

The Kentucky Agricultural Economic Outlook for 2008

edited by Laura Powers



Kentucky's Agricultural Economy

Larry Jones and Will Snell

2007 Review: 2007 in the aggregate was another good year financially for Kentucky agriculture with farm cash receipts totaling an estimated (UK estimate) \$4.22 billion, a record amount! This record occurred despite the fact that a late spring freeze hurt the horticulture industry and the well-publicized drought resulted in lower crop yields around the state. Livestock receipts led the way at over \$3 billion representing a 10.9% increase. Significant gains were registered in equine, cattle and calves and poultry. Most of these gains were due to continued strong prices. Cattle receipts were higher, in part, as some were sent to market due to poor pasture conditions. Crop cash receipts totaled \$1.215 billion, down 6.5% over year earlier levels and certainly the drought played a major role in the decline. Corn cash receipts, however, were up more than 35% reflecting significant increases in acreage planted over the previous year coupled with higher prices. The fruit crop was severely damaged by the late spring freeze, but vegetable crop cash receipts increased more than 15% to \$23 million. Collectively, poultry, cattle and calves

and equine enterprises represented more than 62% of total farm cash receipts in 2007. Equine continued to be the largest enterprise with cash receipts exceeding \$1.1 billion.

Kentucky net farm income in 2006 was the third highest on record at \$1.7 billion, following the record \$2.1 billion in 2005 according to the U.S. Department of Agriculture. We expect 2007 net farm income to remain relatively strong in response to record cash receipts. However, net farm income levels have been dampened by drought, declining government transfer payments and higher production expenses.

2008 Outlook: Assuming normal growing conditions and no major disease outbreaks, farm cash receipts in 2008 are expected to set an all-time record of \$4.294 billion! During the past several years rising cash receipts were primarily due to stronger livestock receipts. Next year, however, we expect crop receipts to be up 12% while livestock receipts to decrease 2.4%. The crop receipt forecast is based on what we hope will be more normal growing conditions.

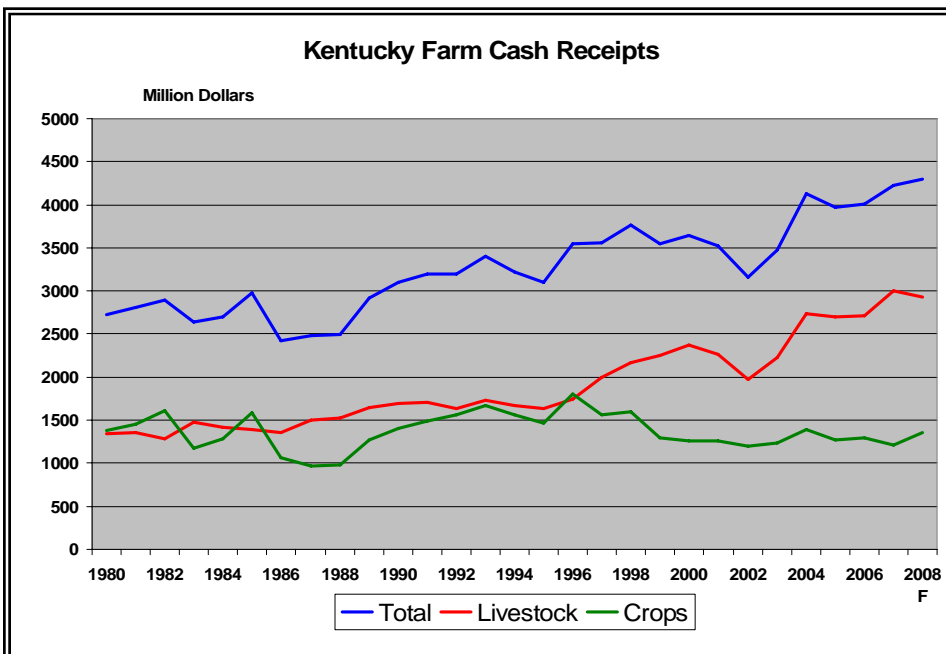
Despite projected record farm cash receipts, we do not expect record net farm income as higher cash receipts will be offset by lower government payments and higher input prices, but net farm income will be very strong by historical standards. Farm balance sheets (on average) continue to be very strong. Major factors to monitor in the farm economy in 2008 (beyond weather and disease) will be energy prices, the continued fallout from the sub-prime mortgage market and the Doha round of trade negotiations. In addition the nature of the final farm bill remains unclear as it has yet to be approved in Washington D.C.

