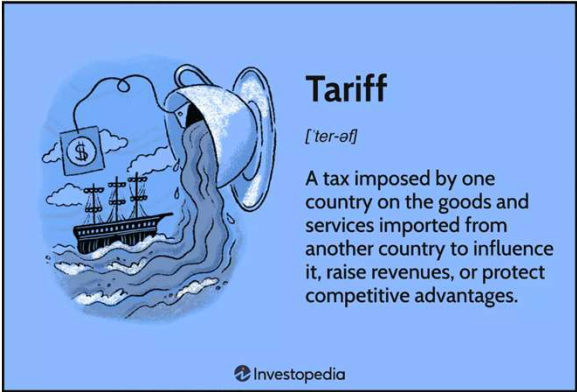
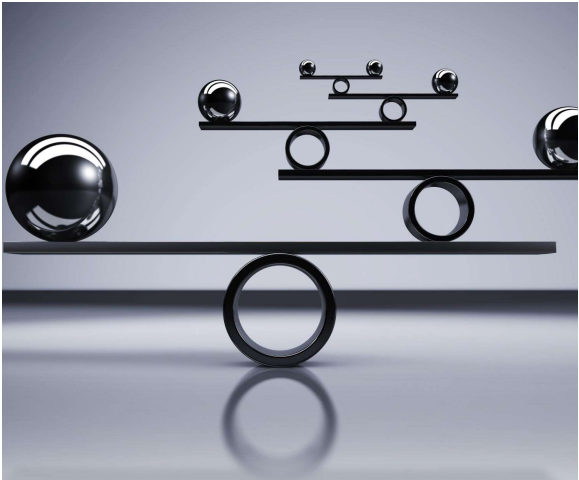




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Tariffs



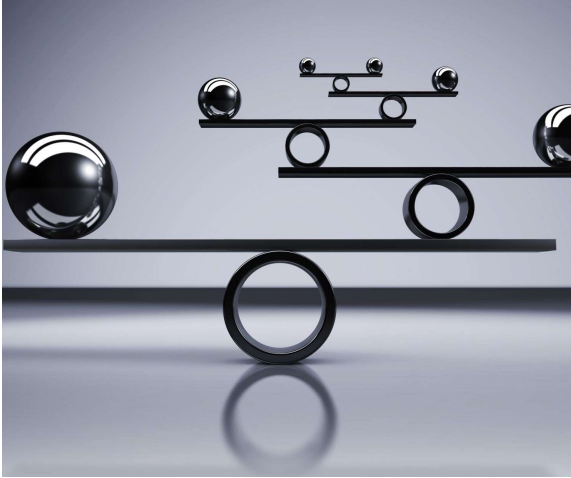
Tariff
[ter-əf]

A tax imposed by one country on the goods and services imported from another country to influence it, raise revenues, or protect competitive advantages.

Investopedia



Tariffs



UNDERSTANDING TARIFFS

When a product is imported, U.S. Customs **calculates the tariff, charges importer and collects the funds.**



Once the tariff is paid, the **product moves into the U.S. market.** Typically, the **consumer pays a higher price** for a product subject to a tariff.

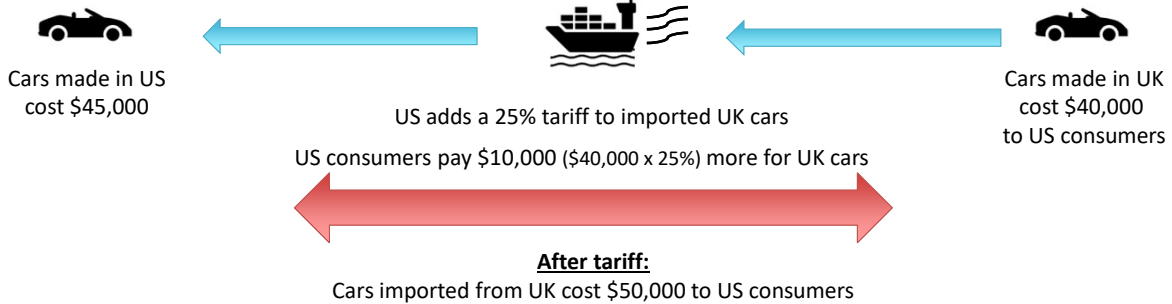


Money collected moves to the U.S. Treasury and is used for general expenses. Up to 30% goes to USDA.

