# FARMING



KENTUCKY'S BIGGEST BUSINESS

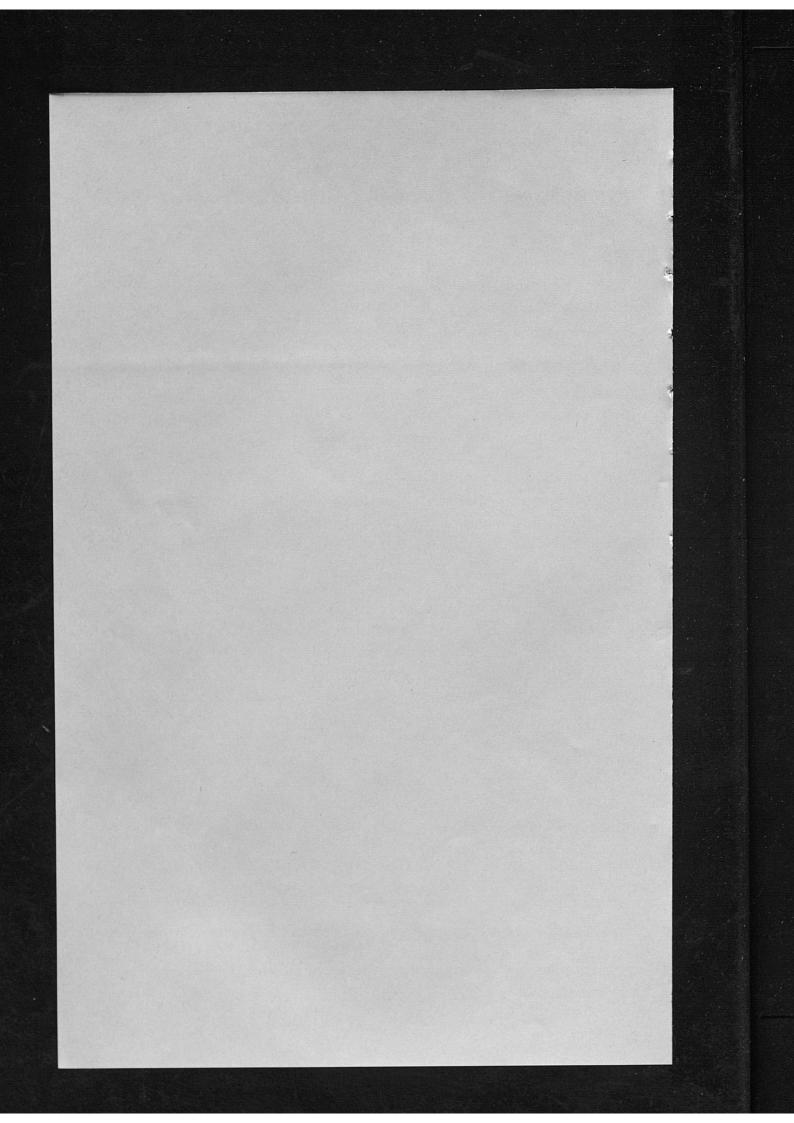
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COOPERATIVE EXTENSION SERVICE AGRICULTURE AND HOME ECONOMICS



## Farming—Kentucky's Biggest Business

By D. MILTON SHUFFETT

Just as many cities are famous for their industries, states are known for their farm products: California and Florida for citrus fruit and vegetables; the Middle Western states for corn and small grain; and, of course, our own state for tobacco.

The kind of soil, lay of the land, and climate play a big part in what is grown on our farms. Geography, in other words, helps form a state's agricultural character or personality. What is Kentucky's agricultural personality? How has it changed? Where does it go from here?

Years ago, folks saved the best ears of corn for next year's seed. They raised their own workstock and the grain and hay to feed them. The "oldtimers" loaded their cash crops on wagons and started off on a week's journey—or more—to a railroad or river town to sell them. Mark Twain, in his book, *Life on the Mississippi*, describes Hickman as a thriving tobacco marketing center. Tobacco was brought to this Fulton county town, sold, stored, and later shipped out on the paddle-wheel river boats.

Nowadays, agriculture takes in businesses which didn't even exist when steamboats traveled our rivers. Tractor dealers, the men who produce and sell feed and hybrid seeds, and many others are a part of our farming system. The large transport trucks you see on our highways, the food processing plants, or wholesale markets may not seem a part of agriculture, but they are. This publication, however, will deal only with crops and livestock produced on the farms in our state. It will answer questions such as (1) What do we produce, how much do we produce, and how much money do we get for it? (2) Where are the major areas of production in Kentucky? (3) What crops and livestock are most important to us? (4) What changes are in store for Kentucky's farmers?

