

# 2024-25 Sorghum Market Outlook

## Kansas Grain Sorghum School

Hays, Kansas – December 5, 2024

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UNIVERSITY

Department of Agricultural Economics

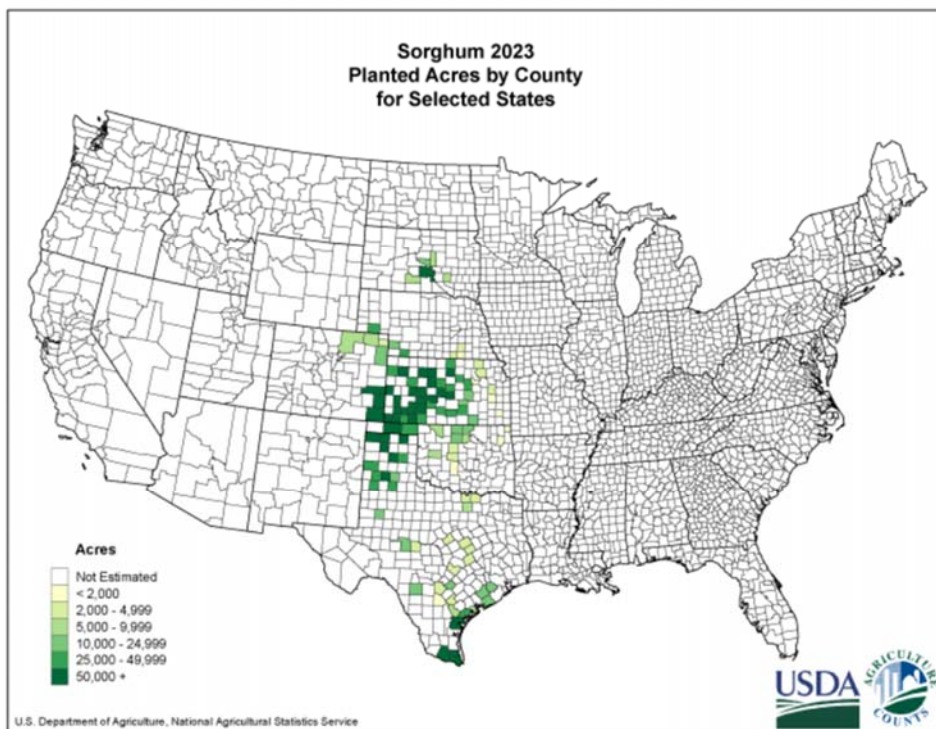
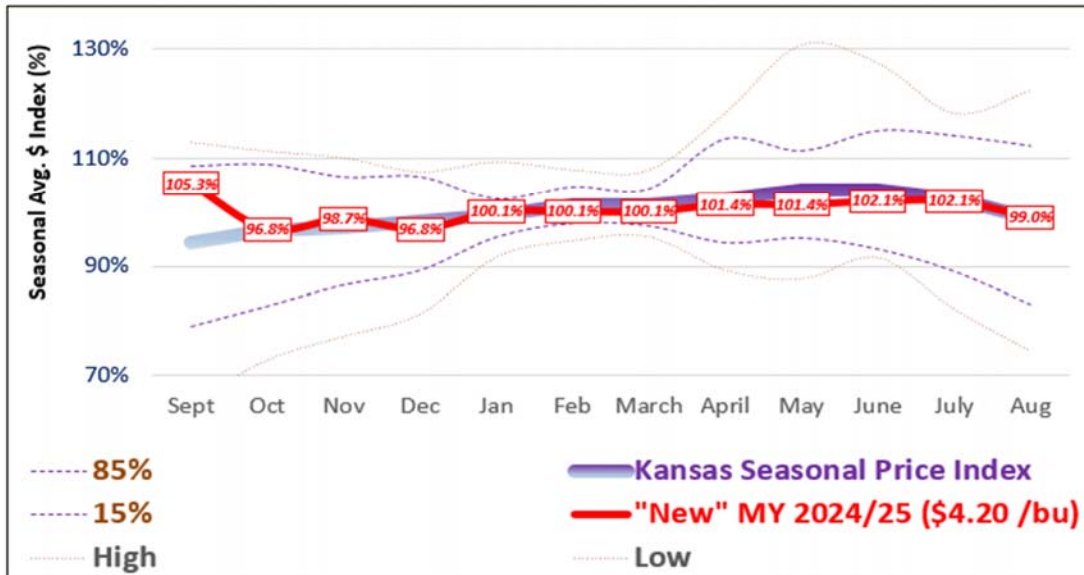


