Weekly Outlook: Is There Enough Acreage?

Darrel Good

Department of Agricultural and Consumer Economics
University of Illinois

February 21, 2011

Recommended citation format: Good, D. "Is There Enough Acreage?" farmdoc daily (1):8, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 21, 2011.

http://farmdocdaily.illinois.edu/2011/02/is-there-enough-acreage-1.html

Most of the focus on 2011 U.S. planted acreage centers on corn acreage. There are a number of reasons for that focus.

First, under the current policy regime, there is a mandate of 13 billion gallons of renewable biofuels production during the 2011-12 corn marketing year that begins on September 1, 2011. Almost all of that mandate is being met by corn based ethanol production. The mandate implies that a minimum of 4.65 billion bushels of corn will be used for ethanol production during the 2011-12 marketing year. Use in other categories of consumption is influenced by available supply, demand, and price. Consumption of corn for food and industrial purposes other than ethanol is currently running at about 1.4 billion bushels per year. Typically, U.S. corn exports are near 2 billion bushels per year and feed use is currently near 5.2 billion bushels per year. With adequate supplies, then, use of corn during the 2011-12 marketing year might be near 13.25 billion bushels. All of that potential consumption must be met from 2011 production since stocks at the end of the current year are expected to be at pipeline levels.

The supply and demand environment for the other two major crops, wheat and soybeans, is fundamentally different than for corn. For wheat, domestic stocks at the end of the current marketing year (May 31, 2011) are expected to be relatively large, accounting for 33.6 percent of expected use during the current marketing. In addition, winter wheat seedings were reported to be 3.7 million larger than seedings in the fall of 2009. Even though the hard red winter wheat crop is not in good condition, there is potential for an adequate crop in 2011 with more favorable spring weather. Furthermore, wheat is produced in large quantities in a number of countries so there is opportunity for foreign production to rebound from the depressed level of the past year. Under more favorable spring weather conditions, for example, wheat seedings in Canada could rebound from the low level of 2010. Russian wheat production was also depressed in 2010 due to severe drought conditions.

For soybeans, stocks at the end of the current marketing year are expected to be very small, but prospects remain good for a large South American harvest that is currently underway. The Brazilian crop could exceed the record harvest of 2009 and China is already buying South American soybeans. In addition, U.S. soybean acreage in 2011 will get a boost from the large increase in soft red winter wheat acreage and the opportunity for double cropping of soybeans. A return to a normal level of double cropping from the low level of 2010 would add 2 million acres of double cropped soybeans. Finally, a shortfall in U.S. soybean production in 2011 could be offset by a large acreage response in South...
America for harvest a year from now.

For corn acreage, two questions need to be answered. How many acres of corn need to be planted in 2011? and Is there opportunity to accommodate the needed increase? An opinion about the amount of the acreage needed is influenced by a number of factors, including the likely strength of demand, a judgment about the appropriate level of price, the desired level of 2011-12 marketing year ending stocks, and the expected U.S. average yield in 2011. With prices at “reasonable” levels, it appears that corn consumption would likely be near 13.25 billion bushels during the 2011-12 marketing year. To bring some price relief to end users of corn, but maintain prices at profitable levels for producers, some build-up in year ending stocks should be an objective for next year. An inventory near one billion bushels would not provide a large buffer for production shortfalls beyond 2011, but would likely meet the dual price objective. An increase in stocks of 325 million bushels would require a crop of 13.575 billion bushels. For now, the safest assumption about the 2011 average corn yield is a trend value. However, there doesn’t seem to be complete agreement on trend value. The USDA and others are using a trend yield of 162 bushels. Our analysis suggests that trend yield for 2011 is close to 159 bushels. A yield of 162 bushels implies that harvested acreage would need to be near 83.8 million and planted acreage near 90.9 to produce a crop of 13.575. A yield of 159 bushels implies harvested acreage of 85.4 and planted acreage of 92.5 million. To allow for yield risk, we still believe planted acreage of corn needs to be near 93 million in 2011.

The recent history of total planted acreage of crop land in the U.S. shows that total acreage tends to expand when commodity prices are high. It should be possible to plant additional 4.8 million acres of corn in 2011 even with an increase in winter wheat and cotton acreage. However, corn prices will have to remain high enough to motivate such a large increase. Corn prices continued to move higher through last week. However, prices for the 2011 crop have not increased as much as the old crop. March 2012 futures are $.90 below March 2011 futures prices. More strength in new crop corn prices may be required to get the needed acreage response.