Tobacco

Will Snell

2007 Review: The value of the Kentucky tobacco crop may have declined to around \$300 million in 2007 as Kentucky tobacco farmers experienced a very challenging growing and curing season, constraining opportunities for further expansion in tobacco income in the early post-buyout era. Both burley and dark tobacco acreages increased in response to emerging demand opportunities, but below average yields resulted in smaller crops. Labor costs and availability remained a concern, but workers were reportedly more accessible than in 2006. Poor early curing conditions resulted in a below average quality burley crop which will likely lead to lower prices for the 2007 crop. Burley disappearance (use) remained relatively strong in 2007 as reduced burley supplies worldwide, coupled with a declining U.S. dollar boosted U.S. burley exports to more than 200 million pounds. Burley imports were lower in 2007, enabling domestic U.S. burley use to stabilize around 100 million pounds, despite lower U.S. cigarette production/consumption. Dark tobacco use continued to see gains in response to growing snuff consumption and the entrance of cigarette manufacturers into the dark tobacco market.

2008 Outlook: Tight burley supplies and emerging opportunities in the dark tobacco sector will once again likely result in tobacco companies asking Kentucky tobacco farmers



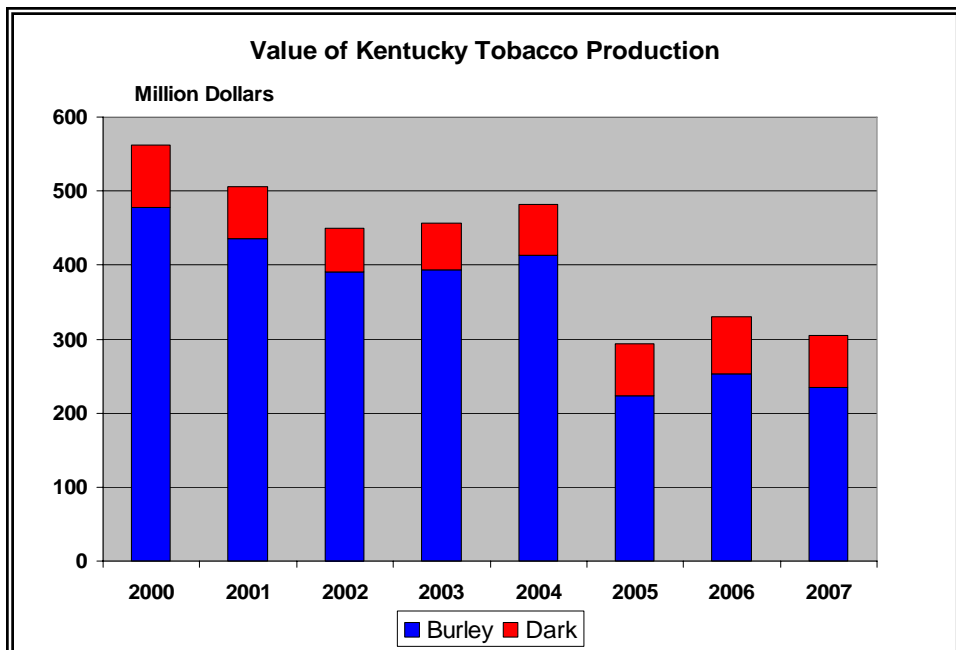
to plant additional burley and dark acres in 2008. After several challenging growing seasons, coupled with increasing costs of production, the contract price incentives offered by the companies will be very critical in determining the acreage response. In addition to price expectations, labor supplies, infrastructure investments, and the confidence/trust remaining tobacco farmers have in the companies in an era of no safety nets will ultimately determine how Kentucky farmers will respond to this opportunity. Despite relatively high forecast grain prices, tobacco production will continue to shift west in Kentucky, but look for dark tobacco to account for a larger percentage of the tobacco expansion in this area. Favorable growing conditions, confidence in the labor supply, and a combination of acceptable production/price incentives could boost the value of tobacco production in Kentucky to approach \$350 million in 2008.

