

# Kentucky County Agriculture & Food Profiles

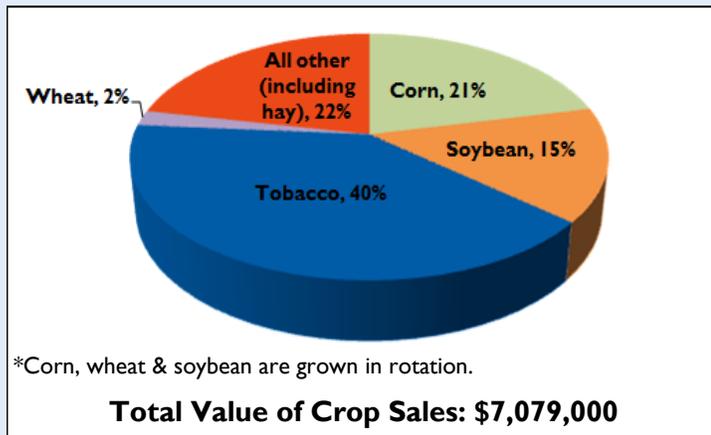
## Boyle County - Agriculture Overview

In 2012, Boyle County had 620 farm operations on 101,549 acres, which represented 87.9% of total county land. In comparison, Kentucky's farm operations made up 51.6% of the state's total land area, and U.S. farm operations made up 40.5% of total land area in the country.

Farm Economics: Land, Income & Value of Sales	Boyle County	Kentucky	United States
Total Acres used for Farm Operations	101,549	13,049,347	914,527,657
Average Acres used per Farm Operation	164	169	434
Percent of Total Farm Acres used for Cropland	41.2%	48.6%	42.6%
Value of Land used for Farm Operations, including Buildings	\$345,730,000	\$36.9 billion	\$2.3 trillion
Total Income from Farm Operations	\$1,423,000	\$423.5 million	\$18.5 billion
Total Income from Agritourism & Recreational Services	\$7,000	\$7.0 million	\$704.0 million
Total Value of Crop Sales, Including Products	\$7,079,000	\$2.3 billion	\$212.4 billion
Total Value of Animal Sales, Including Products	\$23,892,000	\$2.8 billion	\$182.2 billion
<b>Farm Marketing: Percent of Farm Operations that...</b>			
...Marketed Products Directly to Retail Outlets	1.8%	1.7%	3.4%
...Produced and Sold Value-Added Commodities	4.7%	5.3%	5.2%
...Marketed Products through Community Supported Agriculture	0.6%	0.5%	2.2%
...Operate On-Farm Packing Facilities	0.8%	1.1%	2.4%

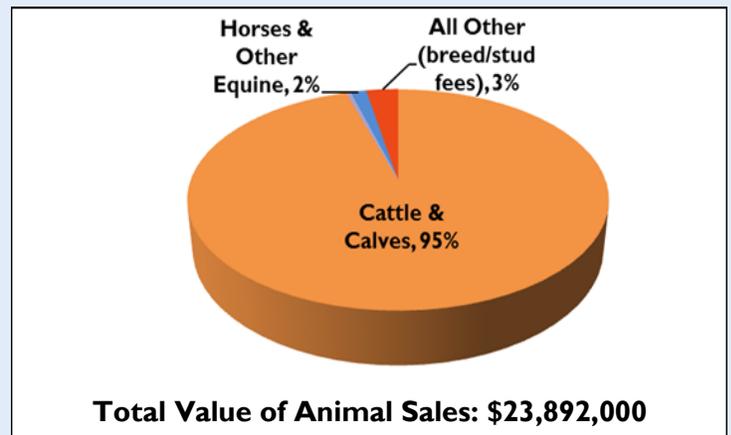
Source: 2012 Census of Agriculture, NASS

### County Crop Sales by Type\*



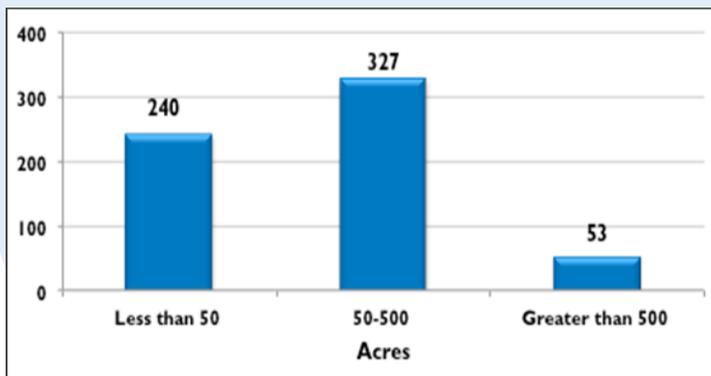
Source: 2012 Census of Agriculture, NASS