## Current Global Grain Markets

- 1) “*Adequate*” Feedgrain & Oilseed supplies are limiting Crop Prices
- 2) “*Tight*” World Wheat supplies, but weak U.S. exports hurt Prices
- 3) Crop Seasonal \$ Trends “*sideways-to-higher*” through Spring
- 4) U.S. & World Crop Production plans for 2025??
  - **Soybeans**: *More U.S. & South America plantings likely in 2025*
  - **Wheat**: *Uncertainty about Black Sea, EU, Australia, U.S. & other major areas*
  - **Feedgrains**: *2025 U.S. & South America acres likely “sideways-to-lower”*

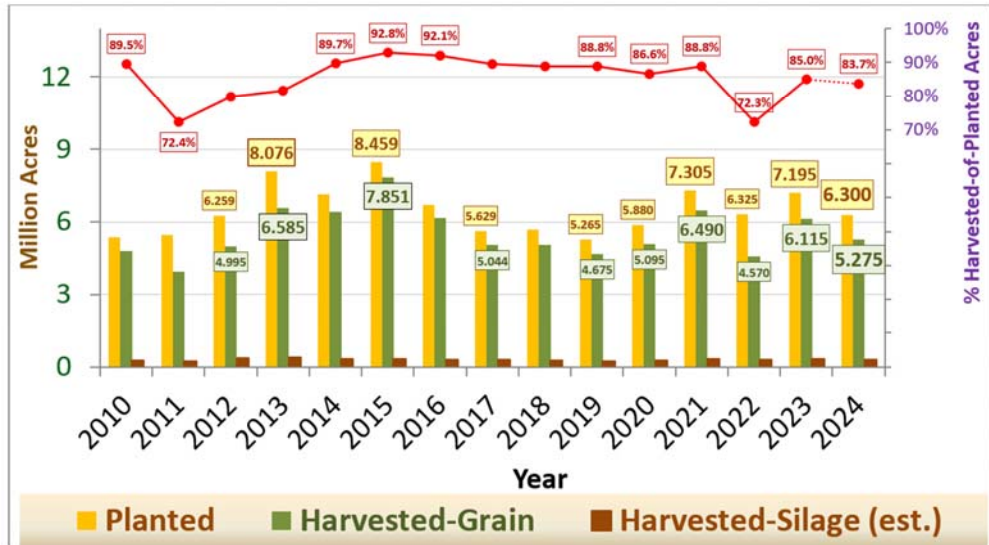
# Kansas Sorghum Seasonal Cash \$ Index

Monthly Prices: 1999/2000 – 2023/24 + Forecast MY 2024/25 12/4/2024



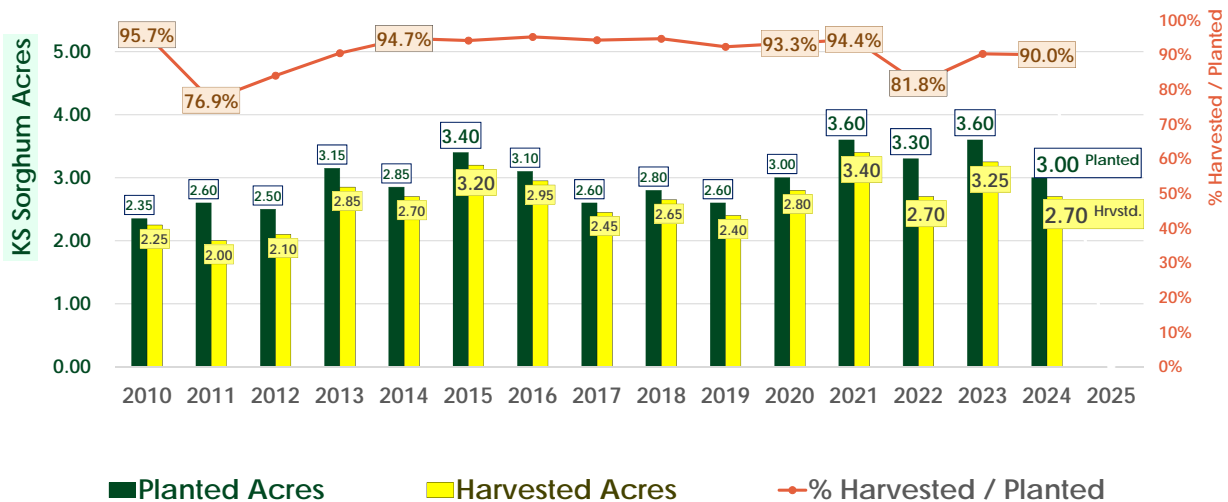
