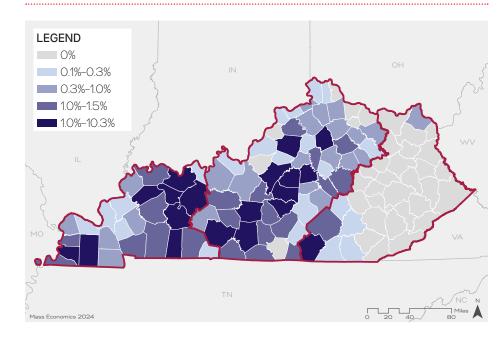
Notes: data exclude all loans with a "withdrawn, denied, or expired" status and also records with \$0 loan value; All dollar values reported in constant 2022 \$ Source: KAFC Data, 2015-2022; Mass Economics analysis

ANALYSIS OF INVESTMENTS

Between 2015 and 2022, KAFC awarded \$140.1 million across 753 loans to 704 unique borrowers. This represents a substantial increase, 41% increase in the number of loans and a 120% increase in the value of the loans from the prior evaluation period, where KAFC approved a total of 533 loans and committed over \$63.5 million to borrowers. On an annual basis, between 2015 and 2022, the total number of loans ranged from a low of 75 loans in 2020 to a high of 128 in 2018. The total dollar amount of loans disbursed annually ranged from a low of \$14 million in 2015 to a high of \$21 million in 2016.

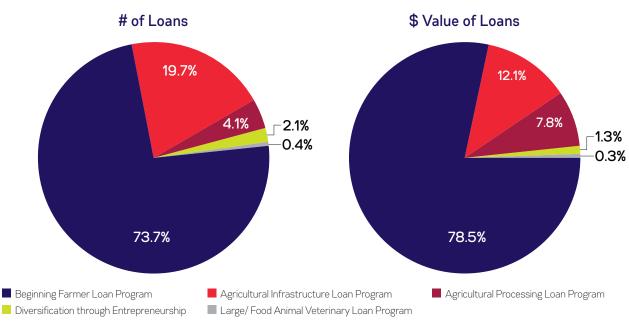
Over the 7-year evaluation time period, 56 unique lenders partnered with the KAFC to provide loans, with the top 2 lenders– Farm Credit and Central Kentucky Ag Credit–representing half of the total loans made. Poultry (40%), beef (23%), and grain (16%) enterprises received the largest share of loaned dollars, almost 80% of which were distributed via the Beginning Farmer Training Program. Producers in 85 counties received at least one loan, meaning that in 35 Kentucky counties, no producers received loans. Over half (\$78.7 million) of the loan fund's total value (\$140.1 million) between 2015 and 2022 was received by producers in 20 counties. The majority of funding distributed through KAFC loans went to agriculture businesses in Central (52%) and Western (43%) Kentucky, while Eastern Kentucky businesses received only 5% of all loan funds disbursed

SHARE OF KAFC FUNDING ACROSS THE STATE, 2015-2022



As illustrated in the charts below, a vast majority of loans supported producers of Poultry (39.5%), followed by Beef (23.1%), and Grain (16.4%) projects, for a combined total of almost 80% of total loans awarded and an aggregate amount of \$110.7 million. The KOAP uses "Enterprise Type" as a way to categorize the various loans by subsectors. It's important to note this categorization is not used across the many facets of the KADF, nor is it consistent with the categorization utilized by the USDA Agricultural Census or the Bureau of Labor Statistics.

KAFC LOAN TYPE BY NUMBER & VALUE OF LOANS



Notes: data exclude all loans with a "withdrawn, denied, or expired" status and also records with \$0 loan value; From 2015 to 2022, there were no transfers from KADB, New Agriculture Enterprise Loan Program, Producer Accelerated Payment Program, or Coordinated Value-added Assistance Loan Program awards; All dollar values reported in constant 2022 \$. Source: KAFC Data, 2015-2022; Mass Economics analysis

The table that follows illustrates the distribution of KAFC loans by type of loan and by enterprise type. Notably, the lion's share of Beginning Farmer Loan Program (41%) and Agricultural Infrastructure Loan Program (58%) loans went to enterprises in the Poultry industry, while Micro Processors received 48% of the Agricultural Processing Program loans.

KAFC LOANS BY ENTERPRISE SUMMARY, 2015-2022

Enterprise	Count Share	Count, 2015-2022	\$ Value, Share	\$M Value (2022 \$)	Avg Value, \$K (2022\$)
Poultry	31.5%	237	39.5%	\$55.3	\$233
Beef	29.7%	224	23.1%	\$32.4	\$145
Grain	15.9%	120	16.4%	\$23.0	\$192
Forage	3.1%	23	2.3%	\$3.2	\$138
Tobacco	2.9%	22	2.0%	\$2.7	\$124
Micro Processor	2.4%	18	3.9%	\$5.5	\$304
Lamb/Goat	2.3%	17	1.8%	\$2.6	\$151
Dairy	2.1%	16	1.7%	\$2.4	\$148
Swine	1.9%	14	2.7%	\$3.8	\$268
Equine	1.9%	14	2.0%	\$2.8	\$200
Horticulture	1.5%	11	0.7%	\$1.0	\$95
Agribusiness	1.5%	11	0.9%	\$1.2	\$111
Vegetables	1.2%	9	0.7%	\$1.0	\$112
Agritourism	0.8%	6	0.6%	\$0.9	\$145
Ag Processing	0.7%	5	1.1%	\$1.5	\$305
Veterinary	0.4%	3	0.3%	\$0.4	\$138
Timber	0.3	2	O.1%	\$0.2	\$76
Aquaculture	O.1%	1	0.2%	\$0.3	\$266
Total KAFC Loans	100.0%	753	100.0%	\$140.1	\$186

Notes: data exclude all loans with a "withdrawn, denied, or expired" status and also records with \$0 loan value; From 2015 to 2022, there were no loans to Turkey or Winery enterprises; All dollar values reported in constant 2022 \$.

Source: KAFC Data, 2015-2022; Mass Economics analysis

ENTERPRISE TYPE BY PROGRAM, \$ VALUE, 2015-2022

Enterprise/ Type	Begining Farmer Loan Program	Agricultural Infrastructure Loan Program	Agricultural Processing Loan Program	Diversification through Entrepreneurship	Large/Food Animal Veterinary Loan Program	Total
Poultry	41%	58%	0%	0%	0%	39%
Beef	27%	7%	11%	0%	0%	23%
Grain	16%	15%	24%	14%	0%	16%
Forage	3%	1%	0%	2%	0%	2%
Tobacco	2%	3%	0%	0%	0%	2%
Micro Processor	0%	0%	48%	14%	0%	4%
Lamb/Goat	2%	0%	0%	0%	0%	2%
Dairy	1%	7%	0%	0%	0%	2%
Swine	3%	1%	0%	0%	0%	3%
Equine	2%	1%	0%	0%	0%	2%
Horticulture	0%	1%	2%	45%	0%	1%
Agribusiness	1%	2%	0%	2%	0%	1%
Vegetables	1%	<1%	0%	0%	0%	1%
Agritourism	0%	4%	0%	15%	0%	1%
Ag Processing	0%	0%	13%	3%	0%	1%
Veterinary	0%	0%	0%	0%	100%	0.3%
Timber	0%	<1%	0%	7%	0%	O.1%
Aquaculture	0%	0%	2%	0%	0%	0.2%
Total	\$110.0	\$16.9	100.0%	\$1.8	\$0.4	\$140.1

In the sections that follow, evaluation findings for each KAFC loan program type are described in more detail.

BEGINNING FARMER LOAN PROGRAM (BFLP)

BFLP supports individuals with farming experience who seek to develop, expand, or buy into a farming operation. KADF uses the following language to define a Beginning Farmer:

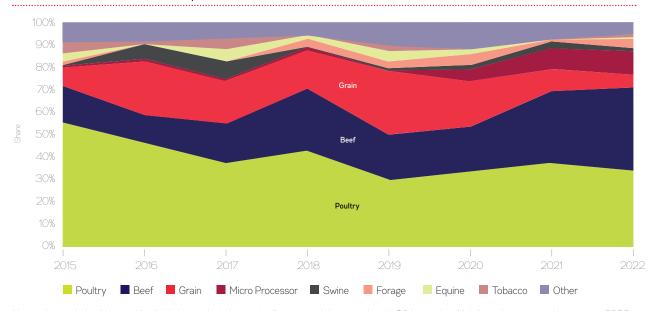
- 1. Has not owned a farm or ranch for more than 10 years (deeded in name)
- 2. Has participated in the business operation of a farm for at least three years
- 3. Will be substantially participating in the proposed operation

Eligible projects include purchases of livestock, equipment, agriculture facilities, and real estate; securing working capital; or investing into a partnership or LLC.