### County Animal Sales by Type



Source: 2012 Census of Agriculture, NASS

### Number of County Farm Operations by Acreage



Source: 2012 Census of Agriculture, NASS

### Number of County Farm Operations by Sales



Source: 2012 Census of Agriculture, NASS

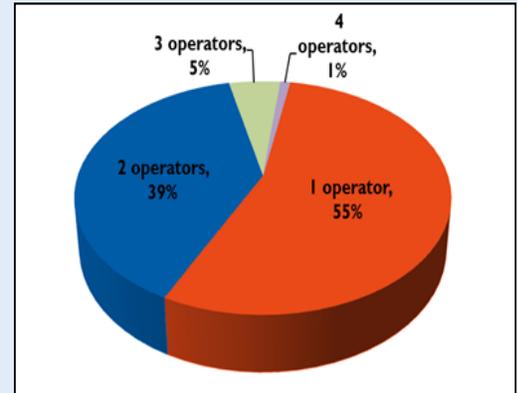
# Kentucky County Agriculture & Food Profiles

## Boyle County - Operators & Food Access

According to USDA 2012 data, 1,407 people directly received income from farm operations in Boyle County, which is approximately 7.6% of total county employment.

Farm Operations & Workforce	Boyle County	Kentucky	United States
Total Farm Operations	620	77,064	2,109,303
<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">}</div> <div> <p>Percent Fully Owned</p> <p>Percent Part Owned</p> <p>Percent Tenant</p> </div> </div>	76.9%	76.1%	67.7%
	20.3%	19.8%	25.3%
	2.7%	4.1%	7.0%
Percent with Internet Access	71.5%	64.7%	69.6%
Total Number of Hired Workers	460	68,586	2,736,417
Total Number of Unpaid Workers	606	76,822	2,062,011
Total Number of Operators	947	114,210	3,233,358
Percent Female Operators	27.3%	30.6%	27.9%
Percent Non-White Operators	2.7%	2.2%	6.1%

Farm Operations by Number of Operators



Source: 2012 Census of Agriculture, NASS

Source: 2012 Census of Agriculture, NASS

In 2013, your Area Development District (ADD) had 21 farmers markets, of which 7 accepted SNAP and 12 accepted WIC.

Boyle County had 1 farmers market(s).

Total Farmers Markets by ADD



Source: 2013 USDA Food Atlas

	Boyle Total	Kentucky County Average	Rural KY County Average
<b>Retail Food Access</b>			
Grocery Stores, 2011	7	7	3
Supercenters & Club Stores, 2011	1	1	0
Convenience Stores, 2011	16	18	8
Specialized Food Stores, 2011	1	1	0
SNAP-Authorized Stores, 2012	23	34	15
WIC-Authorized Stores, 2012	6	8	5
Fast Food Restaurants, 2011	21	25	4
Full Service Restaurants, 2011	25	22	4

Source: USDA Food Atlas

Food Security Measures	Boyle County	Kentucky	United States
Percent of Total Households with no car and more than 1 mile from a grocery store, 2010	2.8%	3.3%	1.9%
Percent of Total Households with no car and more than 10 miles from a grocery store, 2010	0.0%	0.1%	0.1%
Percent of the Population that is low income and more than 1 mile from a grocery store, 2010	10.1%	21.9%	11.7%
Percent of the Population that is low income and more than 10 miles from a grocery store, 2010	0.0%	1.0%	0.9%
Percent of Children that are Eligible for Free or Reduced Lunch, 2011	50.3%	58.0%	52.8%*
Percent of Children that are Eligible for Free Price Lunch, 2011	41.6%	49.0%	43.0%*

Source: USDA Food Atlas, \*USDA National School Lunch Program Participation Rates

# Kentucky County Agriculture & Food Profiles

## Insights for Data Interpretation

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**Prepared by: James E. Allen IV, Research Director**

CEDIK's Agriculture & Food Profile is comprised of three parts: farm economics, farm operations and workforce, and food access. The first page provides information on farm economics. Page two starts with an overview of farm operations and workforce, and then features data related to food access. In an effort to provide as much data as possible on two pages, precise definitions of some measures were not included. Thus, questions may arise including: What does this number represent exactly? How can I interpret this? This short overview provides additional clarification to the meaning of the selected measures in the profile.

### Farm Economics and Marketing

Page one of the profile starts with data on farm economics, including variables such as "Percent of Total County Land used for Farm Operations" and "Total Income from Farm Operations". Numbers in the first table are provided for the County, Kentucky and the United States to allow for comparison between each. In the second-part of the table, estimates are provided for the percent of farm operations that engage in various Farm Marketing techniques, such as "Marketed Productions Directly to Retail Outlets". While only a small percentage of farm operations engage in these actions, these marketing techniques are seen more and more as innovative methods for farms to increase and diversify their incomes. Thus, there are sometimes funds from USDA and other sources for support and research of these farm marketing strategies. Data on this table come from the 2012 Census of Agriculture, USDA/National Agriculture Statistics Service.

In the middle section of the page, two pie charts that show the distribution of sales by type of crops and animals, respectively. The pie charts are intended to characterize farming in your county by identifying what the major crops and animals are for local farmers. Categories were pulled from the data source and some were combined if the category only represented a small percentage of total sales. Additionally, some of the categories may be missing due to insufficient data or disclosure issues (i.e., data are withheld to avoid disclosing information for individual operations).

