

The Kentucky Agricultural Economic Outlook for 2007

edited by Linda Inman and Kenny Burdine



Kentucky Agricultural Economy

Larry Jones, Craig Infanger and Will Snell

2006 Review: 2006 was another good year financially for most Kentucky farmers with farm cash receipts totaling \$4.1 billion, the second highest on record. Livestock receipts led the way at \$2.785 billion representing 61% of the total. Significant gains were registered in equine, cattle and calves and poultry. Most of these gains were due to continued strong prices. Crop cash receipts totaled \$1.326 billion, up 4.4% over the previous year. Row crops led by corn, soybeans and wheat registered gains, while hay and vegetable receipts declined modestly. Tobacco cash receipts declined to \$320 million but crop year sales included tobacco sold from the pre-buyout 2004 crop. Collectively, poultry, cattle and calves and equine enterprises represented more than 60% of total farm cash receipts in 2006. Equine continued to be the largest reported commodity with cash receipts exceeding \$1 billion for the second consecutive year.

Kentucky net farm income was a record \$2.082 billion in 2005 according to the U.S. Department of Agriculture. While favorable

climate and markets played a role, government transfer payments (primarily tobacco buyout dollars) were up significantly to more than \$825 million. We expect the 2006 net farm income figure to decline due to lower government transfer payments and rising production costs, particularly energy based inputs (fuels, fertilizers, chemicals).

2007 Outlook: Assuming normal growing conditions and no major disease outbreaks, farm cash receipts in 2007 are expected to set an all time record of \$4.296 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 13% while livestock receipts increase less than 1%. Crops will be led by significantly stronger row crop prices (corn, wheat and soybeans).

Despite a 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. Farm balance sheets (on average) continue to be quite strong. Major factors to monitor in the farm economy in 2007 (beyond weather and disease) will be how the recent election might affect the debate regarding the 2007 farm bill; what will the collapse of the Doha trade negotiations

mean for U.S. agricultural policy and trade; will the U.S. economy (and world) continue to grow and what are the resulting implications for interest rates and asset prices.

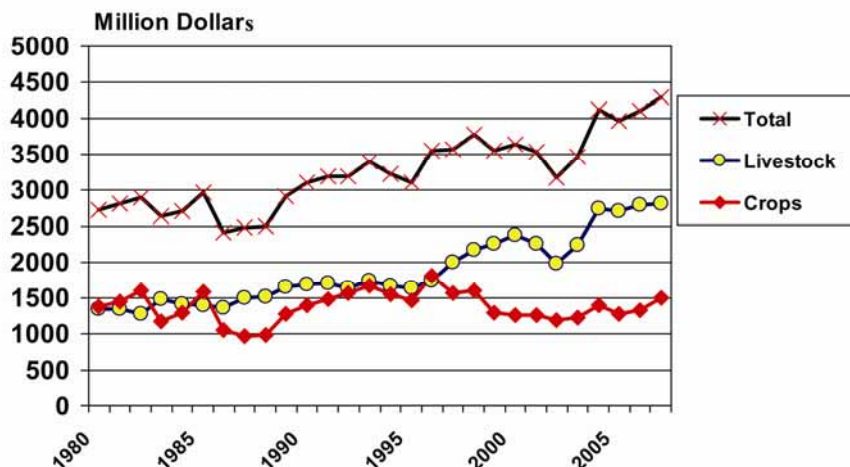
Tobacco

Will Snell

2006 Review: Following a year of post-buyout transition, Kentucky tobacco production, despite disease pressures, weather-related problems, and labor supply challenges likely increased in 2006. However, excessive moisture in September and October and labor shortages during the harvesting season likely eroded earlier predicted yield gains and adversely affected quality. Despite some quality concerns on the later-produced tobacco, contract price schedules indicate that burley prices for the 2006 crop should be higher than what was observed for the first post-buyout crop in 2005. Around 100 Kentucky counties remain in tobacco production following the buyout, but as anticipated, production is shifting more to the central and midwestern crop reporting regions of the state. Outside of Kentucky, burley growth is continuing in non-traditional states such as Pennsylvania and North Carolina, but still falling in Tennessee. Burley is also being produced in other non-traditional states including, Wisconsin, Illinois, and Maryland. Despite expansion outside of the traditional burley areas, Kentucky is maintaining its 70% market share of U.S. burley production. Although the U.S. may have produced a 210-220 (+/-) million pound crop in 2006, production still remains below the 275 to 300 million pounds needed by the industry to meet current use levels. Dark tobacco acreage was also up in 2006 as growers continue to benefit from a sustained expansion in domestic smokeless tobacco consumption, limited off-shore competition, and favorable price incentives offered by smokeless tobacco manufacturers. Accounting for both burley and dark tobacco production, the value of production for the 2006 Kentucky tobacco crop may rebound back above \$300 million.