# U.S. Grain Sorghum Acres

Years 2010 – 2024, Source: USDA NASS Crop Production Report 11/8/2024



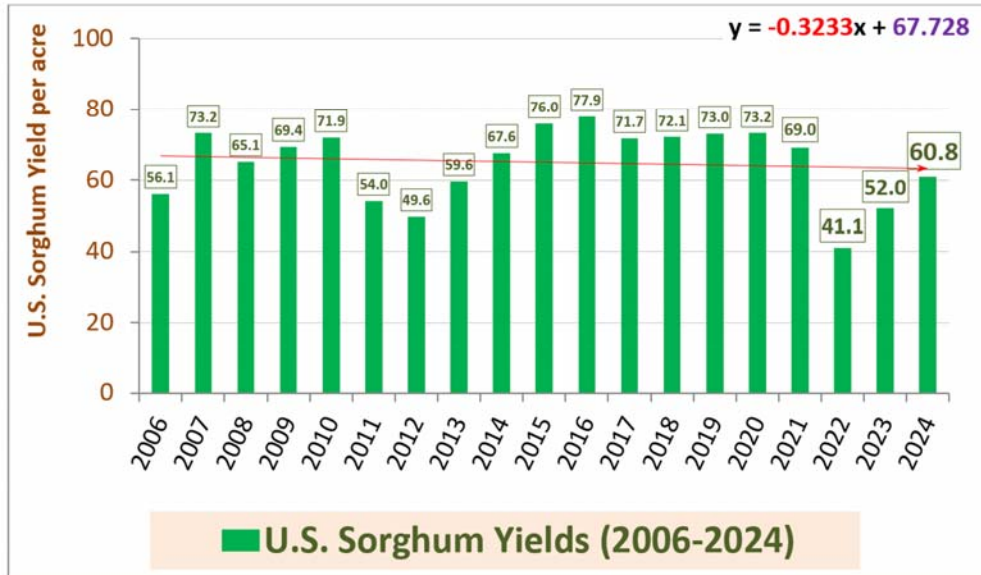
# Kansas Grain Sorghum Acres

Kansas for years 2010 to 2024



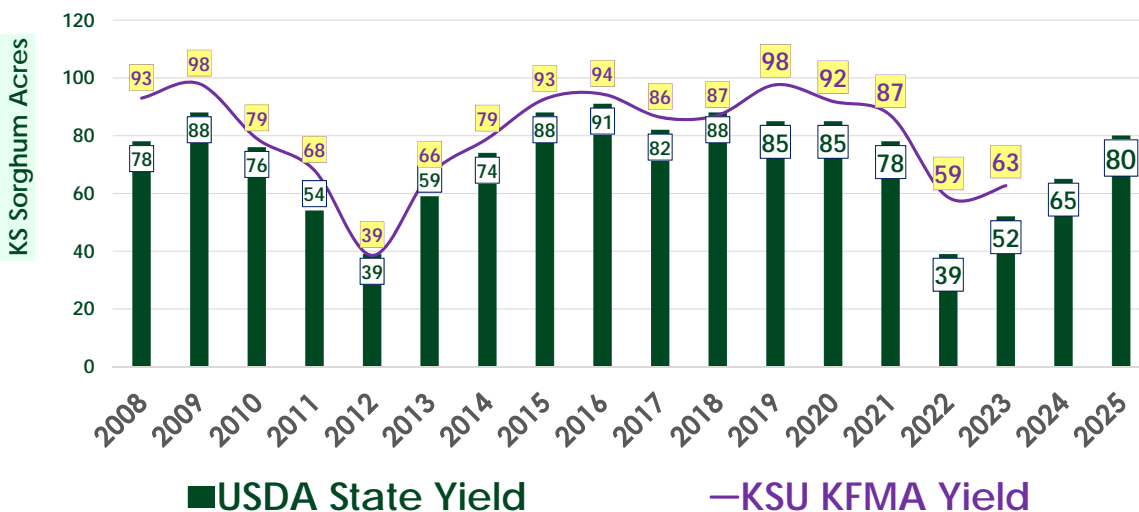
# U.S. Grain Sorghum Yields

Years 2006 – 2024 as of the November 8, 2024 WASDE Report



## Kansas Grain Sorghum Yields

State Averages for Kansas - Years 2008 to 2024



## 2025 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Northwest K

----- MIDDLE YIELDS

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Lucas Haag

Budget abstract

Date: Nov-20-2024

item	unit	price	quantity	amount	Sub-total	your farm
<b>INCOME</b>						
Product						
Grain Sorghum - Northwest KS	bu	\$4.42	85.00	\$375.70	\$375.70	_____
--TOTAL INCOME--					\$375.70	_____
<b>DIRECT EXPENSES</b>						
Additional labor					\$0.95	_____
Crop insurance					\$22.29	_____
Diesel					\$10.00	_____
Fertilizers					\$57.20	_____
Herbicides					\$98.74	_____
Miscellaneous					\$6.85	_____
Operator labor					\$6.47	_____
Repair & Maintenance					\$13.66	_____
Seeds					\$11.10	_____
Interest on operating capital		7.5% percent on direct expenses			\$8.52	_____
--TOTAL DIRECT EXPENSES--					\$235.79	_____
-----Total direct expenses per bu \$2.77						
<b>FIXED EXPENSES</b>						
Cash rent					\$100.50	_____
Capital recovery (depreciation + interest)					\$50.72	_____
--TOTAL FIXED EXPENSES--					\$151.22	_____
-----Total expenses per bu \$4.55						