BFLP is the largest program within KAFC, accounting for 74% of the total value of all loans given out between 2015 and 2022, or \$110 million. The median net worth of farmers who received one or more loans through the BFLP was \$293,557 over the 7-year evaluation period. Over the same time period, the

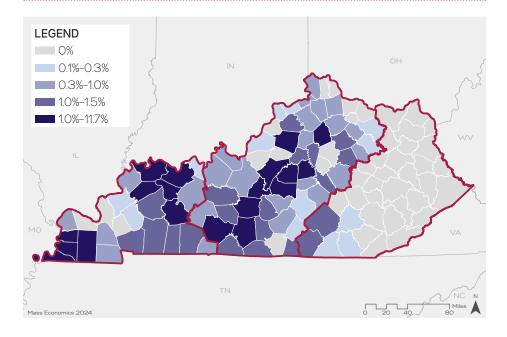
majority of loans from BFLP supported Poultry (\$45.5 million), Beef (\$30 million), and Grain (\$17.6 million) enterprises. BFLP has grown significantly as a share of the KAFC Loan Program over all—during the prior evaluation period (2007-2014), the program accounted for only 47% of the total loans distributed. BFLP loans were disbursed in 76 out of 120 Kentucky counties, the majority (71) of which in the western and central subregions. Of the BFLP loans awarded during the evaluation period, 83% were used to purchase agricultural land.

KAFC: ENTERPRISE SUMMARY, 2015-2022



Notes: data exclude all loans with a "withdrawn, denied, or expired" status and also records with \$0 loan value; All dollar values reported in constant 2022 \$; "Other" includes 10 smaller enterprise types, none of which made up over 5% of the total in any year. Source: KAFC Data, 2015-2022; Mass Economics analysis

GEOGRAPHIC DISTRIBUTION OF BEGINNING FARMER LOAN PROGRAM RECIPIENTS, 2015-2022



AGRICULTURAL INFRASTRUCTURE LOAN PROGRAM (AILP)

AlLP supports producers by providing access to below market financing for the acquisition, renovation, and construction of agricultural structures that enhance the profitability of their farming operations.

During the evaluation period, AILP was the second largest of KAFC's loan programs, and accounted for 12% of total loans given, or \$16.9M. Poultry (68) and Grain (25) enterprises receive the most loans in AILP, followed by Beef (17), Dairy (10), and Tobacco (10). Between 2007 and 2014, AILP accounted for 33% of the loans for a total of \$20M distributed. AILP loans were disbursed in 50 out of 120 Kentucky counties, the majority (48) of which in the western and central subregions.

AGRICULTURAL PROCESSING LOAN PROGRAM (APLP)

APLP supports individuals and companies interested in adding value to Kentucky-grown agricultural commodities through further processing. APLP is the third largest KAFC program and accounts for 8% of total loans given, or \$10.9 million. APLP disbursements have increased in value compared to \$8.4 million during the prior evaluation period (2007-2014) but decreased as a share of the KAFC Loan Program, previously accounting for 14% of the total KAFC loan amount. APLP loans were disbursed in 25 out of 120 Kentucky counties, the majority (23) of which in the western and central subregions.

DIVERSIFICATION THROUGH ENTREPRENEURSHIP IN AGRIBUSINESS LOAN PROGRAM (DEALP)

DEALP supports agricultural entrepreneurs with the purchase, establishment or expansion of a business that sells agricultural products or services to farmers or consumers. Only 16 projects received loans from DEALP between 2015 and



2022, for a total of 1.8M. DEALP disbursements have increased in value from \$489 K during the prior evaluation period (2007-2014). DEALP loans were disbursed in 13 out of 120 Kentucky counties, all in the western and central subregions.

LARGE/FOOD ANIMAL VETERINARY LOAN PROGRAM (LFAVLP)

LFAVLP supports individuals licensed to practice veterinary medicine who seek to construct, expand, equip, or buy into a practice serving large animal producers, including goat, sheep, swine, and other food animals. LFAVLP is the smallest of KAFC's loan programs with only 3 projects receiving loans between 2015 and 2022, for a total of approximately \$400,000. The LFAVLP loan amount declined from nearly \$1 million during the prior evaluation period (2007-2014). LFAVLP loans were disbursed in 3 out of 120 Kentucky counties, one in each of the western, central, and eastern subregions.

SURVEY + INTERVIEW RESULTS

The evaluation team developed two surveys focused on the KAFC loan programs, one for lenders and one for borrowers. KOAP staff developed the contact list, and the table below describes the outreach range and response rate. The relatively low response rate from borrowers (11%) was anticipated, as borrowers are a step removed from the Fund (they work with their lenders, and the lenders work directly with the KAFC). Notably, the borrower response rate increased meaningfully in comparison with the prior evaluation (3%).

Survey Audience	Survey Responses	Contacted	Response Rate			
KAFC Lender	30	56	54%			
KAFC Borrower	77	724	11%			

LENDER SURVEY RESPONDENT CHARACTERISTICS

The evaluation team received 30 responses to the KAFC lender survey, with 21 unique counties across Kentucky represented. A majority of respondents (68%) are located in Central Kentucky counties, 37% Western Kentucky counties, and only 3% in Eastern Kentucky. Of respondents, 53% identified as an agricultural lender, 50% as a bank, and 37% as Agricultural Credit Associations; over 40% of respondents identified as more than one lender type. Most respondents had provided loans to borrowers through the Beginning Farmer Loan Program (93%) or through the Agricultural Infrastructure Loan Program (74%), as expected since those two programs comprise the largest share of loans awarded in the evaluation period. A notably smaller share of respondents had approved loans through the Diversification Through Entrepreneurship in Agribusiness Loan Program (15%), Agricultural Processing Loan Program (11%), and Large/Food Animal Veterinary Loan Program (4%). About three quarters of lender respondents had worked with 2 or more of the KAFC loan programs (52% with two programs, 26% with three programs), while only about a quarter of lender



respondents had provided loans through only 1 program. The majority of survey respondents reported that their organizations have worked with KAFC for 6 or more years (70%), with the remaining 30% having provided their first loan in partnership with KAFC within the past five years. Nearly half of respondents (49%) provided between 6 and 15 loans in partnership with KAFC since 2015, 33% provided between 1 and 5, and 19% had provided over 16 loans with KAFC over the 7 year evaluation period.

The geographic distribution of lenders represented in survey responses closely aligns with that of the total lender pool distribution by geography with the majority of lenders based in western and central Kentucky.

BORROWER SURVEY RESPONDENT CHARACTERISTICS

The evaluation team received 77 responses to the KAFC Borrower survey (11% response rate), from borrowers from 18 counties across Kentucky (21% of 85 counties from which KAFC borrowers hailed). Survey responses were over-representative of Central Kentucky compared to the total KAFC borrower population: 60% of respondents are located in Central Kentucky counties (compared with 52% of total borrowers), 35% of respondents are based in Western Kentucky counties (compared with 43% of total borrowers), and only 5% are located in Eastern Kentucky (4% of total borrowers). The majority of respondents received a Beginning Farmer loan (62%), over one quarter (26%) received an Agricultural Infrastructure loan, and minority received loans through the Diversification Through Entrepreneurship in Agribusiness Loan Program (6%), Agricultural Processing Loan Program (4%), or Large/Food Animal Veterinary Loan Program (1%). 92% of respondents identified as a farm, and the remaining 8% as other types of businesses including processors. Most respondents' businesses (62%) are relatively well established, having been in operation for over 6 years. Just over one-third (38%) have been in business for 5 years or less, with half of these respondents from businesses less than 2 years old.

The survey received a greater proportion of responses from Agricultural Infrastructure Loan Program (AILP) and Diversification Through Entrepreneurship in Agribusiness Loan Program (DEALP) participants and a lower proportion of Beginning Farmer Loan Program (BFLP) participants compared to the total borrower pool.

59% of borrower respondents received loans larger than \$150,000, nearly 30% between \$75,000 and \$150,000, and about 12% had received loans smaller than \$75,000.

Compared to the borrower pool over all, the evaluation team received the survey responses from a larger proportion of grain enterprises and a smaller proportion of beef and poultry enterprises.

It is important to acknowledge that in this evaluation, surveys were targeted to lenders who partner with KAFC and borrowers who have successfully received loans and did not include the perspectives of applicants who were denied loans, likely contributing to a bias toward positive feedback.

KEY THEMES

Both lenders and borrowers believe KAFC has played a critical role in providing producers and processors with much-needed access to low-interest capital.

