

MESSENGER-INQUIRER



December 24, 2022

Cost of Grain Production in 2023

Nitrogen prices were three times higher this year than prices paid in 2021, which were at all-time high levels even then. Unfortunately, prices are not softening much in anticipation of 2023. Cost near \$1.00 per unit of nitrogen may become the new normal. The reason is the increase in the cost of natural gas, the primary component of manufactured nitrogen products. Tight supplies resulting from the invasion of Ukraine and subsequent restrictions placed on Russian natural gas distribution throughout Europe are to blame. In addition to the increased cost of inputs necessary to produce corn and soybeans, the price of corn and soybeans increased to levels this summer not seen in several years as well. Again, the situation in Ukraine and the embargo on Russia greatly reduced the world corn and wheat supply increasing the price substantially from late spring through the fall.

Much remains to unfold concerning the invasion of Ukraine, their ability to produce and supply the world trade sector in 2023, and how much their reduction in production will reduce supply, keeping grain prices up or even higher than this year. Much will be determined in the next few months, but right now, fuel and nitrogen prices have relaxed but sources of potash and phosphorus are forecast to be slightly higher than this year. Crop production chemicals and seed are approximately nine percent higher than 2022 as well.

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Extension farm management specialist, Dr. Greg Halich has revised his production numbers for corn and soybeans in 2023 to reflect the additional cost. For corn, he has seed at \$110 per acre, nitrogen at \$.85/unit applying 190 units of N per acre, P, K and lime at \$104 per acre, all chemicals at \$90/acre, machinery, fuel, and labor (includes trucking 35 miles one way) \$180. After including values for insurance, interest, and miscellaneous he has projected production expense of \$758 per acre before land cost. Last Monday, corn for fall delivery could be contracted for \$5.70 per bushel. If the farm made 190 bushels per acre, gross revenue would be \$1,083. If it's rented on 1/3 to the landowner, and 2/3 to the farmer, the landowner receives \$360.64. The farmer's net revenue is a loss of \$35.64 per acre. The farm has to average 200 bushels per acre just to net \$2.38 per acre.

Soybeans are a different story. Why? Because their price is up and they don't require nitrogen. Dr. Halich has soybean seed at \$70/acre, P, K, and lime at \$80/acre, all chemicals at \$75, machinery, fuel, and labor at \$133. After including all values for insurance, interest, and miscellaneous he has projected production expense of \$425 per acre before land cost. Last Monday, soybeans for fall delivery could be contracted for \$13.81 per bushel. If the farm made 65 bushels per acre the gross revenue would be \$897.65. If it's rented on 1/3 to the landowner, and 2/3 to the farmer the landowner receives \$298.92. The farmer's net revenue is \$173.73 per acre.

Well, soybeans are more profitable than corn, we've known that for years, so what? Soybeans are indeed more profitable than corn, especially on crop-share land. Often corn has to yield no less than the low 200's to even get close to high-yielding soybeans in the same market location. Yes, most farmers rotate annually because there are tremendous benefits to soil

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biology, herbicide resistance suppression, and overall yield compared to crops grown in monoculture. Unfortunately, the economic comparison of corn and soybeans has never been this heavily weighted to soybeans. I expect planted acres are going to reflect this in 2023.

What are some things we can do to encourage staying in rotation and keeping corn acres up? Talk to your landowners. Landowners talk to your tenants. Some options are to offer to pay a share of some of the yield “extras” such as fungicide and insecticide which are not required but do protect yield. Another option is considering reducing the percentage of crop received in corn years. Another option is to move away from crop share to an agreed upon rent fee per acre.

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