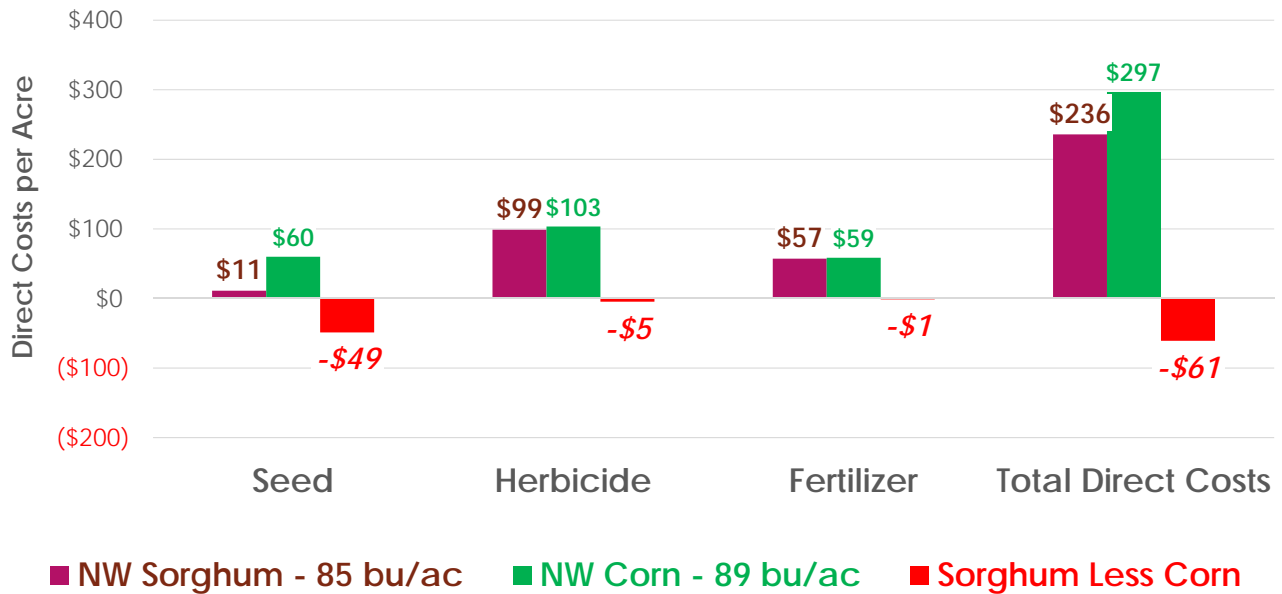
## Non-Irrigated Sorghum Costs 2025 in NW Kansas

### □ The Costs of Non-Irrigated Grain Sorghum vs Corn

- Comparing 85 bu/ac Sorghum vs 89 bu Corn in NW KS 2025 KSU Budgets

- **Seed** \$11.10 /ac (- \$48.90 /ac vs Corn)
- **Herbicide** \$98.74 /ac (- \$4.70 /ac vs Corn)
- **Fertilizer** \$57.20 /ac (- \$1.35 /ac vs Corn)
- **Total Direct Cost** \$235.78 /ac (- \$60.93 /ac vs Corn)
- **Direct Cost / bu.** \$2.77 /bu (- \$0.56 /bu vs Corn)

# NW Non-irrigated Sorghum vs Corn KSU 2025 Budgets



## 2025 Grain Sorghum (W-S-F Rotation) Cost-Return Budget in Northwest KS Budget abstract

----- MIDDLE YIELDS  
 Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Lucas Haag      Date: Nov-20-2024