- Nearly all (98%) borrower respondents reported that the KAFC loan they
 received was a critical piece of financing for their project and 94% reported
 that KAFC loan funds enabled them to leverage additional funds for their
 project.
- Lenders agreed that KAFC has had a significant impact on the state's farming community, with 89% of lender respondents reporting that the program helped borrowers become more financially viable. Stakeholder interviews highlighted the particular benefits for beginning farmers and farmers in specific sectors like poultry.
- Lenders survey respondents overwhelmingly reported (70%) that their partnership with the KAFC loan program has helped them to lend to a more diverse and wider range of borrowers. All lender respondents (100%) reported their borrowers through KAFC were younger compared to their standard loans.
- Stakeholder interviews reaffirmed widespread appreciation for the program and its importance.

66 This is the best thing in the Kentucky government. KAFC is critical to the sustainability of farming in KY."

Borrowers reported that the primary impact of a KAFC loan was strengthening their operations' overall financial position. Many also reported that the loan catalyzed innovation and product development within their business.

- 95% of borrowers reported that loans made in participation with KAFC are a unique opportunity to access capital. 64% of borrower survey respondents reported that the KAFC loan program has helped them to increase farm income.
- 58% reported that the KAFC loan program has helped their business become more selfsustaining.
- 66 The low interest rate available for my KAFC loan has been a tremendous help to me over the last 11 years as I have paid for my farm purchase. Thanks to KAFC I was able to finance a 15 year term and I am now less than 4 years away from a complete payoff."
- 39% of survey respondents reported that the KAFC loan program has helped their business innovate and explore new opportunities.
- In interviews, stakeholders noted that while the loan programs are critically important to those who can access them, the fact that farmers have to be pre-approved by a traditional lender can be an obstacle to accessing loans through KAFC.

66 Make it easier for part time/ small farmers to receive funding."

Lenders reported that partnership with the KAFC loan program has increased their ability to work with a more diverse set of borrowers and to take more risks than they would alone. Still, they indicated that the loan program could more effectively support smaller and more niche producers.

- A majority of lenders (70%) reported that KAFC allowed them to work with a more diverse set of producers and processors than they would have alone.
- Nearly a quarter of respondents said KAFC helped their organization to increase its geographic footprint (22%) and stimulate new markets (22%).
- Despite a majority of lenders reporting that KAFC has helped them serve relatively smaller enterprises (72%) compared to their standard

to be some funding for beginning farmers going from 0 to 5 cows. It is much harder to get from 0 to 5, than 5 to 10."

- loans, several lenders noted the program could even more effectively reach smaller and more niche producers.
- Over half of respondents (52%) reported that partnering with KAFC helps them to meet their own institution's impact goals.

Lenders believe that low interest rates are by far the most important component of continued engagement with the program. Borrower responses also emphasized the importance of low interest rates.

- All lender respondents reported that the low interest rates currently provided by KAFC were among the top two most important components to their continued engagement with the program.
- Loan terms (44%) and the amount of funding available (41%) were the next most popular components of the program among lenders.

The low interest loan from KAFC really helped my business get off the ground and succeed!"

for the mentorship program needs to be revised. The idea of having a mentor is good but no one has the time to check in and do the paperwork."

Generally, lenders believe the idea of a mentorship program has utility, but noted the current structure should be revised.

 Lenders believe the mentorship program is well-intentioned but face barriers to implementation including the administrative burden of reporting. In addition, many loan recipients have pre-existing, informal mentorship relationships with family members and do not align with the current structure.

The KOAP team has developed a clear and easily navigable loan program.

- All lender survey respondents agree that KAFC's criteria and reasons for approval or rejection of loan applications are clear to them, and that the process of working with the KAFC loan program is simple and accessible for lenders. The vast majority (95%) of borrowers reported that KAFC's criteria and reasons for approval or rejection of loan applications is clear to borrowers.
- One-quarter (25%) of lender respondents said ease of administration was one of the two most important components for engaging with the program behind low interest rates, loan terms, and the amount of funding available.

66 [The loan program has been] very easy and straightforward to work with."

Higher risk investments could broaden KAFC's impact without affecting the integrity or sustainability of its efforts.

Interviewees emphasized that in recent years, KAFC has become more risk-averse and historically has only had two borrowers default on their loans (and these defaults occurred outside of this evaluation period). Interviewees suggested that given this success historically, KAFC could take on riskier investments, allowing for more producer innovation in new markets, with new products, and in adopting new technologies. Interviewees predicted that high risk investments, even if they incurred some losses, would be likely to positively augment KAFC's impact on producers' gross income and, more broadly, on the Kentucky agricultural economy.



SUMMARY + STRATEGIC DIRECTION

Lenders overwhelmingly reported the KAFC loan program is vital to the growth and sustainability of Kentucky agriculture. Moreover, the loan program has been instrumental in helping young and beginning farmers enter into agriculture despite high capital costs and other barriers, with the low interest rate as a critical component of making the funds available. A majority of lender partners have a high level of satisfaction in working with the KAFC loan program and believe the Board and KOAP have created a structure that is both accessible and transparent to both lenders and borrowers. Due to limited regional representation in the survey respondent pool, the findings regarding lender experiences in eastern Kentucky may not be fully representative.

While there is consensus among lenders that the loan program effectively supports beginning farmers, some lenders would like to see more of a focus on smaller farmers and those in niche agricultural sectors to enhance KAFC impact. Lenders expressed enthusiasm for the mentorship program's potential to provide valuable guidance to borrowers. However, they emphasized the need for a clear structure and defined parameters to ensure meaningful engagement for both mentors and mentees.

Overall, borrowers shared the lenders' overwhelming appreciation for KAFC. Across loan programs, and enterprise type and scale, Kentucky farmers who have received KAFC loans believe the opportunities to access capital through KAFC are unique and invaluable to their businesses. According to participating farmers, access to low-interest loans has significantly improved their financial stability and profitability.

Several respondents requested increased loan limits to address rising costs and to allow for larger more ambitious projects; others emphasized that they would like to see longer loan terms, such as 25 years, for a more manageable repayment schedule. Two key points of emphasis among lenders and borrowers was maintaining low interest rates and streamlining the loan application process for a smoother borrower experience.



INTRODUCTION

66 "We have seen an incredible impact on the state's farm economy due to the KADF. As an organization that works across multiple states with other programs, Kentucky has by far the most robust farm support ecosystem in comparison to surrounding states. The Fund has had a significant impact on the farmers we work with and has enhanced our technical service to small farms."

- KADF Project Funds Recipient

In order to contextualize trends in the agricultural landscape in Kentucky, the evaluation team conducted an analysis of peer states. This peer state analysis seeks to provide a benchmarking approach that situates Kentucky's agricultural sector change with trends that are occurring regionally and nationwide.



METHODOLOGY

The evaluation team approached the identification of peer states by examining the following three components across states in the contiguous U.S.: history of tobacco production; commodity sales profiles; and food segment profiles. As discussed throughout this report, tobacco production has been an integral part of Kentucky's agricultural landscape and remains an important crop both culturally and economically today. As such, the evaluation team's approach was to identify states with a similar history and trajectory of tobacco production, using USDA Census of Agriculture data, dating back to the last Census before the Tobacco Master Settlement in 1997. In addition, in order to contextualize the broader agricultural diversity across the state and to find states with similar commodity production, the evaluation team analyzed sales from 24 commodities in 2022 and 17 commodities in 20021 to identify states with similar histories of commodity sales. Lastly, the evaluation team examined food segment profiles using data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages. Food segment profiles look at employment in various components of the agricultural economy from crop production and animal production to food and beverage manufacturing to farm support activities (such as prepping, planting and harvesting), which helps to identify similar states from a broader food economy standpoint. The evaluation team combined these three measures to examine states across the U.S. and create a more holistic and robust approach to identification of peer states.

¹ The lower number of commodities in 2002 reflects the change in how commodities were categorized over time; for example Grain encompasses a larger number of commodities in 2002 and later those were broken out into their own categories.



HISTORY OF TOBACCO

Tobacco has long been a critical driver of the agricultural economy in Kentucky, an important source of income for producers, and provided the state with an infrastructure base on which agricultural diversification could occur. In 1997, just before the Master Settlement Agreement, according to data from the USDA Census of Agriculture, Kentucky, Tennessee, and North Carolina (together) were home to 80% of all of the nation's tobacco farms. Kentucky alone made up half of those farms. Over half (>51%) of all farms in Kentucky grew tobacco, giving the state the highest concentration of tobacco farms in the nation. At that time, tobacco sales accounted for almost 26% of all agriculture sales in Kentucky. North Carolina and Kentucky alone accounted for two-thirds of all tobacco sales in the U.S. When combined with the two states that had the next highest tobacco sales, Tennessee and South Carolina, the four states together accounted for 80% of agricultural sales of tobacco across the US. Therefore, from the historical perspective of the importance of tobacco production and sales as part of an agriculture economy, North Carolina, Tennessee and South Carolina emerge as peers to Kentucky.