www.grains.org



Tariffs



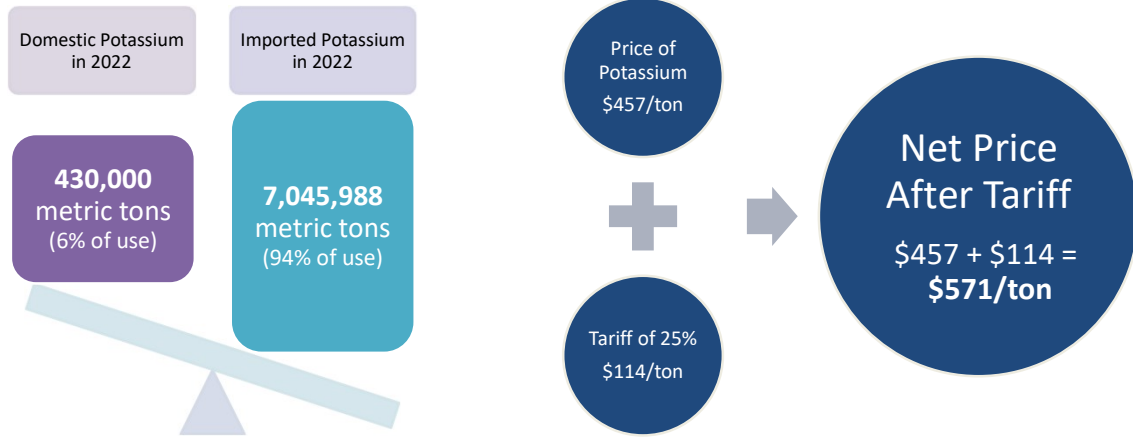
Tariff incentives: Consumers to purchase domestic products at higher cost (pre-tariff)
Exporting countries to negotiate trade agreements favorable for both parties to maintain market access



Concern for Agriculture:
What if a domestic alternative doesn't exist or is only available in limited capacity?



Tariffs – Potassium Example



Tariffs on products with limited alternatives:

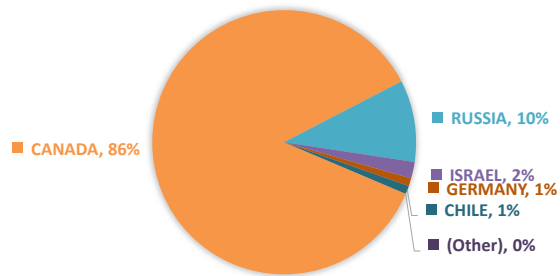
- Offer little incentive to negotiate new trade agreements favorable to both parties
- Can lead to substantially higher prices for consumer compared to pre-tariff prices



Potassium Markets to Watch

Top Export Countries (2022)	% of Total Global Potassium Exports
Canada	41%
Russia	15.1%
Germany	8.35%
Israel	7.07%
Jordan	6.52%

2024 U.S. POTASSIUM IMPORTS BY COUNTRY OF ORIGIN



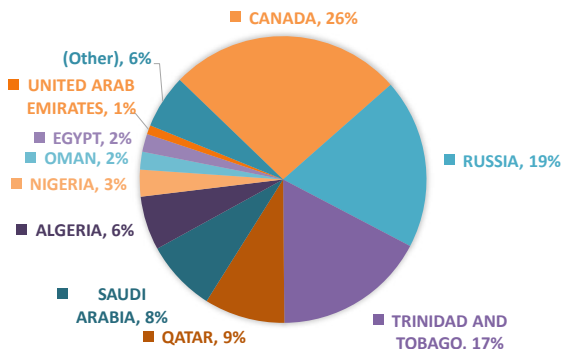
Impacts on Potassium Supply

- Canada - Infrastructure Reliability? (i.e., Railroad Strike)
- War - Russian-Ukraine War/ War in the Middle East
- Belarus production cuts and their impacts?
- U.S. Tariffs vs. Retaliatory Tariffs (Canada)

Nitrogen Markets to Watch

Top Export Countries (2022)	% of Total Global Nitrogen Exports
Russia	10.4%
China	9.3%
Oman	6.9%
Qatar	5.7%
Egypt	5.62%

