

Are Farmers up to the Corn Ethanol Challenge?

In his State of the Union address January 23, President Bush issued a challenge to American farmers, scientists and entrepreneurs to quintuple the output of renewable fuels over the next decade.

With much of this burden falling on U.S. farmers, will they be up to the challenge?

Yes, according to two Alabama Cooperative Extension System economists, at least for now.

One of these experts, Dr. Jim Novak, an Extension economist and Auburn University professor of agricultural economics, is optimistic that corn acreage and carryover will be sufficient to meet demand through the 2006–2007 marketing year, running from September to August. After that, though, it could be an entirely different ball game, especially if the demand for corn-based ethanol increases, as everyone predicts.

Weather is a big factor. If weather doesn't cooperate or if farmers are confronted with some other unforeseen factor, the end result could be reduced yields and, as a result, reduced carryover.

But as Novak stresses, that's only the beginning of the challenges farmers will face keeping up with what is fast becoming an almost insatiable demand for renewable fuels.

Another big challenge will be nitrogen — finding more nitrogen to maintain or, if the need arises, increase corn yields as demand grows. And the inevitable increase in nitrogen costs will leave producers scrambling to find alternative sources.

Add to that the likelihood of land rent increases in the foreseeable future — yet another added operating cost for farmers.

Also factoring into the picture is lingering uncertainty over the next farm bill. Yes, some key players in the farm bill debate, including the chairmen of the U.S. House and Senate Agriculture committees, have promised big incentives for cellulosic-derived ethanol, which may allow farmers the opportunities to grow other energy crops besides corn. But it could be months before this legislation is debated, passed and signed into law. Until then, uncertainty will prevail.

As demand increases, there is the added challenge of bringing marginal land into production. Some of this added acreage may not be well suited for corn production, which will call for additional nitrogen costs and changes in tillage practices, Novak says.

Also, much of this marginal land will be outside farm base acreage, which means that farmers will not be insulated from financial risk, at least under current rules, he says.

Another big factor is energy supply and the price of crude oil. There is uncertainty about how foreign oil suppliers will respond to U.S. attempts at energy independence, Novak says.

Holding a considerably more optimistic view is Novak's colleague, Robert Goodman, an Extension economist and associate professor of agricultural economics.

As Goodman sees it, where there is a will there is a way. Yes, there are a multitude of challenges associated with increasing corn production. But the market will respond one way or another to satiate this demand, just as it has adjusted to other demands in the past.

For example, who in Alabama a century ago could have imagined that more than 20 million acres under cultivation in cotton, corn or other crops would eventually be whittled down to roughly a million acres by the 21st century. But it happened, and the simple fact that it did teaches a lesson about how markets eventually adjust to factors such as changing demand and technological innovation, Goodman says.

Likewise, while the prospect of converting more resources to corn and possibly other forms of ethanol may now seem daunting, Goodman is confident scientists, entrepreneurs and farmers will work out some kind of solution, much as they have in the past with similar challenges.

Goodman and Novak concede that one big factor figuring into all of this is cellulosic ethanol — namely, how quickly biomass sources such as switchgrass and wood chips can be developed into viable ethanol sources to complement corn. During his State of the Union address, Bush insinuated that researchers are on the cusp of one or more scientific breakthroughs that will ensure these potentially plentiful sources of ethanol become commercially viable options.