PEER STATE SELECTION: TOP 10 STATES BY 1997 TOBACCO FARMS, SALES

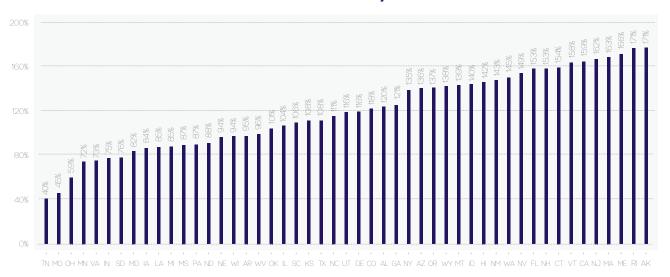
State	Tobacco Farms	Tobacco Farms as % of All Farms	Tobacco Farm LQ	% of U.S. Tobacco Farms	State Rank, % of U.S. Tobacco Farms	Tobacco Sales (\$M)	Tobacco Sales as % of All Sales	Tobacco Sales LQ	% of U.S. Tobacco Sales	State Rank, % of U.S. Tobacco Sales
NY	12,600	21.3%	5.0	13%	3	\$1,126	14.4%	9.9	39%	1
KY	46,800	51.3%	12.2	50%	1	\$820	25.9%	17.9	28%	2
SC	1,400	5.4%	1.3	2%	8	\$212	12.6%	8.7	7%	3
TN	15,500	17.0%	4.0	17%	2	\$191	8.4%	5.8	7%	4
VA	6,100	12.3%	2.9	6%	4	\$186	7.8%	5.4	6%	5
GA	1,300	2.5%	0.6	1%	9	\$149	2.9%	2.0	5%	6
CT	80	1.7%	0.4	0%	15	\$54	12.4%	8.6	2%	7
ОН	2,800	3.6%	0.8	3%	5	\$34	0.7%	0.5	1%	8
IN	2,100	3.2%	0.7	2%	6	\$30	0.6%	0.4	1%	9
PA	1,500	2.5%	0.6	2%	7	\$27	0.6%	0.4	1%	10
U.S	93,300	4.2%	NA	NA	NA	\$2,923	1.5%	NA	NA	NA

KY, TN, and NC were home to 80% of all tobacco farms in 1997 and KY alone made up half
Over half (>51%) of all farms in KY grew tobacco, giving the state the highest tobacco farm LQ (12.2)
Tobacco sales accounted for almost 26% of all sales in KY (also the highest LQ in tobacco sales of 17.9)
NC and KY alone accounted for two-thirds of U.S. tobacco sales and adding TN and SC brought the total to 80%
Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

COMMODITY SALES PROFILES

The second component of the research team's approach to identifying potential peer states included using USDA Census of Agriculture data to examine the total state sales across 24 agricultural commodities for each state in 2022 and 17 commodities in 2002. The team examined the difference in each state's commodity sales from Kentucky's sales, combining data from both 2002 and 2022, and then ranked the states based on how similar their commodities sales

Difference from KY's Commodity Sales Profile, 2022



Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

were. For example, top commodities sales for Kentucky included poultry, corn, soybeans, cattle, and equine, therefore states with similar top commodities ranked closest to Kentucky.

The graph above illustrates the ranking of states based on the difference in their commodity sales from Kentucky for 2022. Combining the rankings from 2002 and 2022, Tennessee, Ohio, Missouri and Virginia were the most similar to Kentucky.



FOOD SEGMENT PROFILES

As a complement to the commodity sales profiles, this component of the research sought to identify potential peer states by examining food cluster segment profiles. Using the Bureau of Labor Statistics Quarterly Census of Employment and Wages, the evaluation team analyzed employment across 28 food cluster segments for each state. As illustrated in the table below, food cluster segments range from crop production and animal production to farm product wholesalers and beverage wholesalers. Examining employment across these segments helps to identify similar states from a food economy standpoint.

FOOD CLUSTER: SUBCLUSTERS AND SEGMENTS

Subcluster	Segment
Crop Production	Crop Production
Animal Production	Animal Production
Fishing and Hunting	Fishing and Hunting
Farm Support Activities	Prepping, Planting, Harvesting
	Farm Management and Labor Contractors
	Supports
Food & Beverage	Animal Food Manufacturing.
Manufacturing	Baked Goods
	Beverages
	Candy and Chocolate
	Dairy Products
	Meat, Poultry and Seafood Processing
	Milling & Refining
	Packaged Fruit and Vegetables
	Specialty Foods and Ingredients

Subcluster	Segment					
Other Food Related	Fertilizers & Agricultural Chemicals					
Manufacturing	Food-related Equipment, Tools & Machinery					
	Food Packaging					
Food-Related Distribution	Farm Product Wholesalers					
	Food Equipment Distribution Warehousing and Storage					
	Grocery and Related Product Wholesalers					
	Beverage Wholesalers					
Food Retail	Primary Food Retail					
	General Retail Including Food					
Food Services	Full Service					
	Limited Service					
	Other Services					

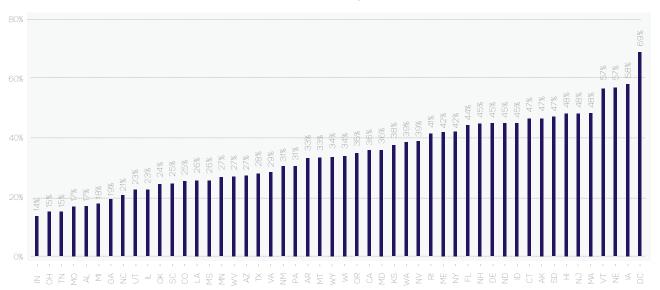


The evaluation team analyzed the difference in each state's employment across the food cluster segments and compared them to Kentucky's, for both 2002 and 2022, and ranked the states. The graph below illustrates this ranking for similar food cluster segments from 2022.

Combining the rankings from 2002 and 2022, Indiana, Tennessee, Ohio, Texas and Tennessee were the most similar to Kentucky. Looking at the commodity sales profiles and the food cluster segments, Tennessee and Ohio were very similar and emerged as strong peers.

PEER STATE SELECTION: MOST SIMILAR FOOD SEGMENT PROFILE, 2022

Difference from KY's Food Cluster Segment Jobs Share Profile, 2022



Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

PEER STATES

Of the top six states that had similar profiles, the evaluation team identified Tennessee, Virginia, and North Carolina as the strongest agriculture sector peers. In addition, Ohio was chosen as a peer state given its strong agricultural profile and food cluster similarities. Indiana and Missouri were not chosen as they were not as strong peer states and to limit the number of states for the comparative analysis.

PEER STATE SELECTION: SUMMARY

State	Tobacco 1997	Ag Sales Profile 2022	Ag Sales Profile 2002	Food Cluster Segment Profile 2022	Food Cluster Segment Profile 2002	Food Cluster Segment LQ Profile 2022	Food Cluster Segment LQ Profile 2002	Count Top 5
TN	Х	Х	Х	X	Х	X	Х	7
ОН		Х	Х	X	Х	X	Х	6
IN		top 10		Х	Х	Х	Х	4
MO		Х	Х	Х	top 10		top 10	3
VA	Х	Х	Х		top 10		top 10	3
NC	Х			top 10		X	top 10	2
AL				Χ	X	top 10		2
TX					X	top 10	Х	2
SC	Χ				top 10	top 10	top 10	1
MN		Х	top 10					1
LA		top 10	Х		top 10			1
CO						Χ	top 10	1
OK			top 10				Х	1
GA	Х			top 10		top 10		1

Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

FINDINGS

Small farms are the lifeblood of Kentucky, underscoring the importance of intermediaries and county-level funding to support smaller producers across the state.

According to USDA Census of Agriculture data from 2022, Kentucky has over 60,000 farms, the second highest number of farms and farms per square mile compared to peer states. In addition, Kentucky has a high percentage of acreage in production compared to the state's total agricultural acreage, ranking second across peer states with almost half (49%) of the state's land in agriculture. The average size of a farm in Kentucky is 179 acres, less than half the average nationally, and 37% of Kentucky farms are between 50 and 179 acres. As these statistics highlight, Kentucky is an agricultural state comprised of many farms and small farms.