2024 U.S. NITROGEN IMPORTS BY COUNTRY OF ORIGIN



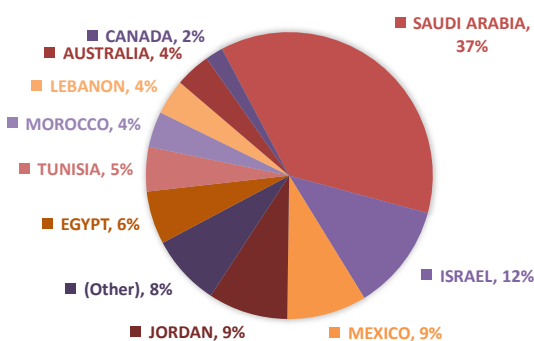
Impacts on Nitrogen Supply

- War - Russian-Ukraine War/ War in the Middle East
- Canada - Infrastructure Reliability? (i.e., Railroad Strike)
- China export controls (i.e., quotas) in 2022 and again in 2024 to reduce domestic prices
 - Results in increased global prices
- U.S. Tariffs vs. Retaliatory Tariffs (Canada)

Phosphate Markets to Watch

Top Export Countries (2022)	% of Total Global Phosphate Exports
Morocco	21.3%
China	16.1%
Egypt	15.8%
Israel	14.6%
Tunisia	5.05%

2024 U.S. PHOSPHORUS IMPORTS BY COUNTRY OF ORIGIN



Impacts on Phosphate Supply

- Wars: Middle East, Russian-Ukraine
- China export controls (i.e., quotas) in 2022 and again in 2024 to reduce domestic prices
 - Results in increased global prices
- Hurricane Fallout (Helene and Milton) – Domestic Supply
- U.S. Tariffs vs. Retaliatory Tariffs (Mexico)

Fertilizer Prices		
Product	Price Per Ton	Price Per Pound
28% (28-0-0)	\$345	\$0.62
Urea (46-0-0)	\$538	\$0.58
DAP (18-46-0)	\$722	\$0.56
MAP (11-52-0)	\$759	\$0.61
Potash (0-0-60)	\$457	\$0.38

Based on USDA Agricultural Marketing Service Production Cost Report

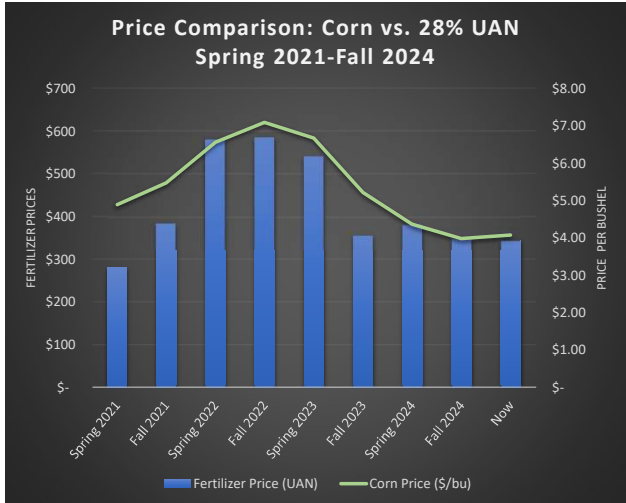


USDA Illinois Production Cost Report (Bi-weekly)
Agricultural Marketing Service
Livestock, Poultry, and Grain Market News

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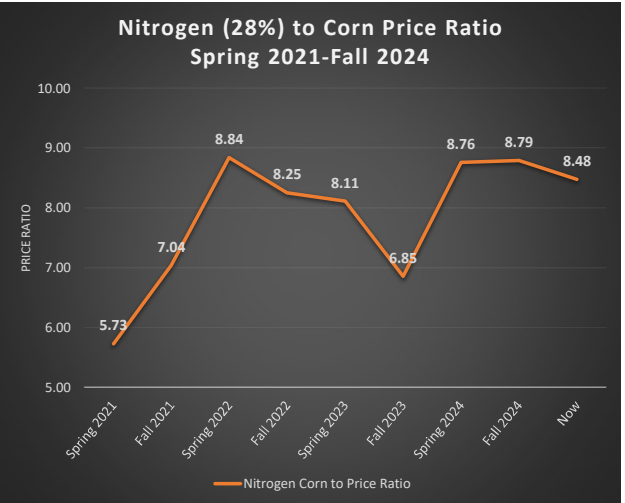
Fertilizer Market Conditions - Nitrogen

