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# How Competitive is Irrigated Corn?

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# Cornhusker Economics

Cooperative Extension

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| Market Report | Yr Ago | 4 Wks Ago | 4/16/04 |
|---|---|---|---|
| ***Livestock and Products,*** | | | |
| ***Average Prices for Week Ending*** | | | |
| Slaughter Steers, Ch. 204, 1100-1300 lb Omaha, cwt | $79.54 | $87.95 | $89.15 |
| Feeder Steers, Med. Frame, 600-650 lb Dodge City, KS, cwt | 90.50 | 101.22 | * |
| Feeder Steers, Med. Frame 600-650 lb, Nebraska Auction Wght. Avg | 95.90 | 109.75 | 109.62 |
| Carcass Price, Ch. 1-3, 550-700 lb Cent. US, Equiv. Index Value, cwt | 124.41 | 133.28 | 145.31 |
| Hogs, US 1-2, 220-230 lb Sioux Falls, SD, cwt | 36.00 | * | 49.00 |
| Feeder Pigs, US 1-2, 40-45 lb Sioux Falls, SD, hd | 38.50 | 49.00 | * |
| Vacuum Packed Pork Loins, Wholesale, 13-19 lb, 1/4" Trim, Cent. US, cwt | 97.09 | 113.71 | 117.08 |
| Slaughter Lambs, Ch. & Pr., 115-125 lb Sioux Falls, SD, cwt | 90.25 | 94.37 | * |
| Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb FOB Midwest, cwt | 192.44 | 199.12 | 187.99 |
| ***Crops,*** | | | |
| ***Cash Truck Prices for Date Shown*** | | | |
| Wheat, No. 1, H.W. Omaha, bu | 3.45 | 3.86 | 3.91 |
| Corn, No. 2, Yellow Omaha, bu | 2.35 | 2.93 | 2.92 |
| Soybeans, No. 1, Yellow Omaha, bu | 6.11 | 10.20 | 9.63 |
| Grain Sorghum, No. 2, Yellow Kansas City, cwt | 4.26 | 5.28 | 5.25 |
| Oats, No. 2, Heavy Minneapolis, MN , bu | 1.90 | 1.89 | 1.79 |
| ***Hay,*** | | | |
| ***First Day of Week Pile Prices*** | | | |
| Alfalfa, Sm. Square, RFV 150 or better Platte Valley, ton | 150.00 | 130.00 | 150.00 |
| Alfalfa, Lg. Round, Good Northeast Nebraska, ton | 75.00 | 55.00 | 55.00 |
| Prairie, Sm. Square, Good Northeast Nebraska, ton | 117.50 | * | 87.50 |

* No market.

Many dryland corn producers were reminded again in 2003 of the risks of depending upon rainfall. Irrigation substantially reduces yield risk particularly in Western Nebraska. But irrigation also adds to production costs, and increasing costs per bushel can have its own risks in periods of low prices.

What is the cost of producing irrigated corn? The University of Nebraska helped establish the Nebraska Farm Business Association (NFBA) to support farmers in keeping records and to address similar cost and profitability questions. Some of the 450 association members keep track of their costs by enterprise, and their costs for producing irrigated corn are reported in Table 1. The NFBA farms were ranked by cost per bushel. They are grouped into quartiles and their 2002 costs compared to the USDA estimate for producing corn in the Heartland for 2002, the latest USDA estimate. The Heartland is the Central U.S. Corn Belt including Eastern Nebraska and South Dakota, Southern Minnesota, Central and Northern Missouri, Iowa, Illinois, Indiana and Western Ohio. The USDA estimate includes 5 percent irrigated.

The first quartile (0-25 percent) of NFBA producers reported an average cost per acre of $358, with a yield of 193.8 bushels per acre and a $1.85 cost per bushel (see Table 1). The irrigated farms reported higher costs per acre than the Heartland estimates for all cost categories. However, higher irrigated yields resulted in a cost per bushel that is below the Heartland average, $1.85 vs $2.30. The lowest irrigated corn production cost per bushel in the first quartile was $1.69.