Grains Kenny Burdine

2007 Review: Weather presented incredible challenges for Kentucky grain producers in 2007 as a late spring freeze and summer drought, affected the corn, soybean, and winter wheat crops. Prices for all grains have been strong and have only become stronger since harvest time. It is frustrating to think what an incredible year this could have been for grain producers if weather had been more favorable.

At the national level, the big story in 2007 was the huge shift in acreage towards corn production. A 22% increase in harvested acres will make this the largest corn crop ever produced. Current estimates put the 2007 corn crop near 13.2 billion bushels, making the massive 2004 crop look small. The increase in production will exceed the increase in use and has analysts projecting a larger carryover for the 2007 / 2008 marketing year.

Kentucky saw an even larger shift in production as harvested corn acres in the bluegrass state are likely to be up by more than 30%. The Easter freeze may have played an additional role here as many winter wheat acres



were sacrificed and planted in corn. Yields in the state are expected to be down by more than 10%, but the massive increase in acreage will more than offset this, resulting in a sizeable increase in Kentucky corn production.

The soybean situation is much the opposite. U.S. producers harvested almost twelve billion fewer acres of soybeans in 2007 as prices were clearly favoring corn at planting time. Fewer acres, coupled with slightly lower yields has 2007 soybean production looking about 19% smaller than in 2006. However, total use was basically steady, suggesting very tight soybean supply levels for the upcoming year. This has explained much of the run up in soybean prices since summer.

Kentucky soybean yields have been highly variable, but are generally much lower than in 2006. USDA is currently estimating Kentucky's bean yield at 27 bushels per acre, which is down from 44 bushels the previous year. When considering both fewer acres and lower yields, Kentucky's 2007 bean crop will be about half of what it was in 2006.

Kentucky's harvested wheat acres fell by

about 25% in 2007, largely due to the Easter freeze that devastated many winter wheat crops. Many were not harvested, and either corn or full-season soybeans were planted. Those wheat crops that were harvested generally saw lower yields as a result of the freeze. Kentucky wheat production was down 46% from 2006.

2008 Outlook: As mentioned earlier, 2007 marked an incredible production shift towards corn across the U.S., as the planting time price ratio clearly favored corn production. The shift was large enough to build a little cushion into the corn market. Stocks-to-use for the 2007 / 2008 corn marketing year is projected to be above 15%.

The soybean balance sheet tells much the opposite story. Carryover soybean stocks are projected to be near 200 million bushels and around 7% of total use. Given this contrast, soybeans will be trying to buy back some acreage in 2008. A relatively tight wheat supply is also a factor as wheat will also be competing for those acres.

Given these differences, it appears very likely that corn acres will decrease in 2008, making room for additional soybeans and wheat. In many places, including Kentucky, soybeans are also logical in the crop rotation coming off last year. As of mid-November new crop futures prices for corn and soybeans were trading at a price ratio of 2.4 to 1. This type of ratio clearly favors soybeans and should be sufficient to buy back considerable acres.

Still, the increase in corn utilization is expected to continue as more ethanol plants are expected to come online. Exports are also likely to play a positive factor in most all agricultural markets as a weak dollar effectively reduces the real prices of our exports to importing countries. Although markets are

2007 Kentucky Grain Production			
	Harvested Acres (1,000 acres)	Estimated Yield (per acre)	Total Production (1,000 bushels)
Corn	1,360 (+31%)	129 bushels (-12%)	175,440 (+16%)
Soybeans	1,075 (-22%)	27 bushels (-39%)	29,025 (-52%)
Wheat	240 (-25%)	51 bushels (-28%)	12,240 (-46%)

likely to be very volatile, 2008 should be a profitable year for grain producers. Hopefully, weather will be more accommodating in Kentucky.