Price Comparison: Corn vs. 28% UAN Spring 2021-Fall 2024




Period	Fertilizer Price (UAN)	Corn Price (\$/bu)
Spring 2021	\$280	\$4.5
Fall 2021	\$380	\$5.5
Spring 2022	\$580	\$6.5
Fall 2022	\$580	\$6.2
Spring 2023	\$540	\$5.5
Fall 2023	\$350	\$4.5
Spring 2024	\$350	\$4.2
Fall 2024	\$340	\$4.2
Now	\$340	\$4.2

Nitrogen (28%) to Corn Price Ratio Spring 2021-Fall 2024

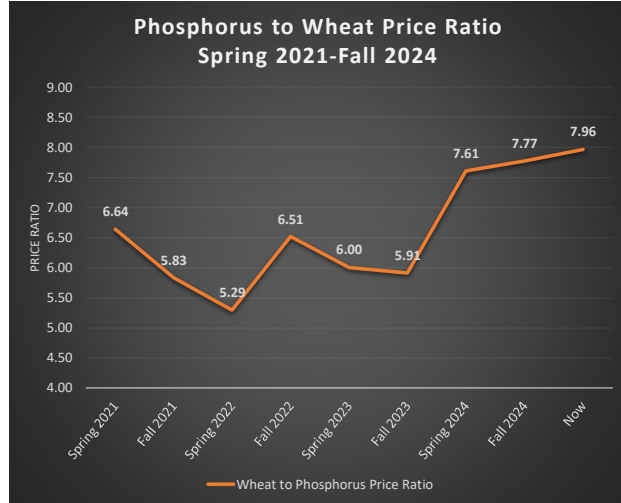
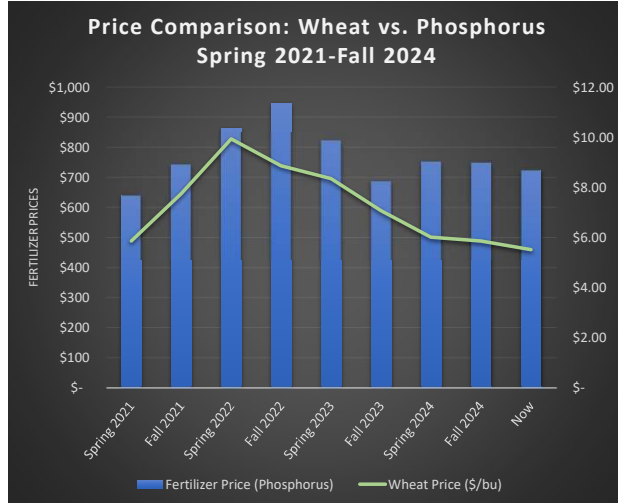


Period	Nitrogen Corn to Price Ratio
Spring 2021	5.73
Fall 2021	7.04
Spring 2022	8.84
Fall 2022	8.25
Spring 2023	8.11
Fall 2023	6.85
Spring 2024	8.76
Fall 2024	8.79
Now	8.48

Value of fertilizer relative to value of corn (per pound basis) = [Fertilizer \$\$/Pound ÷ (\$\$/Bushel ÷ Lbs./Bushel)]