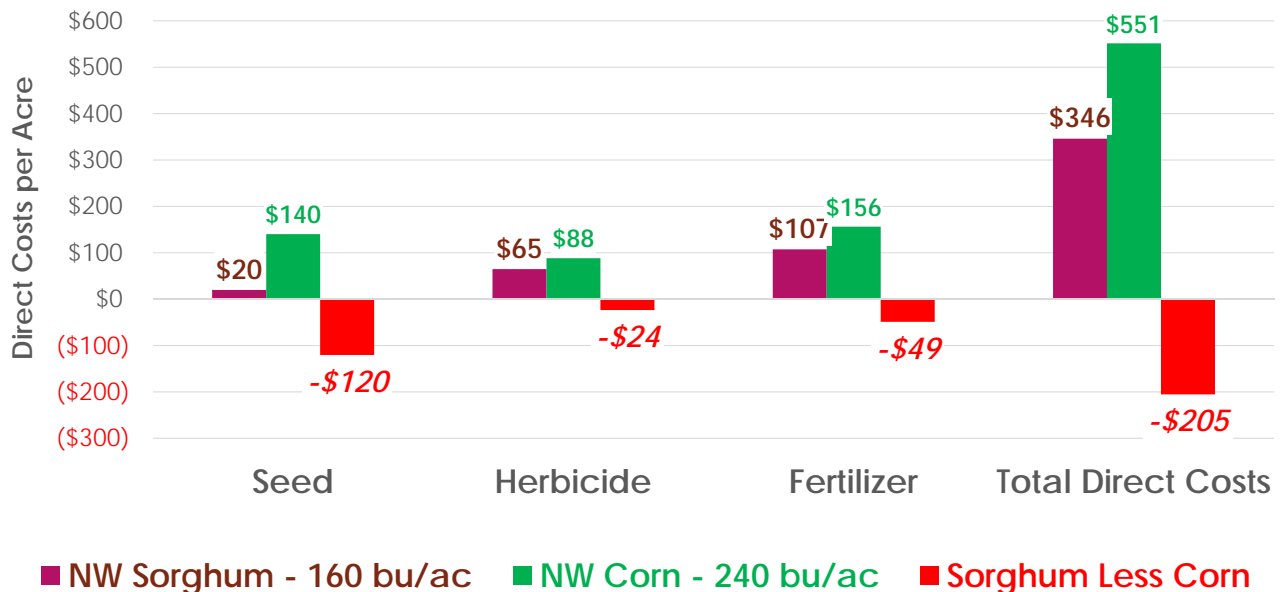
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# Irrigated Sorghum Costs 2025 in NW Kansas

## ☐ The Costs of Irrigated Grain Sorghum vs Corn

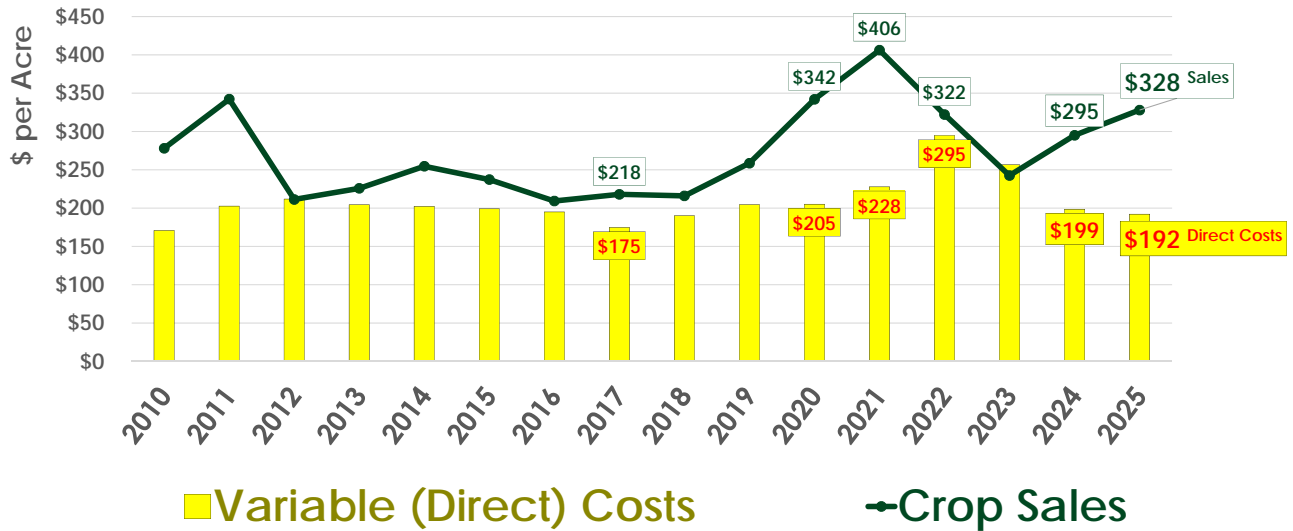
- Comparing 160 bu/ac Sorghum vs 240 bu/ac Corn in NW KS 2025 KSU Budgets
  - **Seed**                                \$19.72 /ac     (- \$140.16 /ac vs Corn)
  - **Herbicide**                            \$64.63 /ac     (- \$23.64 /ac vs Corn)
  - **Fertilizer**                            \$107.23 /ac     (- \$48.97 /ac vs Corn)
  - **Total Direct Cost**                \$345.89 /ac     (- \$205.47 /ac vs Corn)
  - **Direct Cost / bu.**                \$2.16 /bu     (- \$0.14 /bu vs Corn)