Total value of sales for the county is also given at the base of each chart. Note that the sizes of the two pie charts are not proportional to the total value of sales. Data for this section also come from the 2012 Census of Agriculture, USDA/National Agriculture Statistics Service.

Regarding the pie charts, there are two notable comments to make that apply to most Kentucky counties. First, for Crop Sales, it is important to highlight that corn, wheat, and soybeans are often grown in rotation, meaning that farmers will grow each crop in succession on the same plot over three years in order to maintain a nutrient balance in the soil. Thus, these three categories should be viewed together on the pie chart as the distribution shown only represents a snapshot of crop sales in a given year. Secondly, for Animal Sales, note that USDA has a misleading way of presenting its data on annual equine sales. While sales of an equine animal itself are categorized as a sale of "Horses, Ponies, Mules, Burros and Donkeys", equine breeding and stud fees are lumped in the "All Other" category along with rabbit and mink production. Unfortunately, there is no way for us to disentangle the information. Thus, when interpreting the data, many counties may want to assume that the "All Other" category mostly refers to the equine breeding and stud fees, though this cannot be confirmed in the data provided.

The first page ends with two graphs that provide data on the number of farms operations by acreage and by sales for the county. The graph on the bottom left provides number of farms that have less than 50 acres, between 50-500 acres, and above 500 acres; the average acreage of a farm operation in Kentucky is about 160 acres. The graph on bottom right section groups the number of farms by sales amount into farms that make less than \$10,000, between \$10,000-\$50,000, and more than \$50,000 in annual sales. Given that these are sales (i.e., revenue) and not profits, one may speculate that farm operations selling more than \$50,000 annually may be able to have one household member who farms full-time, while farm operations selling less than \$50,000 (and especially less than \$10,000) are likely part-time farmers. **(continued on page 2)**

However, note that a farm had to sell at least \$5,000 that year in order to be defined as a farm operation, so all operations shown drew in at least \$5,000 in sales. Data from the 2012 Census of Agriculture, USDA/National Agriculture Statistics Service were aggregated to create each graph.

### **Farm Operations and Workforce**

The second page of the profile starts with a table of selected Farm Operations and Workforce measures such as “Total Farm Operations” and “Total Number of Hired Workers”. Under “Total Farm Operations”, the bracket indicates that all farm operations are either fully owned, partly owned, or leased to tenants (i.e., these three categories add up to 100.0%). Subcategories under “Total Number of Operators” for the percent of female and non-white operators reveal the diversity of farm operators in your county. This section also includes a pie chart which shows the distribution of county farm operations by number of operators. Farm operations were broken down into five categories based on the number of operators. These data come from the 2012 Census of Agriculture, USDA/National Agriculture Statistics Service.

### **Food Access and Food Security**

The final section—Food Access and Security—includes one map and two tables. The map displays the number of farmers markets throughout Kentucky within each Area Development District (ADD), and information above the map shares how many farmers markets are in the county. Farmers markets were aggregated to the regional level because many counties do not have (or necessarily need) a farmers market. The map shows where farmers markets are active across a greater coverage of land.

The middle-right table on retail food access provides data on the total number of retail locations where food can be purchased, including “Grocery Stores” or “Fast Food Restaurants”. Data in this table are provided for the County and two other categories: “Kentucky County Average” and “Rural KY County Average”. The Kentucky County Average is the average number of food retail locations in a Kentucky

county (i.e., the total number of retail locations in Kentucky divided by the number of counties in Kentucky). However, urban counties with many food retail locations distort this number. Thus, the Rural KY County Average is the average number of food retail locations in a rural Kentucky county (i.e., the total number of retail locations in rural Kentucky divided by the number of rural counties in Kentucky). To calculate the Rural KY County Average, we defined rural as areas with less than 2,500 population, adjacent or not adjacent to a metropolitan area, based on USDA 2013 Rural-Urban Continuum Codes. This allows for better comparison with most counties.

This section ends with a table on food security measures. A common measure of food security is distance to grocery store and access to transportation—places where residents have difficulty accessing a grocery store is sometimes referred to as a “food desert”. This table includes similar measures, such as “Percent of Total Households with no car and more than 1 mile from a grocery store” and “Percent of Children that are Eligible for Free Lunch”. For comparison reasons data in the table is provided for County, Kentucky, and United States. Data for this section come from 2014 USDA Food Atlas (except where otherwise specified).

#### References:

USDA/Food Atlas, retrieved from [http://www.ers.usda.gov/data-products/food-access-research-atlas.aspx#VCvGmFc0\\_yV](http://www.ers.usda.gov/data-products/food-access-research-atlas.aspx#VCvGmFc0_yV)

USDA/National Agriculture Statistics Service, retrieved from <http://www.nass.usda.gov/>

USDA/Food and Nutrition Service, retrieved from <http://www.fns.usda.gov/nslp/national-school-lunch-program-nslp>

#### **Still have questions on the data?**

If you have further questions regarding the data in this profile, please contact CEDIK Research Director James Allen at (859) 218-4386 or [james.allen4@uky.edu](mailto:james.allen4@uky.edu).