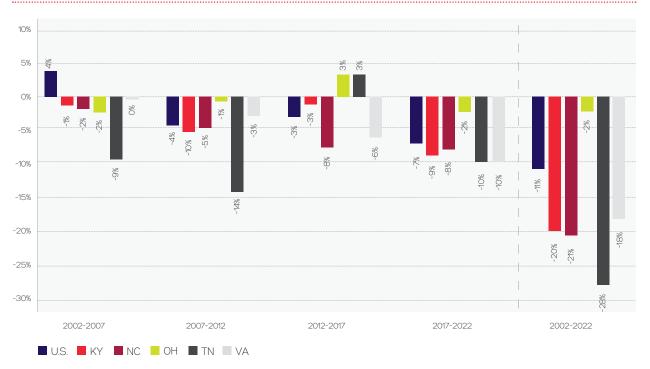
PEER STATES: FARMS, FARMED ACREAGE

Geography	Farms, 2022	Farms/Sq. Mi., 2022	Farmed Acres (M), 2022	Farmed Acres % of Total, 2022	Avg. Farm Acres, 2022
U.S	1,900,500	0.5	880.1	39%	463
KY	69,400	1.8	12.4	49%	179
NC	42,800	0.9	8.1	26%	190
ОН	76,000	1.9	13.7	52%	180
TN	63,100	1.5	10.7	41%	170
VA	39,000	1.0	7.3	29%	187

Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

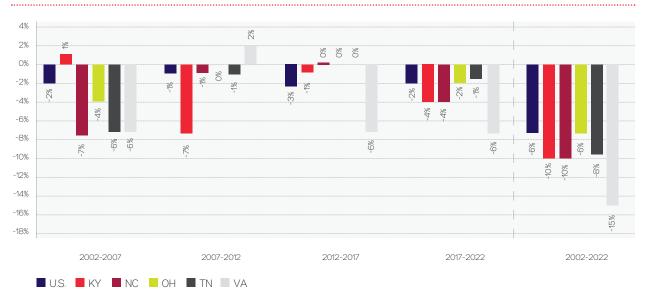
Nevertheless, when examining farm growth (in terms of number of farms) and farm acreage growth across peer states over time, Kentucky has experienced a decline over the last two decades. While consolidation in farming has led to a decline in both the number of farms and the number of acres in production as evidenced by the U.S. trend line, Kentucky's decline has been almost double that experienced by the nation as a whole– and it has been similar to or more severe than most peer states. Supporting small farmers' ability to stay in farming, through educational training, technical assistance, and access to capital, is critical to the ongoing agricultural economy of Kentucky.

FARM CHANGE (# OF FARMS)



Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

FARMED ACREAGE CHANGE



Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

Kentucky has cultivated a number of agricultural strengths and when compared to peer states. Horticulture and vegetable production present potential opportunities.

Over the past 20 years, Kentucky, compared to its peers, has seen significant sales growth in specialty animals, grains, other field crops (sorghum, rye, oats, etc.), fruits, berries and tree nuts, and vegetables. For other commodities, in particular milk and horticulture (narrowly defined as cut flowers, floriculture and other non-vegetable production), the state has seen a decline that outpaces peer states.

PEER STATES: COMMODITY SALES GROWTH

		Grow	rth 2002-2	2022 (202	22 \$)	
	U.S.	KY	NC	ОН	TN	VA
Specialty Animals	45%	2,440%	-51%	94%	25%	-5%
All Grains	160%	268%	224%	203%	224%	228%
Other Field Crops	56%	156%	87%	24%	127%	45%
Fruits, Berries, + Tree Nuts	53%	136%	116%	25%	171%	117%
Vegetables	36%	104%	99%	-8%	53%	4%
Poultry (+ Eggs)	96%	96%	138%	171%	84%	83%
Hogs	80%	82%	16%	197%	76%	34%
Sheep + Goats	28%	78%	78%	104%	83%	53%
Cattle	22%	7%	2%	34%	-3%	-9%
Aquaculture	23%	7%	12%	168%	13%	266%
Equine	4%	-8%	-18%	50%	-48%	-60%
Milk	60%	-33%	-7%	48%	-60%	-21%
Horticulture	-11%	-35%	-13%	-13%	-6%	12%
Tobacco	-63%	-66%	-51%	-90%	-69%	-62%
Cut Christmas Trees + Short Term Woody Crops	-15%	-80%	32%	-26%	-85%	63%
Cotton, Lint + Seed	0%	NA	50%	NA	6%	141%
Total Sales	66%	60%	65%	122%	44%	43%

Notes: Commodities that grew faster than the U.S. shaded in green; Table sorted by KY Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

As of 2022, Kentucky had a high concentration of equine, tobacco, and specialty animals, followed by soybeans and poultry, compared to peer states. The table below illustrates how specialized peer states are in certain commodities, based on USDA Census of Agriculture sales data. As described previously, location quotients (LQs) are metrics used to describe a place's industrial specialization, where an LQ of 1 indicates the state is roughly on par with the nation as a whole. In the table below, Kentucky's specialization relative to its peer states is demonstrated. The boxes shaded in dark green represent the highest industry

concentrations or specializations. While many peer states share similar concentrations due to a similar physical landscape and regional agricultural profile, all of the peer states have higher concentrations in both horticulture and vegetables. In combination with the growth in horticultural sales the state saw between 2002 and 2022, these data suggest that there is room for increased growth and an opportunity for the Fund to prioritize investments in these two areas. Moreover, as discussed more below, the legacy of tobacco in Kentucky provides a foundational opportunity for producers in that arena to diversify into horticulture and vegetable production.

LOCATION QUOTIENTS (INDUSTRY STRENGTH) FOR SELECT COMMODITIES BY STATE

Commodity Sales LQs, 2022

State	Equine	Tobacco	Specialty Animals	Soybeans	Poultry (+ Eggs)	Wheat	Corn	Other Field Crops	Cattle	Sheep + Goats	Hogs	Horticulture	Milk	Vegetables
KY	22.2	15.5	6.1	1.7	1.6	1.2	1.1	0.9	0.8	0.8	0.4	0.3	0.3	0.1
NC	0.3	14.9	0.2	0.5	3.5	0.4	0.2	0.4	0.1	0.2	3.3	0.8	0.1	0.7
ОН	1.2	O.1	1.7	2.3	1.2	0.7	1.5	0.4	0.4	1.0	1.5	1.1	0.9	0.3
TN	1.5	7.7	0.7	1.8	1.5	1.4	0.8	0.9	0.9	1.2	0.4	2.1	0.2	0.6
VA	2.9	0.5	0.6	0.8	1.2	0.9	0.6	0.7	7.0	0.4	0.6	1.8	0.5	0.5

Notes: LQs > 1 shaded in light green; LQs > 2 shaded in dark green; Commodities in red text have zero sales

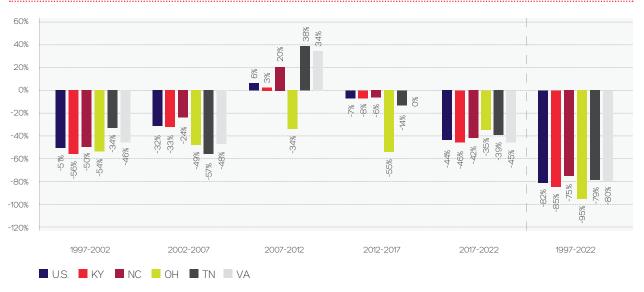
Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis



Among its peers, Kentucky had the highest historic concentration of tobacco agricultural production, has had the steepest shift away from tobacco, and retains the greatest specialization in tobacco.

While Kentucky has a high concentration of tobacco sales and the crop remains an important crop in the state economically and culturally, tobacco farming has declined significantly since 1997. A nationwide decline in tobacco consumption and increased competition from producers outside the U.S. have contributed to a decline in the price of tobacco and associated sales as illustrated by the U.S. trend line, and Kentucky has outpaced almost all peer states in diversifying away from tobacco. While tobacco production remains an area of agricultural concentration for Kentucky, interviewees mentioned many of these producers operate diversified farms with other crops or products in addition to tobacco. Tobacco remains an important cash crop for diversified farms and the crop has served as an economic engine keeping many diverse operations afloat.

TOBACCO SALES % CHANGE OVER TIME (1997 - 2022)

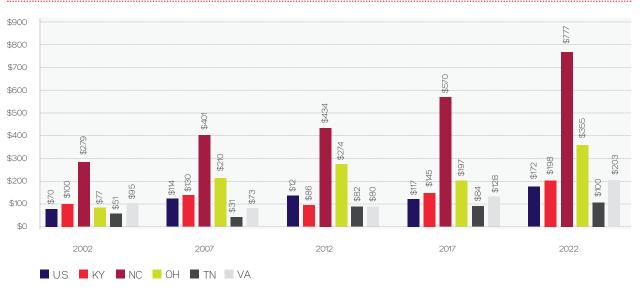


Source: dF-USDA Census of Agriculture, 1997-2022; Mass Economics analysis

Kentucky farm profitability exceeds the U.S. as a whole, but lags behind most peer states.

An important way to understand the strength of the agricultural economy is farm profitability. As illustrated in the table below, compared to peer states, Kentucky's profits per acre are much lower than most of its peers, especially when compared to North Carolina and Ohio. While profits per acre are lower than most peer states, Kentucky outpaced the national average and has increased substantially over the last two decades. Profitability is primarily impacted by the type of farm and how the farmland use, which are connected to growing conditions, producer experience, marketing opportunities, and other factors.