Livestock and Meats

Lee Meyer

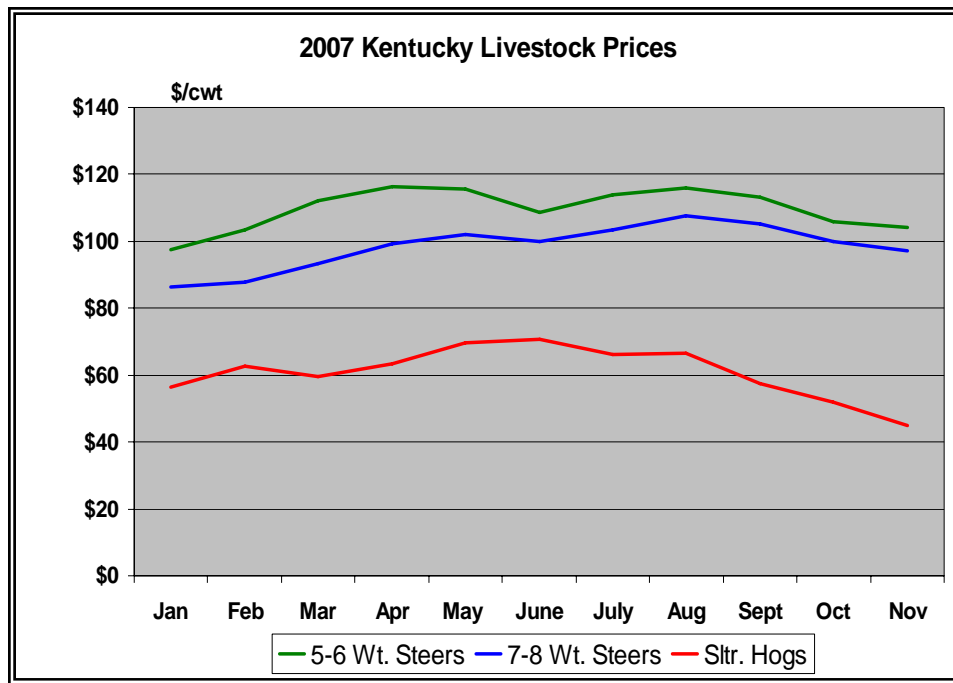
2007 Review: Meat production was expected to increase a couple of percentage points in 2007 as strong prices encouraged more production. But that didn't happen as tight grain prices rippled through the meat industries. Per capita meat consumption declined back to the lowest level in four years.

Retail meat prices have been up across the board. While beef prices started the year down from the 2006 level, they started rising in March and were as much as 8% over the year earlier level for the remainder of the year. Retail pork prices are also up, but at a more modest 2%. Chicken prices didn't change much during the first half of 2007, but since May have increased about 7%. Turkey, which composes only eight percent of total meat consumption, exhibited a 9% jump in retail prices.

Cattle: Cattle prices were a pleasant surprise for producers in much of 2007. Slaughter cattle supplies have been tight, and so prices were expected to be at high levels. Slaughter cattle prices will end 2007 with an average in the low \$90s, about \$6 higher than in 2006. This will be a new record, slightly above the previous record high level of \$88 in 2005.

While slaughter cattle prices were expected to be high, feeder cattle prices had been forecast to drop because of the high cost of corn. But, as corn price moderated and slaughter cattle prices hit high levels, feeder cattle prices came along for the ride, and will end 2007 better than expected. Kentucky prices for yearling steers were only slightly lower than 2006, however calf prices were about \$6/cwt. lower, ending the year about \$110/cwt. Part of the reason for the lower Kentucky calf price was the drought. As pastures dried up, farmers sold calves earlier and at lighter weights than usual. The glut of early sales hurt mid summer prices. Prices at the end of the year were actually higher than in 2006.

Hogs: The swine enterprise continues to evolve. Independent producers continue to find markets and contract production is expanding. According to a University of Missouri study, less than 10% of the hogs in the U.S. are sold on an open market, and Kentucky is probably no different. Most producers will not complain about most of 2007. The industry put three percent more product on the market, yet prices held stable, averaging about \$48/cwt. (carcass) for the year. The problem was late in the year, as prices tum-



bled as slaughter pushed the processing capacity to its limit. Plants had to open on Sundays to keep up with production, and that only happens when packer margins are very favorable.