The cost per bushel is represented in the graph on the next page. Clearly, based on the data presented here, the irrigated producers in the first two quartiles are competitive with Midwest corn producers. In fact, the average cost of production of all of the NFBA member records reported in Table 1 is $2.25 per bushel which is below the Heartland average of $2.30.

**Table 1. Corn Production Costs, Nebraska Irrigated and Heartland**

| Cost Per Acre | NFBA Irrigated | | | | Heartland Average |
|---|---|---|---|---|---|
| | 0-25% | 25-50% | 50-75% | 75-100% | |
| **Land, Overheads** | $110.50 | $131.10 | $118.00 | $122.69 | $109.52 |
| **Machinery & Labor** | 141.88 | 155.95 | 141.79 | 136.47 | 119.48 |
| **Materials, Interest** | 105.62 | 99.19 | 114.06 | 123.54 | 97.65 |
| **Total Listed Costs** | **$358.00** | **$386.24** | **$373.85** | **$382.70** | **$326.65** |
| **Yield bu/acre** | **193.8** | **189.6** | **159.2** | **150.9** | **142.0** |

| Cost Per Bushel | NFBA Irrigated | | | | Heartland Average |
|---|---|---|---|---|---|
| | 0-25% | 25-50% | 50-75% | 75-100% | |
| **Land, Overheads** | $0.57 | $0.69 | $0.74 | $0.81 | $0.77 |
| **Machinery & Labor** | 0.73 | 0.82 | 0.89 | 0.90 | 0.84 |
| **Materials, Interest** | 0.54 | 0.52 | 0.72 | 0.82 | 0.69 |
| **Total Listed Costs** | **$1.85** | **$2.04** | **$2.35** | **$2.54** | **$2.30** |

Unfortunately there are a number of pitfalls in making a comparison with the USDA estimates. First, the USDA estimates are a representative sample of producers, while the NFBA members may well be for an above average group of managers. The NFBA members that keep enterprise records are probably an even more select group. Also there are some accounting differences, for example, the NFBA records are based on depreciation and interest reported on tax returns, while the USDA estimates include depreciation based on an expected useful life and interest on total investment (including opportunity cost of equity capital). A study of NFBA soybean enterprise records is currently under way with the objective of identifying the differences in practices between the high and low cost producers in an attempt to explain the cost differences. The results should be available this time next year.

For more detail on the USDA estimates see:

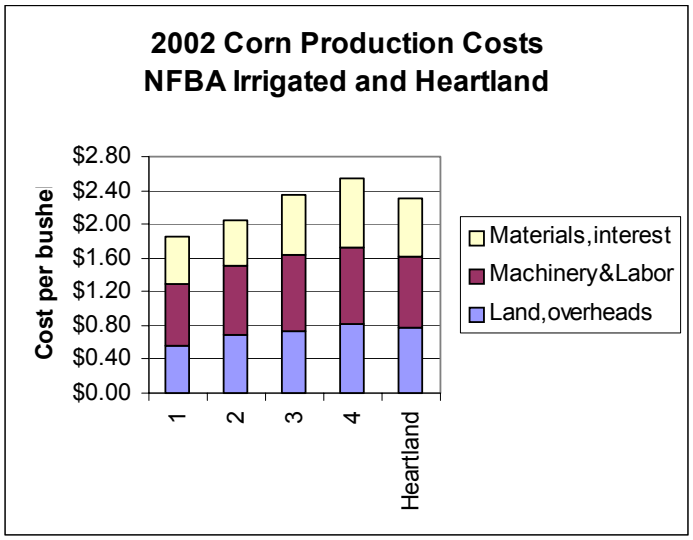
http://www.ers.usda.gov/Data/CostsAndReturns/testpick.htm

For more detail on the NFBA records see their annual report at:

http://www.nfbi.net/ReportsandAnalysis.html

This report along with our budgeted costs of production can also be reached under the Agricultural Economics Departmental web page at:

http://agecon.unl.edu/pub/Prices%20and%20Costs.html

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