PEER STATES: PROFITABILITY - PROFITS / ACRE OPERATED, (2022 \$)



Source: dF-USDA Census of Agriculture, 2002-2022; Mass Economics analysis

SUMMARY + STRATEGIC DIRECTION

In order to contextualize KADF investments in Kentucky's agricultural economy, the evaluation team developed a robust methodological approach for conducting a peer state analysis. Tennessee, Virginia, North Carolina and Ohio emerged as peer states, and can continue to be used as a benchmark for understanding changes, in addition to challenges and opportunities, related to Kentucky agriculture.

Kentucky has created an agricultural economy built off the strength of small farms, with the second highest number of farms overall and farms per square mile compared to its peers. Continued investment in small farms is critical to the foundation of the state's agriculture.

While Kentucky has successfully diversified away from economic dependence on tobacco production, tobacco remains an important part of the culture and economy of Kentucky.

Lastly, the Fund has the opportunity to continue expanding investment in sectors of the agricultural economy that are poised for growth, including vegetable production and horticulture (a sector in which Kentucky does not currently lead in comparison with its peers).





In response to the findings synthesized in this report, seven recommendations follow, below. Each recommendation begins with an explanation of why the recommendation matters, how it connects to evaluation findings, broad recommended activities, initial steps to take to implement the recommendation, and identification of beneficiaries and anticipated impacts to be achieved through implementation of the recommendation. Where relevant, tools and resources to support successful implementation are provided as well.

The seven recommended interventions are:

- Clarify and promote the Fund as a diverse portfolio of funding supports for farmers at various stages of business growth and development
- 2. Secure and build the Fund's long-term sustainability
- 3. Expand funding to intermediary providers of small grants, microloans, and complementary technical assistance
- 4. Streamline county programs and revise oversight, eligibility requirements, and investment areas
- 5. Equip the Board to assess and seize emerging investment opportunities
- 6. Reduce grantees' financial dependence on KADF, particularly those that receive large amounts of repeat funding
- 7. Overhaul grantee reporting requirements and internal data management systems

Each of these recommendations alone would contribute to increasing and sustaining the KADF's impact on Kentucky's agriculture and economy. Taken together, these recommendations are meant to build on the Fund's history and success, extend its reach into every corner of the state's agriculture, amplify its impact, broadcast its wins, and position it to strategically and opportunistically identify agriculture and the food system needs and respond with targeted investments.



Clarify and promote the Fund as a diverse portfolio of funding supports for farmers at various stages of business growth and development

Kentucky agriculture includes an incredibly diverse range of producers (from homesteaders to large scale producers) who grow, raise, and add value to a wide range of products, and reach nearby and far-flung markets (from local farmers markets to global commodity markets). The Fund supports all of these types of producers at all stages of their development. Like the industry it supports, the KADF, too, is diverse and complex. Often, according to interviewees and site visit conversations, prospective Fund applicants struggle to find the best way to engage with the Fund, to understand how the various components of the Fund holistically support each individual business over time, and how all elements of the Fund wrap up together to support Kentucky agriculture—and the state's economy—as a whole (see the "Key Themes" subsections of the KADF Programs Findings and KADF Projects Findings report sections for more information). There is an opportunity to use the KADF website to increase clarity and transparency for applicants, streamline KOAP's communication efforts, and present a cohesive story about the purpose and reach of the Fund.

RECOMMENDED ACTIVITIES

- Develop an easily digestible diagram that illustrates how elements of the Fund support various stages and scales of farm business development, in order to clarify what the Fund makes available, for whom, and to what end.
- · Create a web landing page for The Fund, with the overview diagram, to



- serve as the go-to place for applicants to access information and resources, and to exemplify what the Fund invests in through individual stories.
- Partner with KDA and others to promote the overview and beneficiary stories in regular newsletters, social media, and other outreach.
- Leverage staff time to promote the Fund as a unified body of opportunities for agriculture industry stakeholders.

INITIAL STEPS

- Clarify internally- among KOAP staff and the Board- how elements of the Fund align to various stages and scales of farm business development. An example of what such a diagram might look like is below.
- Once clarified internally, share the diagram publicly, on the KADF website, as the go-to, one-stop-shop, central landing place for prospective loan or grant recipients, policymakers, and anyone else interested in learning about the Fund.
 - a. While a full and integrated website overhaul would serve the Fund well, this can also be accomplished with a single, well-linked overarching webpage that provides an overview of the Fund's organizing structure.
 - b. Link elements of the diagram to program eligibility criteria and goals, application materials, contact information (e.g. for County Program Administrators), and deadline calendars. Work toward digitizing application materials and processes and standardizing a calendar of application deadlines across all components of the Fund-aggregating that information into a simple database of links is an important first step.
 - c. In addition to the web presence, the diagram/Fund overview can be printed out for distribution at various events and shared (digitally and in print) with all of the Fund's partners.
- 3. Prioritize KOAP staff time to create and maintain the resources described above. To make that time available, identify opportunities to reduce KOAP staff's current administrative burden (such as production of in-depth monthly Board Books).

TOOLS/RESOURCES

The diagram that follows organizes elements of the Fund by the type of support provided. Farmers or their advocate and support organizations can assess where they are in their business life cycle, define their goals for what they want to accomplish with funding, and identify whether they are seeking to support farm businesses (or agriculture sectors more broadly) to:

- Plan and Launch, a new agricultural venture
- · Refine, Adapt and Improve, infrastructure, operations, or efficiencies

- Innovate, Diversify, and Grow, on foundations of an existing enterprise or effort
- Transfer and Succession, extend knowledge, business, and land to the next generation

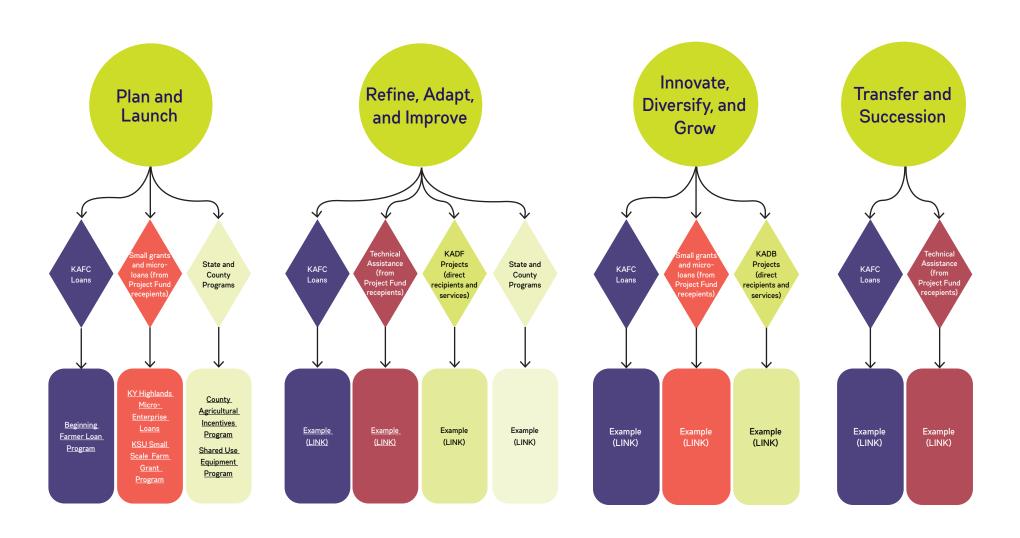
The diagram on the next page includes both direct funding opportunities from KADB and KAFC, as well as funding opportunities like small grants and micro-loans offered that are nested within and administered by intermediary organizations.

PRIMARY BENEFICIARIES

- All farms, in all agricultural sectors
- KADF applicants
- Board members/KOAP staff

TYPE OF IMPACT

- · Increased Fund reach/access
- Increased transparency





Secure and build the Fund's long-term sustainability

KADF plays an exceptional role in supporting the KY agricultural economy; and within agriculture industries and communities, it is widely appreciated for that role. As settlement funds are expected to reduce over time, planning for KADF's long-term financial sustainability is critical. Making elements of the Fund self-sustaining, while also girding up public understanding of the Fund's contribution to the state's overall economy will preserve the Fund's ability to continue to support agriculture sectors as their needs evolve, and to protect the investments the Fund has already made.

RECOMMENDED ACTIVITIES

- Build policymakers' and the public's understanding of the Fund (and of agriculture more broadly) as critical contributors to the state economy.
- Increase KAFC's interest rate for future loan awards as the prime interest rate increases, striking a balance between an attractive, accessible interest rate and one which can continue to replenish the Fund's reserves over time.
- Explore approaches to protecting KAFC's investments in farmland (such as through incentives for farmland protection measures), to secure the natural resource base for agricultural industries.

