

Ethanol Could Fuel Rise in Corn

Growing Demand May Limit Supply For Poor Countries

By PRASENJIT BHATTACHARYA

Corn prices are likely to reach unprecedented highs in the next two to three years, as an ethanol boom in the U.S. is likely to limit corn's availability for food and feed use.

This has fueled concerns that corn, a staple food ingredient in many countries and widely used as feed in the poultry and livestock sectors, might become out of reach for poorer consumers, boosting food prices in general.

Soaring food prices could cause urban riots in scores of low-income countries that rely on grain imports, such as Indonesia, Egypt, Algeria, Nigeria and Mexico, said Lester Brown, founder of the Earth Policy Institute and author of a recent report about potential corn demand from the ethanol industry.

The report said the ethanol distilleries being built in the U.S. will need 139 million metric tons of corn by the 2008 harvest, far more than a U.S. Department of Agriculture estimate of the requirement, pegged at around 60 million tons.

"If the Earth Policy Institute estimate is at all close to the mark, the emerging competition between cars and people for grain will likely drive grain prices to levels never seen before," Mr. Brown said.

Apart from being the biggest corn grower, the U.S. is also the leading corn exporter. Since 2006, corn-importing countries

have become more dependent on U.S. corn as China cut back on exports amid increased domestic demand from its own ethanol industry and fears of a supply shortage.

Mr. Brown isn't alone in warning that an ethanol boom might lead to sharp rise in corn prices by creating a supply squeeze.

"If biofuels continue to expand globally, you can expect grain prices to move to their energy equivalent, until cellulose and other alternative-energy sources become commercially available," said Simon Bentley, analyst with LMC International, a commodities research firm based in the United Kingdom.

Mr. Bentley said that while sufficient land is available to expand corn output in the U.S. and Brazil, how such expansion will affect output of other crops, especially soybean, and corn prices, remains the key question.

According to a recent report by J.P. Morgan, average corn prices are expected to be about \$4.03 a bushel in 2007, up 61% from \$2.51 a bushel in 2006.

The most-active March contract on the Chicago Board of Trade closed at \$3.9650 a bushel Friday, up 55% from the \$2.5525 a bushel the contract traded at on the same day last year.

The J.P. Morgan report said the ethanol industry's growth calls for an additional 500 million to one billion bushels of corn every year.

While such a rapid rise in demand in itself will ensure high corn prices, the study added that any weather threat to the corn crop this year will be "met with record high prices."

China, a large producer and consumer of corn, is already taking measures to ensure domestic availability.

In December, the Chinese government stopped approving new corn-based ethanol plants.

ence, said the key to a sustainable biofuels industry is cheaper feedstock, not expensive corn.

"As demand for corn increases, so too will its prices. This will drive the ethanol industry to look for lower-cost feedstock and as these alternatives develop, price and demand will stabilize," Mr. Ragauskas said.

He said the food-versus-fuel



Corn Futures

Daily settlement price on the continuous front-month contract

Friday's close: \$3.965

Change since start of 2005, up 94%

Change since start of 2006, up 84%



Source: CBOT via Thomson Datastream

An Iowa cornfield

"As of now, it seems the government is reluctant to permit additional capacity for corn-based ethanol production, though existing corn-based ethanol plants are functioning normally," said Gu Lifeng, manager of the maize division at the state-run Cofco Maize Co., based in Beijing.

Meanwhile, Chinese corn processors are ramping up their alcohol-production capacity, which can be converted into ethanol plants if the government relaxes its stance.

Arthur Ragauskas, associate professor at the Georgia Institute of Technology, who recently co-wrote a paper on biofuels in the industry journal Sci-

debate can generate new ideas if there is increased collaboration among academia, governments and the private sector to develop nonfood biomass—such as switchgrass, recycled waste materials and corn stovers, which is the part of the corn plant that is left over after harvest—into viable resources for biofuels.

The corn growers' lobby in the U.S., however, continues to argue that there will be enough corn in the long term to meet food, fuel and feed needs.

"All demand for corn—food, feed, fuel and exports—are being met. Farmers have always responded to price signals from the marketplace and historically we have had much more challenge with overproduction than shortage," said Rick Tolman, chief executive of the National Corn Growers Association.

"Market forces, not broad assumptions, are driving ethanol and corn markets...There is no conflict between [corn use for food and fuel], nor any pending crisis," Mr. Tolman said.