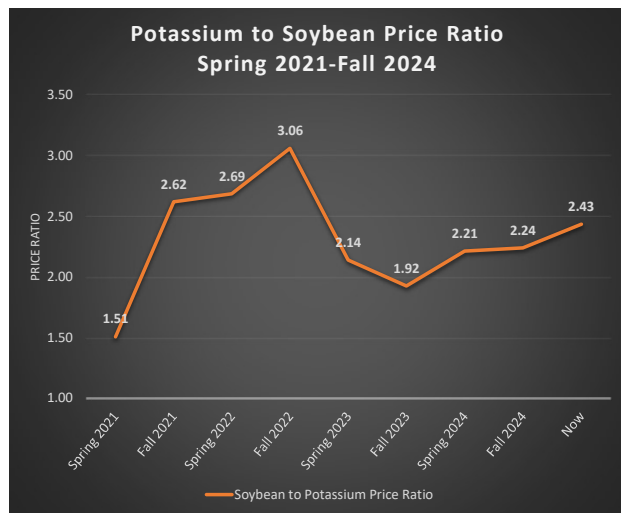
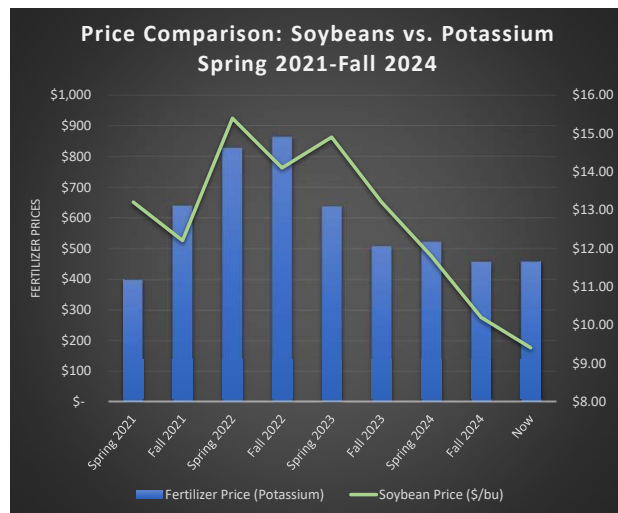
Fertilizer Market Conditions - Phosphorus



[Fertilizer \$\$/Pound ÷ (\$\$/Bushel ÷ Lbs./Bushel)]



Fertilizer Market Conditions - Potassium

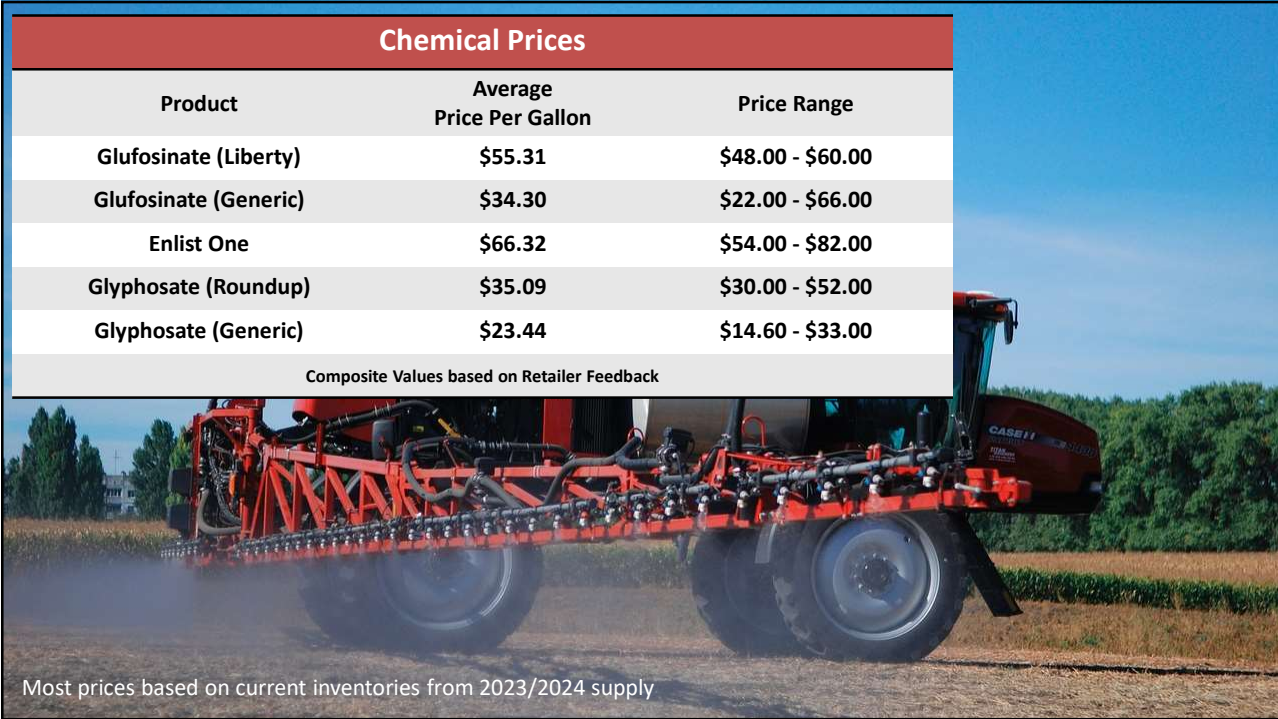


[Fertilizer \$\$/Pound ÷ (\$\$/Bushel ÷ Lbs./Bushel)]