Sheep and Goats: Small ruminant enterprises have found a place in Kentucky. Both sheep and goat markets have been favorable. The national average lamb price increased about 12% from the 2006 level as production dropped slightly. For goats, slaughter was up about 11% for the first half of 2007 but prices still increased about \$7 per cwt. For both goats and sheep, about half of the U.S. consumption is imported, reducing the impacts of changes in domestic production levels. And, at the small consumption levels, (less than one pound of each per person annually), much of the production is sold directly to consumers.

Poultry: Broiler prices were up dramatically in 2007, over 20% on slightly lower production. Not all of that was converted into profit, as much higher feed costs raised production costs extensively. Exports continued to be an important destination for U.S. broiler production, accounting for 15% of the U.S. production. And importantly, exports balance out the preferences for cuts, with white meat going to domestic destinations and dark meat going to foreign consumers.

2008 Outlook: **Cattle:** The impacts of the 2007 drought are going to impact Kentucky producers into 2008 and beyond. Costs are much higher due to the prices of hay and other feedstuffs. And, revenues are going to be down due to lower pregnancy rates and the need to hold heifers to replace the cows that went to market last year.

With fewer cattle on feed, and a tight supply

of cattle outside of feedlots, beef production will be steady to slightly lower this year. If exports continue to expand, there will be less beef on the domestic market. Slaughter cattle prices are likely to average near the record 2007 levels. There is a tendency to worry about weakening demand and reaction to high retail prices, and these worries could result in weaker-than-expected slaughter cattle prices.

When beef supplies are tight, the profit in the industry tends to shift toward the cow-calf level. As long as feed costs do not take a significant jump, 2008 could be a good year for feeder cattle sellers. The wildcard continues to be feed costs. A bad corn planting season could reduce feeder cattle prices by 10% or more.

The positive sides are the total beef supply, meat demand and expected prices. It is likely that total beef cow numbers in the January 1, 2008 USDA cattle inventory report will be down slightly. With cow numbers down in the drought-impacted south, significant increases in total cattle supplies are several years down the road, making investments in cows a reasonable business decision.

Hogs: Once the industry gets through the winter of 2007-08, it is set for a good year. Production is expected to be up about 2%, but part of that will go to increased exports. Prices are predicted to average near \$65/cwt. for 2008, about \$50 on a carcass basis. Prices for the traditionally high summer months could hit the low \$70s. So, while production costs are higher, the industry is expected to be profitable for most of 2008.

Sheep and Goats: Little is expected to change for the small ruminant enterprises. Sheep production is expected to continue its

pattern of small declines, while goat slaughter should increase. Both lambs and goats should continue to sell at prices near or over their 2007 levels.

Poultry: Egg hatchings and pullet sets suggest a continued small increase in broiler production in 2008. There are no fundamental economic factors that suggest much of a change in the poultry market. International impacts of avian influenza could disrupt trade patterns and open up export markets, but arbitrary trade restrictions could do just the opposite. The other risk factor would be feed costs, which would have little impact on short term prices, but would affect profitability.

Dairy Kenny Burdine

2007 Review: Milk prices started the year very close to 2006 levels, but quickly increased to some of the highest in the last ten years. Since starting the year at \$14.50, the U.S. All Milk price has been above \$20 per cwt. since June. Prices for cheese, butter, and nonfat dry milk have all supported dairy prices. Much of this strength is due to strong export markets for dairy products.

Expansion in the U.S. dairy herd appears to have continued in 2007, but Kentucky does not appear to be following this pattern. Despite higher milk prices, the gradual decline in Kentucky dairy cows continues. Monthly milk production reports are suggesting that Kentucky will see another decrease in dairy cow numbers by the first of the year.

2008 Outlook: Expansion in cow numbers, coupled with steady increases in production per cow, suggest another milk production increase is likely in store for 2008. The good news this year is that strong demand should absorb a lot of that production. A weak U.S. dollar is likely to keep international interest strong, exports steady, and provide some nice underpinning for U.S. milk prices. 2008 prices should be stronger than 2007 in the first quarter, although they will probably find it difficult to be as strong by summer. In the end, 2008 prices are likely to average very close to 2007 levels.