2007 Outlook: Despite higher anticipated prices for the 2006 crop, increasing input costs and frustrations over the labor situation

Kentucky Agricultural Cash Receipts-1980-2007



Source: Ky Ag Stats/NASS

may constrain additional acreage expansion in 2007, without further price incentives. Higher prices could provide the supplies to expand the dwindling domestic use, but could have offsetting affects on the growing export market. Consolidation in the number of growers will likely continue in 2007, with production continuing to shift to the areas that can consistently produce the quality attributes demanded by the companies at the lowest cost. While the future for those remaining in the sector remains very uncertain, production and cash receipts for the Kentucky tobacco sector does have the potential to expand in future years (in response to demand opportunities) if growers are encouraged (through manufacturer price incentives) to remain in production, and most importantly, the labor situation shows some signs of stabilizing or improving. Consequently, tobacco farmers and organizations will focus most of their attention in 2007 on national immigration reform legislation that provides an adequate supply of legal and affordable labor.

Grains Steve Riggins

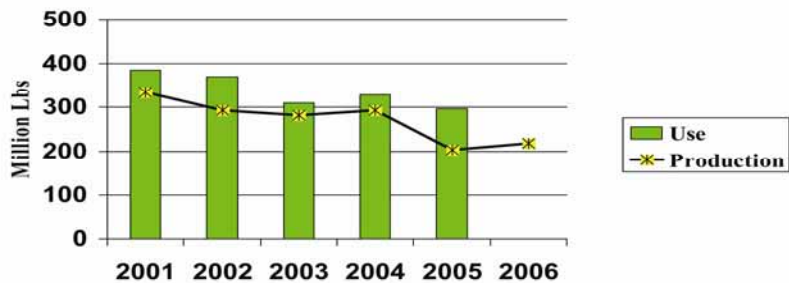
2006 Review: U.S. corn production for the 2006 crop now looks to total less than 11 billion bushels as actual harvest results indicate a slightly smaller yield than forecast in late summer. However, USDA's current forecast 2006 U.S. corn yield is projected as the second best ever while total production is projected to be the third largest in history.

The good news for corn farmers is that USDA and the market both appear to believe that consumption of U.S. produced corn will be record large for a fourth consecutive year, approaching 12 billion bushels, and exceed production by about 1 billion bushels. This robust demand for U.S. corn is predicated on near record use of corn as both domestic livestock feed and exports and on surging record setting use of corn in ethanol production (see graph).

The situation for soybeans is quite different to that for corn. – a third straight year of very large production (3+ billion bushels of soybeans each year, new record this season) and total use expected to finally top 3 billion bushels this marketing season. These large U.S. and global soybean crops have provided more than an adequate supply to allow global use to expand significantly while prices have remained modest by historical comparison.

The major story for wheat in 2006 was production problems in many of the main wheat producing/exporting countries and also in some large wheat producing countries that had to import more wheat than usual or had to import wheat for the first time in several years. Currently global wheat

Burley Tobacco Production Vs Use



Source: NASS/USDA

production (2006-07 marketing year) is projected to be well below 600 million metric tons (mmt) and far below the two largest global crops in history – 2004 @ 629 mmt and 2005 @ 619 mmt. Rapidly growing economies in China and India have produced strong increases in food demand and resulted in record consumption of wheat. The sharp reduction in production therefore has produced very high wheat prices.

2007 Outlook: The price outlook for U.S. corn, wheat and soybeans over the next several months will be heavily dependent on production prospects for corn and especially soybeans in the Southern Hemisphere, weekly export sales and shipments of U.S. grains/products, demand for corn by ethanol producers, import/export activity by China for corn and soybeans, import decisions by India for wheat and livestock feed demand in the U.S. By early spring, the driving force behind price outlook will be expectations about acres planted to principal crops in the U.S., the condition of northern hemisphere wheat crops and harvest results for South American soybean production. U.S. production prospects will then dominate the market news until at least mid summer.