Kentucky is a fairly small state, and a good deal of the land cannot be farmed. In fact, almost one-half of the state, or 11.5 million acres, is covered with forests. Some of these woods are the same ones that Daniel Boone blazed trails through back in 1769 when our state was known as "the dark and bloody ground." Four and one-half million acres of these forests is owned by Kentucky farmers. The other 7 million acres is in private nonfarm

holdings and federal and state forests.

This large percentage of forest land helps explain the rather small amount of acres used for cultivation. Iowa, for instance, with its moderately rolling plains, cultivates approximately 65 percent of its farm land. In our state, only about 25 percent of the farm land is used each year for harvested crops, and this average has dropped during the past 20 years. This decline in the number of acres cultivated is partly due to changes in our farming systems. The new trends in our kind of farming show an increase in hay and pasture crops and a falling off of row crop production. Many Kentucky farms are part-time or part-retirement farms. That is, the owners live on them but till very little of the land. They either work in town or have retired from farming or a city job. This kind of farm, of course, reduces the state's total number of acres cultivated. We shall look into these points later. First, however, what are the main features of our agriculture?

### OUR FARM ENTERPRISES VARY

We have a system of general farming in Kentucky. Most farmers use a crop-livestock combination. This doesn't mean that we have a one- or two-crop economy, for Kentucky produces a great variety of crops and livestock. In addition to family farms, commercial farms which specialize in tobacco, poultry, livestock, dairying, vegetables, fruit, and cotton are located in the state. In general, however, the state's agriculture is made up of small family farms whose owners depend upon combinations of tobacco and livestock as their main sources of income.

If you divide 17 million acres (the state's farm land) by 151,000 (the number of farms) you can understand why the average farm is rather small. (See Table 1.) And that's not all—the total farm land is shrinking. As the population increases, new schools, homes, parks, roads, and factories are needed. Yesterday's barnyard or tobacco patch may today be a shopping center or tennis court. Since 1940, the total amount of farm land has decreased 3 million acres. To put it another way, 79 percent of the land area in 1940 was in farms; by 1959, this figure dropped to about 67 percent.

Table 1 .- Kentucky's Agriculture, 1959

	Number	Percent	Acres	Million Acres
Farms	151,000			
Farms operated by owner		82.8		
Average size of farm			112.8	
Cropland harvested per farm			26.6	
State land area				25.5
Land in forests				11.5
Land in farms				17.0
Farm land in forests				4.5
Cropland harvested				4.0

#### TOBACCO-OUR MAIN CASH CROP

Tobacco, the state's most important cash crop, is another reason why our farms are small. As you all know, a lot of work goes into a tobacco crop. Since this crop requires such a large portion of the farm labor, often there just isn't enough time for many other crops. Tobacco, also, returns a good deal of money per acre, so less land is needed for a profitable farm enterprise. Small farms in Kentucky have almost become a tradition.

This tradition, however, is slipping a bit, for the average size of our farms is increasing. Modern equipment and advanced farming methods enable fewer farmers to do the job. More than 1,261,000 persons lived on Kentucky farms in 1940. By 1960, however, only 548,000 stayed on the farms. Although over one-half of them moved off of the farms, the state's agricultural production increased 30 percent.

In other words, farm output has increased in the past 20 years by almost one-third with only one-half as many people farming. Even with automation, not too many industries can boast of this kind of efficiency. Back in the early days of our state, farmers just cleared a piece of ground and kept planting it until the soil "wore out" or the topsoil washed away. But today—just as the auto maker has next year's car already designed—the farmer has a master plan for his farm. His crop rotation, fertilization, and livestock programs are often planned years ahead.

Long-range planning and scientific advances have raised agriculture from a "hit-or-miss" endeavor to a highly complex business. Kentucky's modern farmer knows the importance of soil tests, pesticides, soil conservation, and sound business practices. Thus, after considering all of these improved farming methods, Kentucky's increased farm output isn't hard to explain at all.

Kentucky is not alone in enjoying this increased farm output. Agricultural production has jumped in every state in the Union. Since farming methods are constantly changing, Kentucky's position in relation to the other states has changed some. Our production of corn, wheat, and other small grains; chickens and turkeys; and sheep and lambs has dropped. However, our output of broilers, beef, dairy products, and soybeans has increased in relation to output in the United States as a whole. Hogs, hay, and tobacco have stayed about the same. As we mentioned earlier, the character of our state's agriculture is changing, and this accounts for these shifts in our production. A lot of this added pasture is being used to feed more and more dairy and beef cattle.