Chemical Prices		
Product	Average Price Per Gallon	Price Range
Glufosinate (Liberty)	\$55.31	\$48.00 - \$60.00
Glufosinate (Generic)	\$34.30	\$22.00 - \$66.00
Enlist One	\$66.32	\$54.00 - \$82.00
Glyphosate (Roundup)	\$35.09	\$30.00 - \$52.00
Glyphosate (Generic)	\$23.44	\$14.60 - \$33.00

Composite Values based on Retailer Feedback



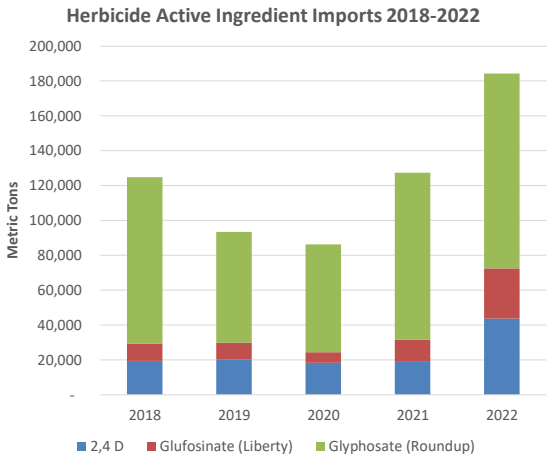
Most prices based on current inventories from 2023/2024 supply

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AgriBusiness GLOBAL Empowering Agriculture To Feed The World

Markets to Watch

Herbicide Active Ingredient Imports 2018-2022



Year	2,4 D	Glufosinate (Liberty)	Glyphosate (Roundup)
2018	~20,000	~10,000	~90,000
2019	~20,000	~10,000	~60,000
2020	~20,000	~10,000	~50,000
2021	~20,000	~10,000	~90,000
2022	~45,000	~30,000	~105,000

US Chemical Importers		
A.I. Product	2018 Key Suppliers	2022 Key Suppliers
Glufosinate	China (?) Others (?)	China (?) Others (?)
2,4 D	38% China 22% India 10% Colombia 7% Poland	58% China 18% Australia 11% Colombia 15% India 10% Poland
Glyphosate	99% China	98% China

Prioritizing Products

<p>1</p> <p>Start with what you can store</p> 	<p>2</p> <p>Go after highest quantities</p> 	<p>3</p> <p>Concentrate on supply concerns</p> 	<p>4</p> <p>Adjust for Income Tax Needs</p> 
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Set Targets Based on Market Expectations

- Contact at least 2 retailers to compare prices
- Compare to expected commodity prices
- Factor in discounts into targets (if available)



Example of Target Setting

Product	Month	Pricing Target (relative)	Pricing Target
UAN28	October-Nov	Baseline -10%	~\$310/ton
UAN28	December	Baseline - 5%	~\$328/ton
UAN28	January	Baseline	~\$345/ton
UAN28	February-March	Baseline +10%	~\$380/ton



Closing Thoughts...

Marketing/Input Purchasing is simple, just not easy

- Comfort with market environment/pricing tools takes time to build
- Grain Marketing
 - Start by following futures prices and basis trends
- Input Purchasing
 - Start by following natural gas and corn price trends



Make plans that use a few different tools

- Grain Marketing:
 - Forward contracts, HTAs, basis contracts
- Input Purchasing:
 - On-farm storage, discounts, quantities

Seek input from management team on plans

- Spouse, grain merchant, input retailer, lender, extension educator

Keep your plans reasonable, achievable, and simple



Grain Marketing & Input Purchasing Resources

- E-3415: Introduction to Crop Insurance for Field Crops
- E-3416: Introduction to Grain Marketing
- MSU Grain Marketing Evaluation Tool

- Input Purchase Plan Templates
- Cost Comparison Decision Tools (Fertilizer, Pesticides, Seed)