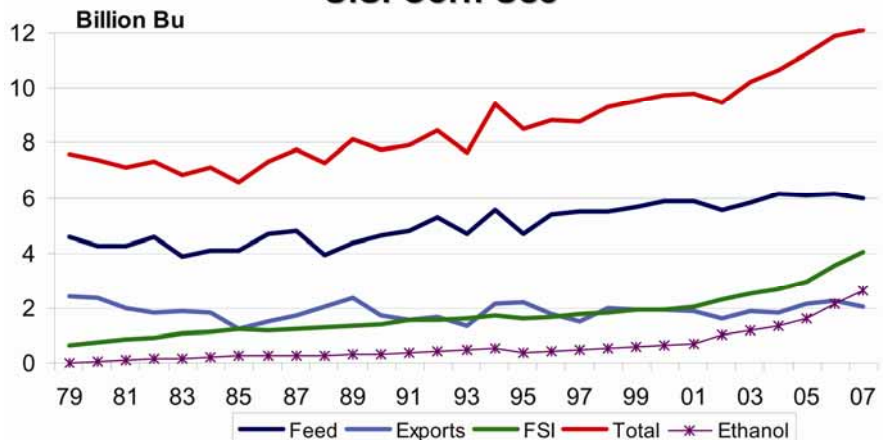
Futures markets are based on the daily collective expectations of all participants – these markets try to anticipate today what

something should be worth in the future. Wheat markets have been very strong for several months rationing a small global wheat supply while inducing world farmers to increase future wheat production.

The unprecedented use of corn to produce energy and the projected magnitude of further corn use for ethanol and soybean oil for bio-diesel use has produced a dramatic rally in corn prices since mid September, even as harvest of the third largest U.S. corn crop got into “full-swing”. A few weeks after the corn price rally started, soybean prices also began an impressive rally. The market is trying to “save” as much of the “old-crop” corn as possible while inducing farmers to dramatically increase acres devoted to corn production next spring. Given the current situation with various government programs and recent cropping practices in the U.S., any large increase in corn acres must lead to a meaningful reduction in U.S. soybean acres. If soy-diesel output expands as expected, there will soon not be enough soybean production – unless it comes from South America. This exciting period of potential profits in agriculture will not endure. A market driven economy will not allow the continued existence of excess profits.

Farmers should monitor the weekly export data, the inspections report on Monday and

U.S. Corn Use



the sales report on Thursday. Prices could soften if the market sees evidence that users are starting to curtail purchases from the U.S. The monthly soybean crushing report by the Census Bureau needs to show a continuation of strong use for domestic soybean crushings. Additionally, in January, the USDA data need to confirm strong domestic use of corn for livestock feed and record use of corn for ethanol production. Now is the time for farmers to develop their first marketing plan for the 2007/08 marketing season.

Livestock and Meats

Lee Meyer and Kenny Burdine

2006 Review: From a whole meats perspective, total consumption has resumed its usual path of small increases. For 2006, we expect total meat production (beef, pork, poultry) to increase by 2%, which is less than 1% on a per person basis. The USDA estimates 2006 per capita consumption of beef at 66 pounds, pork at 49 pounds, and broilers at 87 pounds. After rising for the past eight years, consumer expenditures for meats are declining slightly as the retail prices of beef and chicken declined for most of the year. Only pork prices rose at the grocery store to levels higher than 2005.

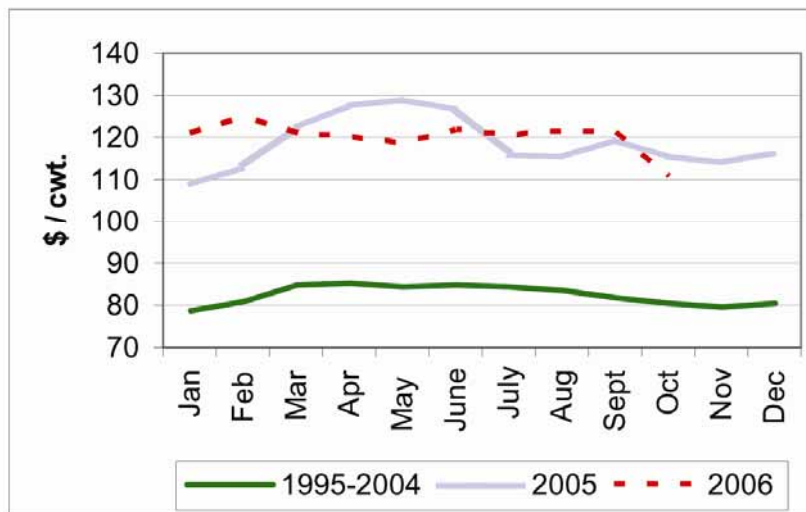
Cattle – The slaughter cattle market behaved as predicted during most of 2006. While prices were down during the spring/early summer due to heavy marketings, they have since recovered. Prices for the last part of 2006 are averaging over the 2005 level. For the year, beef production will be up about 6% from 2005, and prices will be down about \$2, to \$86 per cwt.