#### FARM OUTPUT

Based on the value of sales, Kentucky's agricultural output ranks 23rd in the United States. As you can see in Table 2, we rank even higher in many products. Kentucky farmers sold farm products valued at \$636 million in 1961, or 1.8 percent of the money paid to farmers in the United States. As mentioned earlier,

Table 2.— 1961 Production of Agricultural Commodities in Kentucky and Its Rank Nationally

Commodity	Production			
	Million Lb	Million Bu	Million Tons	Rank
Crops				
Burley tobacco	355			1
Dark air-cured tobacco	17			1
Dark-fired tobacco	10			2
Popcorn				4
Corn		61		13
Grain sorghum		0.65		15
		5		18
Soybeans		4.7		24
Wheat			2.6	17
Hay	•••			21
Forest products*		•••		
Livestock Inventory (January 1962)		Th	Thousands	
Cattle on farms		2	2,242	14
Dairy cattle (over 2 years old)			549	12
Hogs and pigs			.386	11
Sheep and lambs			394	21
Turkeys	••••		81	16
Turkeys			3,022	25
Farm chickens	••••••		3,850	21

<sup>\*</sup> Rank based on value of sales.

a variety of products is grown in Kentucky, and farm income is about equally divided between crops and livestock. Cash receipts now are four times the 1940 level. While this income has increased in all product lines, tobacco is still the largest single commodity in cash receipts (Table 3).

Table 3.— Cash Receipts From Farm Marketings, Kentucky, 1961

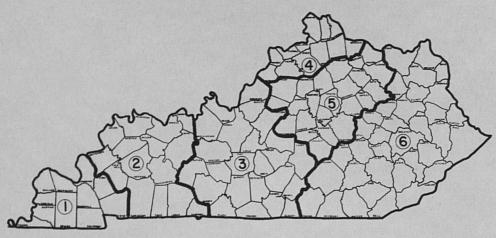
Commodity (n	Income nillion dollars)	Percent of Total
Crops		
Tobacco	. 272.5	42.8
Corn		3.0
Soybeans	. 11.0	1.7
Wheat	. 7.0	1.1
Forest and greenhouse products	. 8.3	1.3
Fruit		0.3
Other crops	. 12.7	2.1
Total		52.3
Livestock		
Cattle and calves	106.6	16.8
Dairy products	88.8	14.0
Hogs		10.6
Eggs	19.9	3.2
Poultry	11.8	1.8
Other	8.6	1.3
Total	303.5	47.7
TOTAL	636.0	100.0

#### CROP-REPORTING DISTRICTS

Geography, you recall, determines a state's agriculture. In Kentucky, the state is broken down even smaller into crop-reporting districts. Because of the differences in topography (the surface features of the land) and the kinds of soil, Kentucky's farming varies in every section. The state is divided into six of these regions. By comparing the kind of farming in each of these regions, you can see the general pattern of geographical variation (Fig. 1). The soil and terrain within a region may not always be the same; generally, however, the crop-reporting districts conform to the type of farming areas.

#### TRENDS IN AGRICULTURE

Is our system of farming likely to change? Some of the trends, mentioned earlier, are gaining in popularity. We have a fairly



Map furnished by the Crop-reporting Board, U.S. Department of Agriculture.

Fig. 1.— Kentucky is divided into six crop-reporting districts. Because of topography and different types of soil, farming varies in each section.

long pasture season, and our rate of expansion in cattle has been much greater than the nation as a whole. This upward trend in cattle will likely continue in the years ahead.

Corn and tobacco production will stay just about the same. Government control programs are helping keep tobacco acreage from varying very much. Corn production has shifted to the more commercialized areas, or the land that is better suited to growing corn. As mentioned earlier, hill land—land likely to erode—is being turned to pasture. Corn production, in recent years, has centered on the more level land in the western part of our state. This development has tended to keep corn acreage about the same each year.

Barley, oat, and rye acreages have dropped sharply and may decline even further. Production of soybeans and grain sorghums will probably increase some. Hogs fed for slaughter are closely related to grain supplies, but in recent years the production of feeder pigs has increased quite a bit. We are close to the market too, for the states to the north of Kentucky are the primary outlets for our feeder pigs.

