

Elevators *at the crossroads*

If the U.S. grain marketing system evolves into two separate channels, one of co-mingled grains and the second of non-biotech, conventional grains, South Dakota elevators should be able to make the transition smoothly.

The need for separate storage bins and dedicated grain hauling all depends on consumer demand and interest in food labeling, says Bashir Qasmi, South Dakota State University economist. “Right now, that is too fluid to predict.”

At least one of every 10 grain elevators in South Dakota already has the facilities in place to segregate grains, conclude Bashir and Clayton Wilhelm, graduate research assistant.

The issue of segregating grains has come up because of the advent of transgenic grains—created by using the tools of biotechnology to combine genetic material from diverse sources, usually different organisms, to add desired traits to a plant variety. Conventional grains still have their markets. In addition, other high-value traits of some grains are creating demand for special “identity-preserved” handling so that those crops can be sold at a higher price.

“We feel that the South Dakota grain handling system is well equipped to segregate corn and soybeans at about 10 to 15% of the elevators in the state,” the two wrote. “If the market demand for non-biotech grain expands, some elevators may switch over to exclusively handle non-biotech crops. This may be an alternative for medium-size elevators facing a strong competition from new, larger elevators.”

Their findings are in line with the National Grain and Feed Association’s estimate that roughly 5% of the nation’s elevators can segregate grains without new investments if the tolerance level for transgenic grains is set at 1%. The cost of segregating conventional from transgenic grains increases as the tolerance level is set lower because of the additional difficulty in meeting the tougher standard.

STORAGE FACILITIES at 17% of the elevators statewide can be divided into five separate units, Qasmi and Wilhelm found. The highest percentage of elevators with such capability were in the West River and North-Central regions, where 27% to 32% of elevators can be divided into five separate units.

For the remaining four regions, 8 to 14% of elevators can divide storage space into five separate units.

“Roughly half of elevator managers are willing to consider handling identity-preserved grains for an average premium of \$0.28, \$0.37, and \$0.38 per bushel of corn, soybeans, and wheat, respectively,” say Qasmi and Wilhelm. “In our opinion, South Dakota’s grain-handling industry is reasonably ready to participate in segregation as well as identity-preserved grains if the demand for non-biotech expands.”

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Qasmi and Wilhelm note that South Dakota is currently the leader in adoption of transgenic corn and soybeans, first introduced in 1996. That makes the issue of handling and marketing transgenic grains vitally important to producers. In 2002, the year of their survey, South Dakota farmers planted 89% of their soybean acres to transgenic varieties, compared to 75% of acres nationwide. South Dakota producers also planted 66% of the state’s corn acres to transgenic varieties, compared to 33% of corn acres nationwide.

The demand for non-transgenic corn and soybeans is currently very limited, the two noted, accounting for about 1 to 2% of 1999 U.S. corn, and 2 to 3% of 1999 U.S. soybeans. The demand for non-transgenic corn and soybeans comes mainly from Japan, the European Union, and a small number of American food manufacturers who use only non-biotech ingredients.

Qasmi and Wilhelm say that the move toward segregation and identity-preserved grains is only the latest change in an industry that already has seen major shifts in recent decades. South Dakota’s grain-production and grain-handling industries have redefined themselves over the past three decades by moving away from oats and barley toward more corn, soybeans, and wheat.

Meanwhile, the number of commercial elevators has significantly decreased over the past 30 years, from 387 in 1974 to 203 in 2001. Average operating capacity of the remaining elevators is much larger, increasing from 131,000 bushels in 1974 to 612,000 bushels in 2001. ♦



Bashir Qasmi, economist, SDSU