## NW Irrigated Sorghum vs Corn KSU 2025 Budgets



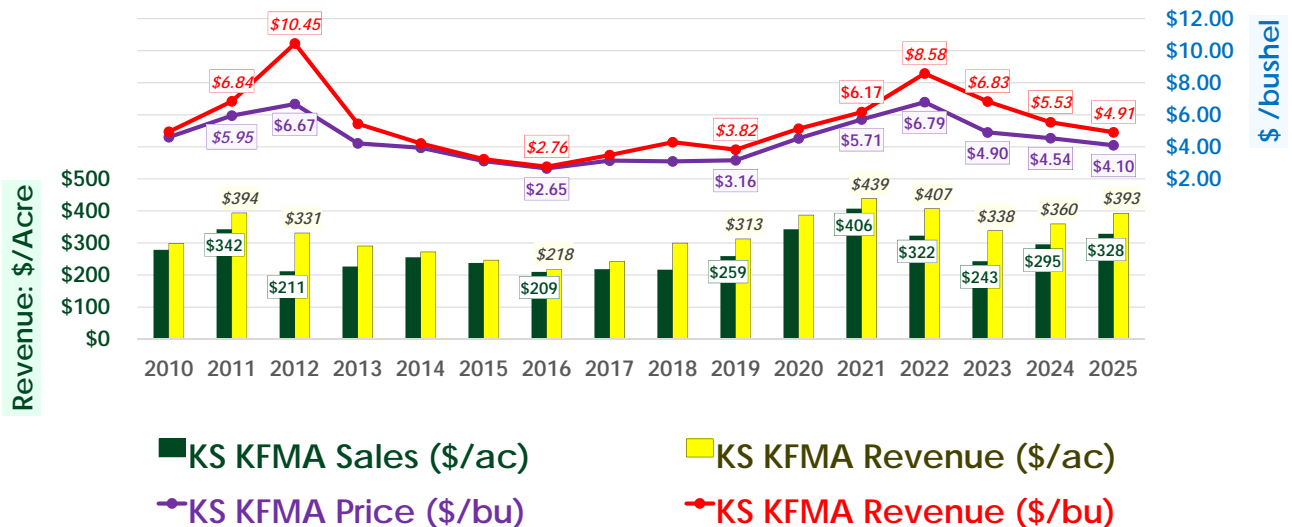
# Sorghum Variable Costs & Crop Sales

Kansas – Non-irrigated 2010 - 2025 KFMA Crop Enterprise Records + 2025 KFMB Crop Ests.