Even with constant changes, Kentucky has remained a rural and an agricultural state, and the improvement in the many lines of production indicates greater development of the state's agriculture. Farming is still a major enterprise in our state and, together with the businesses serving agriculture, is our state's largest industry.



Fig. 2.— District I, Jackson Purchase Area. Since the topography in this area is level to rolling, corn is an important row crop. Farm size varies from small in the upland regions to large in the Delta section. Dark tobacco-livestock combinations prevail, and farming in the area can be described as general. This district has 8.6 percent of the land area of the state, but it has 15.2 percent of the corn acreage, 12.7 percent of the wheat acreage, and over 20 percent of the soybean acreage. About 9 percent of the state's cattle and calves, 6 percent of the milk cows, and 12.6 percent of the hogs are found in District I.



Fig. 3.— District II, Pennyroyal Plains, Western Coal Fields, and Lower Ohio Valley. Farming varies from small subsistence farms in the coal fields to large grain-livestock-tobacco farms in the plains and Lower Ohio Valley. District II has 15.8 percent of the state's land area, but has 31 percent of the corn, 50 percent of the wheat, and 72 percent of the soybean acreages in the state. Parts of the region, particularly the Lower Ohio Valley, have large commercial farms that are very similar to operations found in the corn belt. This area has 16 percent of the cattle, 9.6 percent of the milk cows, and over 25 percent of the hogs found in the state.

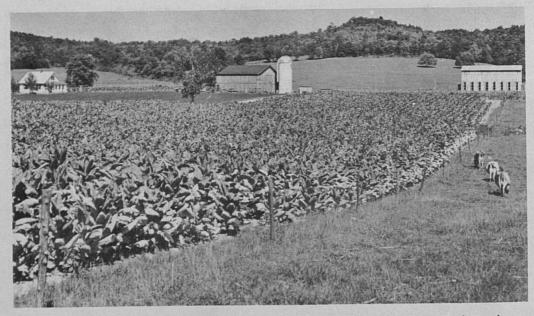


Fig. 4.— District III, Eastern Pennyroyal, Knobs, and Outer Bluegrass. Burley tobacco (shown above) and livestock are the main enterprises. The topography of this area is smooth to rough; farms are generally medium sized. Much of the area is better suited to pasture than row crops, and livestock numbers are relatively heavy in this area. This district has 22.7 percent of the state's land area, 28.1 percent of the cattle, 34.3 percent of the milk cows, 30.8 percent of the hogs and pigs, and 12.4 percent of the sheep and lambs. Over one-fourth of the state's corn acreage is located in this area.



Fig. 5.— District IV, Outer Bluegrass. Hilly land—depicted in the hay baling scene above—is typical of this district. Burley tobacco, dairy cattle, and grazing livestock are the main enterprises. District IV is the smallest of the crop-reporting districts, having only 6.3 percent of the land area of the state. However, the district has 8.8 percent of the cattle, 11.8 percent of the milk cows, and over 10 percent of the sheep and lambs found on Kentucky farms. Nearly one-fourth of the state's burley tobacco acreage is located in this district.



Fig. 6.— District V, Inner and Intermediate Bluegrass Area. Both small and large farms are found in this district. The topography is gently rolling to steep, and burley tobacco and forage-consuming livestock are the most important commercial enterprises. This is a fairly large district and includes about 15 percent of the land area of the state. The area has nearly 28 percent of the cattle, 24 percent of the milk cows, 18 percent of the hogs, and 65 percent of the state's sheep and lambs. Over 40 percent of the burley tobacco acreage is found in this district where farm allotments are large as compared with other areas of the state.

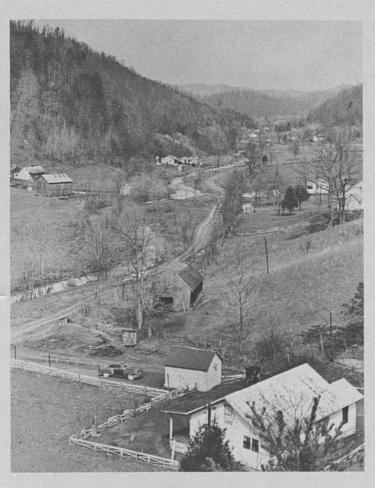


Fig. 7. — District VI. — Eastern Kentucky Mountains. The area is hilly to mountainous. While many productive farms are found in the area, the region is made up of many small farms and agriculture is of a subsistence nature for the most part. Nearly onethird of the land area of the state is in District VI, but in total agricultural production the area is not so important as other areas of the state. Much of the land in this district is in forests.

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