The Japanese and Korean markets were reopened to US beef during the 3rd quarter and this provided price optimism. However, as exports to these markets are only gradually replacing the alternative sources from Australia and other countries, there has not been a major price impact.

The feeder cattle market has followed suit, with prices staying at strong levels throughout the year. Only in October did feeder cattle prices begin to decline. The key factor was a dramatic change in the feed cost outlook. As corn prices jumped, feeder cattle prices declined by \$5 to \$10 per cwt. On an annual basis, KY feeder cattle prices are likely to average very close to 2005 levels.

Hogs – The pork industry continued increasing production, a trend that started in 2000. Hog inventories and productivity have increased at slow, but steady levels. For most of those years, consumers' willingness to pay increased and prices held strong. However, during 2006, farm level prices dropped by 6% as production rose 2%.

KY Auction Prices (500 to 600 lb Feeder Steers)



It appears that Kentucky's hog industry may have turned the corner. According to the most recent USDA hog inventory report, pig numbers are up 6% in the state. There has been a dramatic change in the type of production, with a large portion of Kentucky's industry producing and/or marketing under contracts.

Broilers -- Like the other meats, increases in production coupled with weaker consumer demand hurt the broiler industry. While production increased only modestly (2%), it still led to 8% lower prices (a twelve city average of \$.65 per pound). Finally, exports have been critical to the broiler industry as about 15% of the broiler meat produced in the U.S is exported. Exports for 2006 increased by 6% over 2005 levels.

Goats – The meat goat enterprise has stabilized in Kentucky. Reports are that some of the early producers have dropped out, but that the industry is maturing and production efficiency and quality are improving. According to the USDA, Kentucky goat numbers increased by 8% coming into 2006, placing Kentucky 5th in the U.S for goat numbers.

Meat goat prices continued at historically high levels. However, prices vary dramatically based on quality and the particular market. Kentucky regular stockyard prices for 40-60 pound goats average about \$45 to \$50 per head. This is somewhat lower than the east coast, New Holland, PA market. However, goats sold at the Ky. Department of Agriculture sponsored graded sales sell near east coast prices.

2007 Outlook: Cattle: Key factors changing the outlook for cattle are feed costs and drought in the Southwest and Northern Great

Plains. During late 2006, placements of cattle into feedlots jumped dramatically as ranchers put cattle on feed because of such poor range conditions. The result was that the number of cattle in feedlots as of September 1 was 10% over the year earlier level. As the fall moved on, placements dropped back. Since almost all of these cattle would have eventually been put on feed, the long term impact on beef production for 2007 is modest.

Drought in the west has also forced some sizeable increases in cow slaughter, which may actually mean a decrease in cow numbers for 2007. With slightly lower cattle numbers in North America, total 2007 beef production may be slightly less than 2006. A contributing factor is that cattle placed at light weights are often marketed at lighter weights as well. Increasing feed costs will also discourage feedlots from keeping cattle any longer than needed.

Slaughter cattle prices for 2007 should be down slightly from 2006. Prices for the year are likely to average in the mid \$80s (compared to the \$86 average for 2006). If cattle are moved through feedlots on schedule, the best prices are likely to be in the May-June time period, which would be a very counter seasonal price pattern.

Feeder calf prices are not likely to do as well. Lower slaughter cattle prices are a minor factor – the major factor is higher feed costs. For every \$1 per bushel that corn prices increase, yearling feeder steer prices tend to decline by \$8 per cwt. And, the impact on calf prices is even greater. As a result, feeder cattle prices are likely to be \$4 to \$10 lower for the year.

The impact on profitability will be mixed. Cow-calf operations selling weaned calves will be hurt the most, but should still be able to cover all of their variable costs. Backgrounders are likely to benefit, as their buy-sell margins become more favorable and because they can use feedstuffs (like distillers grains and soyhulls) as an alternative to expensive corn.

Hogs: A 3% increase in production will likely mark 2007, and trade will remain a question mark. As a result, prices are expected to drop for the year. Forecasts based on fundamental factors suggest a 10% price decline is possible. However, as of late 2006, futures markets have been less pessimistic, suggesting that 2007 prices will average in the upper \$40's.

Changing feed costs may have an even bigger impact on the market. As feed costs increase, profitability will drop. So producers may be hurt by both lower prices and higher costs. If so, production may be scaled back, providing price support later in the year.

Broilers: In many ways, the broiler market is like the hog market, except that its prices have been less sensitive to changing production levels. Expanding consumption can take up the small expected production increase without a need to lower prices. Broiler prices are expected to remain near current levels (in the \$.65 to \$.70 area). But, increasing feed costs will affect broiler profits and may lead to lower production levels.