INITIAL STEPS

1. Convene leading KAFC lender partners to collaboratively identify a simple, viable strategy and process for adjusting the KAFC interest rate in relation to prime interest rate shifts.



- 2. Advocate for the state's continued bi-partisan support of and investment in the Fund, with an eye to securing multi-year funding commitments.
- 3. Initiate conversations with the state Purchase of Agricultural Conservation Easement Corporation (PACE) program Board, land trusts, and other experts and advocates to identify ways to link statewide farmland preservation efforts with KAFC loans that support land purchases.

PRIMARY BENEFICIARIES

- · All farms, in all agricultural sectors
- Current grantees
- KADF applicants

- Strategic investments
- Increased Fund reach/access
- Economic impact



Expand funding to intermediary providers of small grants, microloans, and complementary technical assistance

The Fund has demonstrated that small grant and loan awards can have outsized impacts for smaller farmers, who are an important engine of the KY agricultural economy. Intermediaries- organizations that utilize KADF funding to reach a wide array of producers and businesses with small grants, micro-loans and targeted services- have successfully expanded the Fund's reach, capacity, and impact while decentralizing the administrative burden to the Board and KOAP staff associated with doing so. Partnerships with intermediary organizations also allow the KADB to leverage existing trusted relationships between farmers and agricultural support organizations in communities across the state. KAFC's partnerships with lenders can be seen as a parallel: Just as KAFC partner lenders have been structurally critical to KADF's ability to offer an agricultural loan program, partnerships with other intermediaries can be thought of as structurally critical to the Fund's ability to offer small grants, micro-loans, and complementary technical assistance. Currently, the Fund's partners consistently report that they are unable to meet demand for capital and other services they provide based on interviews and site visit conversations (see the "Key Themes" subsection of the KADF Projects - Findings report section for more information). Increased investment will increase the Fund's impact and reach.



RECOMMENDED ACTIVITIES

- Commit more funding annually to a range of trusted, proven, and effective intermediaries to reach a broad range of farmers (across sub-regions of the state, across scales of production, and across product sector), with a focus on the following activities:
 - Small grants
 - · Micro-loans
 - Technical Assistance provision
 - New market development (Value Chain Coordination, etc.)
- Require intermediaries to gather simple, brief impact reports and basic demographic data from small grant and micro-loan recipients in order to more comprehensively track the Fund's reach and impact (see Recommendation #7 for more detail). Provide administrative support to intermediary partners to enable this.
- Partner with one or more intermediary organizations to leverage their producer networks in order to reframe, strengthen, and oversee the KAFC mentorship program

INITIAL STEPS

- Develop, apply, clearly share, and enforce criteria for selection of strong, effective intermediary partners that reach across all sub-regions of Kentucky.
- Convene select currently funded intermediary partners to understand the administrative burden associated with provision of small grants, micro-loans and technical assistance, and to project the burden of gathering producer recipient data.

PRIMARY BENEFICIARIES

- · Small farm & agriculture businesses
- Regions & producers underserved by other KADF offerings
- Board members/KOAP staff

- Increased Fund reach/access
- New product development
- New market development



Streamline county programs and revise oversight, eligibility requirements, and investment areas

County programs accounted for roughly one third of the Fund's total awards from 2015 to 2022, and those programs successfully direct funds to thousands of individual producers across the state annually, most notably for on-farm investments and essential equipment purchases that might otherwise be unattainable for individual producers. In the current model, local agricultural organizations administer the programs, which reduces the administrative burden for KOAP staff and the Board related to those investments, and which increases local influence over investments. While the county programs have been successful extending KADF's reach (making funds available to KY farmers statewide), stakeholders in interviews and survey responses repeatedly expressed concerns about the complexity of the county programs, the level of influence county administrators have, and the extent to which these programs do or do not drive agricultural advancement and innovation (see the "Key Themes' subsection of the KADF Projects - Findings report section for more information). Moving forward, county programs should continue to advance Kentucky agriculture by providing small grants directly to farmers and increasing the ability of groups of producers to purchase essential equipment.

RECOMMENDED ACTIVITIES

- Transition CAIP Administration to organizations that are not aligned with one single or a limited set of agricultural subsectors.
- Streamline county program structure to be two-pronged, focused on



CAIP and SUEP. Simplifying the number of programs offered will simplify county program administration and streamline communication about grant opportunities to prospective applicants. The Board may choose to continue supporting priority areas such as beginning farmers, youth education, or others through Project grants or other funding approaches including within revised CAIP investment priority areas.

- Revise CAIP's investment areas to increase focus on improving operations through innovation and diversification and move away from subsidizing standard operating expenses.
- Set a lifetime limit per recipient, using social security numbers or some other unique identification method to verify. (A range of \$7,500 to \$10,000 per recipient might be considered, moving forward.)
- Modernize and standardize CAIP's application processes and timelines, and move all online. Continue to make non-digital applications available if necessary, to ensure that all producers have access.

INITIAL STEPS

- 1. KOAP staff begin recruiting industry-agnostic organizations to administer CAIP in counties where this is not already the case (start with Conservation Districts).
- 2. Consider eliminating DAR, NextGen, and YAIP program areas to streamline county programs and focus these programs on innovation, diversification, and shared equipment purchases.
- 3. Re-evaluate and revise CAIP investment areas with a focus on innovation and agricultural diversification.
- 4. KOAP staff begin discussions with select CAIP administrators to determine a process for establishing lifetime limits. Consider lifetime limits as a replacement for the cost-share requirement as well, to minimize the administrative burden. Seek input from high performing county administrators on whether to apply lifetime limits retroactively and if so based on what timeline (e.g. 5 to 10 years back).

PRIMARY BENEFICIARIES

Small farm & agriculture businesses

- Increased Fund reach/access
- Strategic investments



Equip the Board to assess and seize emerging investment opportunities

For the Board to identify and seize innovative and catalytic opportunities that will help to propel KY agriculture forward, a clear process for evaluating Project proposals (or for identifying new priority investments areas) is needed. This need was highlighted consistently by both grantee and prospective grantee organizations in addition to several Board members themselves. Such a process will ensure the Fund identifies and addresses widespread needs as they have in the past (with farmers' markets and meat processing) and identifies game-changing investments in infrastructure or new market development when they arise. The process should be transparent to prospective grantees and inclusive of all Board members' perspectives. The Board is assembled to represent the breadth and diversity of agricultural experience and perspective in Kentucky-a clear opportunity/risk assessment process that ensures all Board voices participate in all decisions will strengthen the Fund's impact.

RECOMMENDED ACTIVITIES

- Utilize a risk/opportunity assessment tool, such as the one included below, to assess Project applicants' ability to successfully deliver on ambitious projects and to create an agreed-upon decision-making process as a unified Board.
- Publicize the assessment tool components, to give applicants visibility into selection criteria and priorities.
- Support high-growth, high-potential applicants, as well as systems-level needs that cut across industry segments. For example, KADF investments in local agricultural products reaching local markets has been a success and remains an area of high potential and impact.
- A central, cross-cutting need is KADF support for producer investments in agricultural resilience, in response to and in preparation for economic, political, and climate changes (as a complement to federal and other funding available).

INITIAL STEPS

- 1. Introduce the assessment tool at a Board meeting or planning session, and discuss the purpose and process of using it.
- 2. Conduct a 'test run' of the assessment tool, then refine the tool or process of using it to reflect KOAP and Board member experience and feedback.
- 3. Use the tool routinely to assess opportunities, inform group decision-making, and provide a structure in which all Board voices are heard.
- 4. When new project guidelines are adopted, set a future time to re-visit and re-assess whether they are still needed, so that priorities are being removed as quickly and nimbly as they are created.

TOOLS AND RESOURCES

The following tool (see following page) was designed to provide Board members with a framework for working together to assess opportunities and/or make strategic investment decisions together, in a way that creates space for each member's perspective. There are a variety of ways that the matrix that follows could be integrated into the Board's process.

- Prior to each meeting, each Board member completes the assessment for each Project or opportunity to be assessed. KOAP staff gather Board member responses in advance of the meeting and share aggregate scores as a starting place for discussion.
- The assessment tool appears in all Board books. Board members take a few minutes before discussing each Project to complete the assessment tool for that project.
- When a broad industry need emerges and the Board is considering creating targeted investment priorities or guidelines around that need, the Board can use the assessment tool to prioritize and align on new areas of investment focus

However the Board and KOAP choose to integrate this tool into decision-making processes, the following principles should be considered:

- Include this tool/matrix in all Board books and correspondence with the Board, to familiarize all Board members with the framework.
- The numeric scores should never be used as a way to make a final determination on an opportunity's merit—rather, the scores should serve as a discussion prompt and way of taking the temperature of the group.
- Create discussion time for Board members who gave both low scores and high scores across the various components within the tool time to speak.
 For example, scores could demonstrate that Board members are aligned in scoring a project high in 'Alignment with Investment Priorities', but mixed in perceptions of 'Projected Impact'. KOAP staff can facilitate discussion accordingly.