Horticulture Tim Woods

2007 Review: The value of all horticulture cash receipts in 2007 looks like it will come in at about \$103 million, with floriculture (\$44), nursery, greenhouse and sod (\$36) and produce (\$23). Kentucky's produce (vegetables/fruit) industry and green (nursery/greenhouse) industry continued growth and

diversification in 2007 in terms of acreage and capital investment. Gross produce receipts declined slightly in 2007 as producers struggled to overcome a hard Easter freeze and then drought conditions mid-Summer. March planting intentions indicated an expected acreage increase for produce crops of 8% overall and a total of 11,514 acres. This is the same acreage growth rate as the 2006 estimate. Fruit crop acreage was projected to essentially remain the same at an estimated 2,496 acres. While vegetable crop acres estimated at 9,018 were up 11% from the 2006 level. A weaker overall economy and slower new construction have contributed to a slowdown in the growth in the green industry, but the sector still will show decade-high gross sales of about \$80 million.

Commercial Vegetables: Kentucky posted the second highest rate of growth (53%) in vegetable acres harvested among U.S. states between 1997 and 2002. The value of commercial vegetables harvested in Kentucky during 2007 will decrease slightly from 2006 but will still show increasing interest among growers across the state, even in the wake of 2 cooperatives recently closing and other co-ops scaling back business. A significant amount of commercial marketing has continued through private arrangements. Direct marketers continued diversifying product offerings, while wholesale vegetable prices were exceptionally strong across all crops during Kentucky's season. Farmers selling at community farmers markets increased from around 1,800 in 2006 to over 2,000 in 2007. Volume of vegetables marketed through auctions and to restaurants was down slightly in 2007 due to the adverse weather. Grower participation, however, has expanded in the auctions (Fairview, Christian County; Lincoln County, and Bath County). Over 350 producers sold through the produce auctions in 2006 and the total will be higher again for 2007.

Commercial Fruit: Tree fruit growers were hit very hard by the freeze and saw losses generally between 75-100%. Berry growers also saw losses to freezing, but continued to increase acreage and utilized more value-added and local grocery sales. Kentucky wineries reported purchasing more local grapes in 2006 and bottling more wine. The number of registered wineries has grown from 5 in 2004 to 44 in 2007. Some of the early maturing grapes were negatively impacted by the freeze, but most varieties planted experienced good yields this summer. Vineyard and winery expansions are continuing, according to our recent survey, primarily targeting local markets.

Green Industry: The green industry nationwide is fueled by new home construction and consumer disposable income, both of which

had a bit of a downturn in 2007. Kentucky's growth in this sector over the past few years is largely confined to larger greenhouses, but landscapers and mid-size nursery businesses have also reported growth. This sector grew rapidly between 2002-06, with growth leveling out, but still steady this year. Opportunities for farm producers in this sector lie generally in direct marketing and installation/delivery services accompanying nursery product sales.

2008 Outlook: The outlook is fairly positive for commercial vegetable production in Kentucky for 2008. Acreage initiated under the co-ops will continue to transition to other business structures for wholesaling. If it hadn't been for very difficult production conditions, 2007 would have been a record year for produce sales. The UK Produce Marketing and Planting Intentions Survey has been distributed for 7 straight years and documents the growth in each of the various direct-to-consumer, direct-to-grocery and restaurant, wholesale, and even CSA market channels. Producers were asked to provide some perspective on the changes in their fruit & vegetable operations in recent years, identifying changes in their acreage in 2006 from 2003. The majority of growers indicated they had actually seen sales for 2006 increase during this period - slightly (18%) or substantially (35%). Produce sales projected over the next 3 years were expected to increase somewhat (35%) or substantially (16%), while only 15% expected any sort of decrease. While 2007 production may not have reached grower expectations, there remains a high level of optimism toward expanded market opportunities.

New grape and berry plantings continue to reach fruiting age. There are approximately 550 bearing acres of wine grapes in Kentucky with many new plantings going in. There is plenty of room for growth in local markets for berries. Wine production is expected to continue its increase in 2008 as more wineries come into production and expand capacity.

Nursery/Greenhouse: Green industry growth could be hampered by higher energy costs and housing market slowdowns in 2008. While well-managed firms will weather tighter profits, smaller firms could face exit or consolidation. Several larger, high technology systems have been developed that have contributed substantially to the wholesale dimension of the business in Kentucky. Service-oriented firms, like landscapers and retail centers, however, may be better positioned for growth in 2008.

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