In the longer run, trade is a serious issue. With about 15% of its product exported, the industry is sensitive to competition and market access. Brazil is a strong competitor, and it passed the U.S. in exports during 2004. And, with Russia and other eastern European countries being major buyers, continued access to these markets is a key for stable broiler prices.

Goats: As demand weakness affects all the meats, the goat market will not be as strong. Prices for 40-60 lb., Selection 2 kids should average just over \$105 per cwt., with the typical seasonal pattern of the highest prices in the first half of the year. Many Kentucky goat producers will not receive prices even close to the \$1.05 / lb. mark because of the still poorly developed market system they use. However, those who participate in the "Graded and Tel-O-Auction" sales can expect very competitive prices. Based on a recent budget analysis, efficient producers should still be able to cover all of their variable costs and some of their labor.

Horticulture

Tim Woods and Jim Mansfield

2006 Review: The value of all horticulture cash receipts in 2005 was \$104 million, with

floriculture (\$43.6), nursery, greenhouse, and sod (\$35.6), and produce (\$25). Kentucky's produce (vegetables/fruit) industry and green (nursery/greenhouse) industry continued growth and diversification in 2006. Gross produce receipts rose slightly in 2006 as producers benefited from more direct market channels, especially farmers' markets. Over 1,800 vendors sold in farmers markets in 2006 and the number increases each year. Total sales for produce in 2006 are estimated to be around \$26 million. A strong overall economy and relatively lower energy costs will lead to modest growth for Kentucky's green industry, increasing slightly to a decade-high gross sales of about \$80 million.

Commercial Produce: 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 2006 decreased slightly in the wake of 2 cooperatives closing and the other coops scaling back business. Still, 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. Volume of vegetables marketed through auctions and to restaurants was up in 2006, due to expanded marketing by the two larger auctions (Fairview, Christian County; Lincoln County, and Bath County). Over 300 producers sold through the produce auctions in 2005 and the total will be higher again for 2006.

Berry growers continued to increase acreage, utilizing more value-added and local grocery sales. Kentucky wineries report purchasing more local grapes in 2005 and bottling more wine. Registered wineries have grown from 5 in 2004 to 31 in 2006. Vineyard and winery expansions are continuing.

Green Industry: The green industry nationwide is fueled by new home construction and healthy consumer spending. This sector grew rapidly between 2002-06, with growth leveling out, but still steady this year. Opportunities for farm producers in this sector lie in direct marketing and services accompanying nursery product sales.

2007 Outlook: The outlook is mixed for commercial vegetable production in Kentucky for 2007. Co-op acreage will continue decreasing, but auction and independent grower-shipper wholesale sales will again increase. Gross sales will continue to be driven by higher-value direct marketing at farmers' markets, directly off the farm, and to foodservice. Overall vegetable acreage will be stable, but higher-value market

channels should keep sales steadily increasing.

New grape and berry plantings continue to reach fruiting age. There are approximately 450 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 2007 as more wineries come into production.

Nursery/Greenhouse: Green industry growth could be hampered by higher energy costs and housing market slowdowns in 2007. 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 2007.

Dairy Kenny Burdine

2006 Review: The dairy market in 2006 was not near as kind to producers as it was in the previous two years. Prices in 2006 were below 2005 levels each month and should average more than \$2 per cwt lower by year's end. Milk production saw quarter-over-quarter increases the entire year as both milk cow numbers and milk per cow were higher. The April-June quarter was the worse quarter seen since the same quarter in 2003. The US All Milk price averaged only \$12.00 per cwt those months as poor cheese and butter prices seemed to pull the entire complex down.

In Kentucky, dairy cow numbers continue to decline. USDA estimated that Kentucky milk cow numbers decreased by 7% during 2005, and this liquidation appears to have continued in 2006. Kentucky mailbox prices held up better than the US All Milk price, averaging \$14.33 in the first quarter, but fell to \$12.32 in the second quarter. Prices rallied from those levels through the summer and fall, but will not reach 2005 levels. Most Kentucky dairy producers will see negative economic returns for the year.

2007 Outlook: Expansion of the US Dairy herd may have ended in the summer of 2006, which would suggest that smaller milk cow numbers are possible for 2007. However, production per cow is likely to offset any reductions in cow numbers. USDA is forecasting a slight increase in milk production for next year. This is not good news given poor prices seen in 2006. However, steady demand coupled with a more favorable outlook for some components should support the milk complex somewhat. 2007 prices are likely to open year below year ago levels, but show more resilience in the spring and summer.