PRIMARY BENEFICIARIES

- All farms, in all agricultural sectors
- Board members/KOAP staff

- Increased Fund reach/access
- Increased transparency

KADF PROJECT OPPORTUNITY ASSESSMENT TOOL

Component	Score
Alignment with Investment Priorities	(Scale: -5 to +5)
Increase farm income	
Stimulate new markets	
Affect tobacco growers and impacted communities	
Add value to KY agricultural products	
Explore new opportunities for KY farms	
Projected Impact on State Agriculture	(Scale: -5 to +5)
Positively impacts multiple producers or agricultural sectors	
Positively impacts producers or a sector previously less represented in Fund investments	
Impacts and activities likely to continue and/or multiply beyond the funding period	
Addresses a critical, known gap or problem in KY agriculture	
Applicant and Application Strength	(Scale: -5 to +5)
Demonstrated feasibility or need	
Demonstrated capacity to execute the Project successfully	
Amount requested aligns with projected impacts	
Leveraging alternate sources of funding/capital	
Total Score:	

Scoring Key:

- -5 to -1: Possibility or likelihood of negative impact to KADF, stakeholders, or KY agriculture, with -5 representing danger and -1 representing inconvenience.
- O: Activity is impact neutral to KADF, stakeholders, or KY agriculture
- +1 to +5: Activity presents possibility of likelihood of positive returns to KADF, stakeholders, or KY agriculture, with +1 representing low level
 positive impacts and +5 indicating transformative impact.



Reduce grantees' financial dependence on KADF, particularly those that receive large amounts of repeat funding

The KADB has provided repeat funding for a number of mission-aligned organizations over the life of the Fund. This approach has supported the development of an exceptional ecosystem of support for farmers and ranchers in Kentucky. It has also resulted in a number of organizations receiving large amounts of funding in every Project cycle and, for some grantees, significant financial dependence on KADF. Both existing and prospective grantee organizations, as well as several Board members, highlighted the importance of grantee financial diversification–noting its importance for the financial health and resilience of both individual grantee organizations and the Fund itself (see the "Key Themes" subsection of the KADF Projects - Findings report section for more information). For the Board to continue to have the capacity to invest in high impact Projects as opportunities arise, limiting large scale repeat investments and incentivizing grantees to diversify their funding sources will be required.

RECOMMENDED ACTIVITIES

• Set a cutoff amount above which funding requests should be required to present a 1:1 financial match (such as grant requests that average \$500,000 per year). For entities that have received funding in prior years, implement a phased approach where grant dollar amounts are reduced by 10% each grant period until the organization is able to provide a 1:1 financial match or requests less than the cutoff amount.



- Bearing in mind that grantees currently have varying levels of fundraising capacity and that not all organizations have equal access to alternate funds, KADB may choose to consider demonstrations of effort to achieve a 1:1 match as part of funding requests as well.
- Outline and broadcast clear guidance and financial independence expectations and consequences associated with not diversifying funds, for both current and prospective future grantee organizations.

INITIAL STEPS

- 1. The Board should agree on a cutoff amount, above which prospective grantees should be required to present a 1:1 financial match.
- 2. The Board should determine which funds are subject to match. The evaluation team recommends that pass-through funds (such as funds that are requested for re-distribution as small grants or loans) are exempted from the match requirement.
- 3. Communicate to grantee organizations matching funds requirement and policy for organizations receiving repeat funding. Articulate the purpose of these limits to build buy-in among grantees.

PRIMARY BENEFICIARIES

- Board members/KOAP staff
- KADF applicants
- Current grantees

- Increased Fund reach/access
- Strategic investments



Overhaul grantee reporting requirements and internal data management systems

The KADB's ability to understand the reach and impact of its investments is predicated on its capacity to efficiently collect and store impact and demographic data for grant and loan recipients. Currently, reporting requirements across projects, programs, and loans allow for analysis of specific impacts for specific Fund components (such as those of an individual county program or for the KAFC loan program). However, inconsistencies in the data requested and collected make it difficult to analyze the Fund's overall impact across its diverse components. Further, aligning all KADF data requests with USDA's categorization norms, where possible, will enable analysis of correlations between Fund investments and county, state, regional, and national trends. Establishing a universal and standardized set of outcome and demographic data for collection across all KADF investments will enhance the Boards' ability to understand, articulate, and increase the Fund's overall impact and to inform future investment strategy. The ability to use Fund beneficiary reporting data to do just this is a top priority expressed by several Board members.



RECOMMENDED ACTIVITIES

- Develop specific, consistent universal impact metrics to capture across all KADF grants and loans. A suggested universal metric set is included in Tools/Resources.
- Require that all grant and loan recipients complete impact reports in the format and template provided. Eligibility to apply for and receive subsequent rounds of funding should be tied to grantees' successful completion of reporting metrics in the format requested by KOAP.
- Change the cadence of Project grantee reporting to annual progress reports and one final cumulative report that documents all project impacts to reduce the administrative burden associated with reporting for recipients, the Board, and KOAP staff.
- Require intermediary organizations to collect and report on sub-grantee characteristics and impact.
- Develop a unified data storage and management system, to enable KOAP staff to access impact data when needed and enforce reporting requirements.

INITIAL STEPS

- Develop a simple and clear reporting template (ideally to be filled out online) that incorporates universal metrics and that also leaves limited space for particular impacts that are specific to one particular program or project.
- 2. Work with lenders to develop a process to ensure that loan recipients return impact reporting forms on schedule.
- 3. Work with county administrators to develop a process to ensure that county grant recipients return reporting forms on schedule.
- 4. Define a process for aggregating reporting data from final cumulative reports to an internally maintained database (such as a spreadsheet or alternate system).

TOOLS/RESOURCES

Below is a proposed list of universal metrics to collect across all KADF programs and projects:

	APPLICANT GENERAL INFORMATION	FARM AND PRODUCER CHARACTERISTICS (for all farm grant and loan recipients)	PROJECT IMPACTS (for all grant and loan recipients)
App	olicant Type:	Producer Characteristics:	Project Impacts:
rec eac	Nonprofit Education and Technical assistance Grants Loans Farmer Other business or organizationtype egorize all KADF grantees and loan ipients using the same system as hother and aligned with a national andard such as USDA Census of	 Sex of producers Male, female Primary occupation Farming, other Producer age Under 25, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75+ Produce race American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, 	 # of counties impacted # of farms impacted (with a specific breakdown such as below, for farm service providers) # of farms that received technical assistance # of on-farm site visits # of farms that received a grant # of farms that received a loan # of new markets reached # of new products developed \$ of increased sales
	riculture, such as: Grains, oilseeds, dry beans, and dry peas	Native Hawaiian or Other Pacific Islander, White, More # of pieces of equipment of the pieces of equipment of equipme	# of pieces of equipment purchased
	 Corn, Wheat, Soybeans, Sorghum, Barley, Rice, Other grains, Oilseeds, Dry Beans and Dry Peas 	Farm Characteristics : • Farm Size (based on USDA gross cash farm income brackets)	Describe any additional project impacts (max 5 pages)
	Tobacco	· <\$150,000*	
	Cotton and Cottonseed	· \$150,000 and \$349,999	
	Vegetables, melons, potatoes, and sweet potatoes,	\$350,000 and \$999,999\$1,000,000 and \$4,999,999	
	Fruits, tree nuts, and berries	• \$5,000,000 or more	
	• Fruits and tree nuts, Berries	• Farm Size (Acreage)	
•	Nursery, greenhouse, floriculture, and sod	Primary Enterprise Type (based on list above)	
	Cultiated Christmas trees and short rotation woody crops	Secondary Enterprise Type Though USDA does not provide GCFI brackets beneath Though USDA does not provide GCFI brackets beneath	
	Other crops and hay	\$150,000, KADB may consider doing so to capture more detail about the state's smallest farms.	
	• Maple syrup		
	Cattle and calves	Market Characteristics :	
	Milk from cows	Direct marketing (aligned with the	
	Hogs and pigs	USDA Local Food Marketing survey)	
	Sheep, goats, wool, mohair, and milk	Consumers	
	Horses, ponies, mules, burros, and donkeys	Retail marketsInstitutions	
	Poultry and eggs	Intermediate markets	
	Aquaculture,		
	Other animals and other animal products		

PRIMARY BENEFICIARIES

Board members/KOAP staff

- Increased transparency
- Strategic investments
- Increased Fund reach/access