# Kansas Sorghum Prices & All Revenue

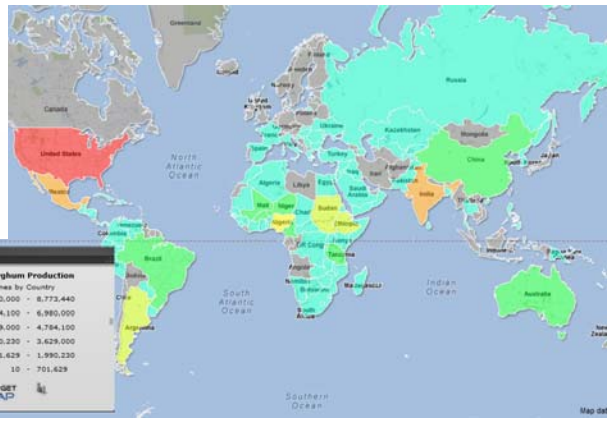
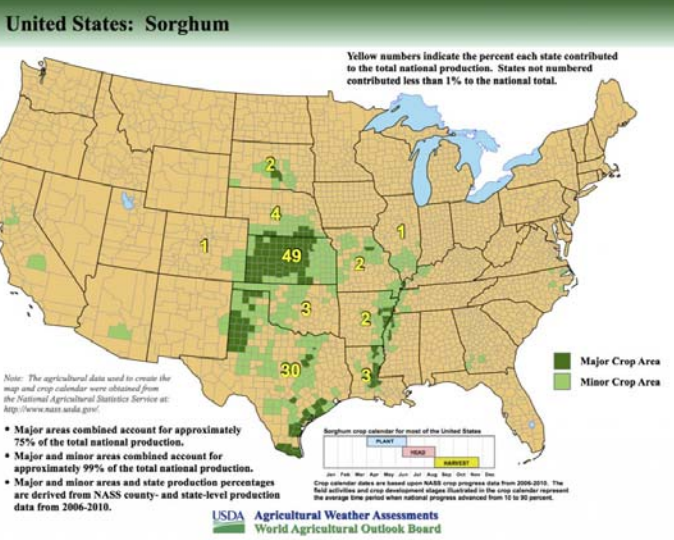
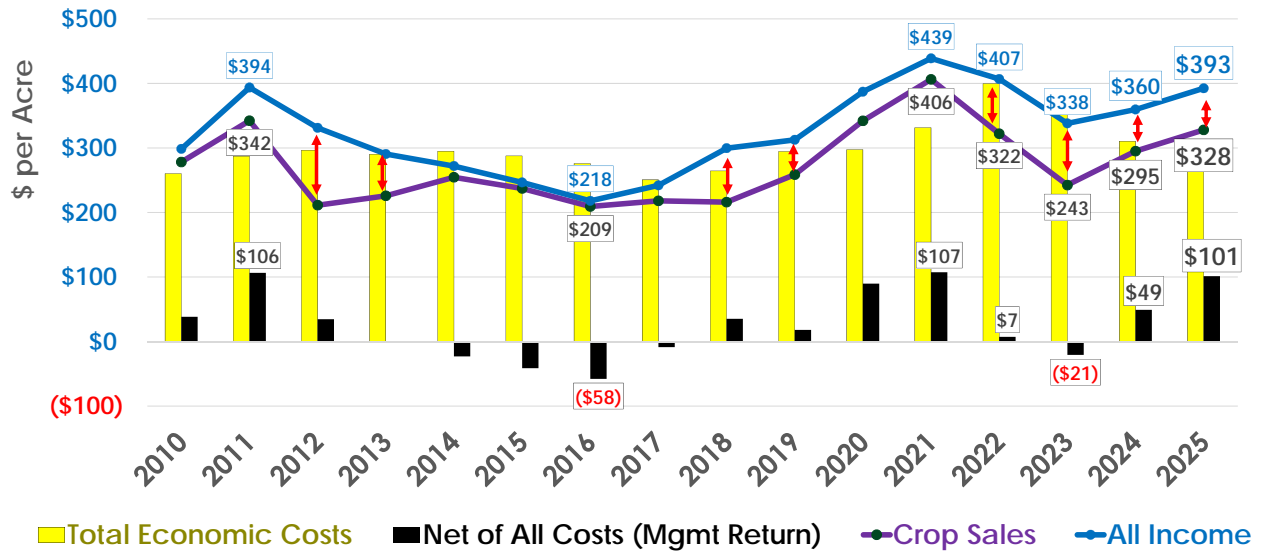
Years 2010 - 2023 Kansas Farm Mgmt. Assoc. Enterprise Records + 2024 KFMA Budget Ests.





# Sorghum Revenue, Costs & Returns

All Kansas – Non-irrigated Since 2010 Kansas Farm Mgmt. Assoc. Enterprise Records



# Grain Sorghum Markets



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## CME Corn Futures

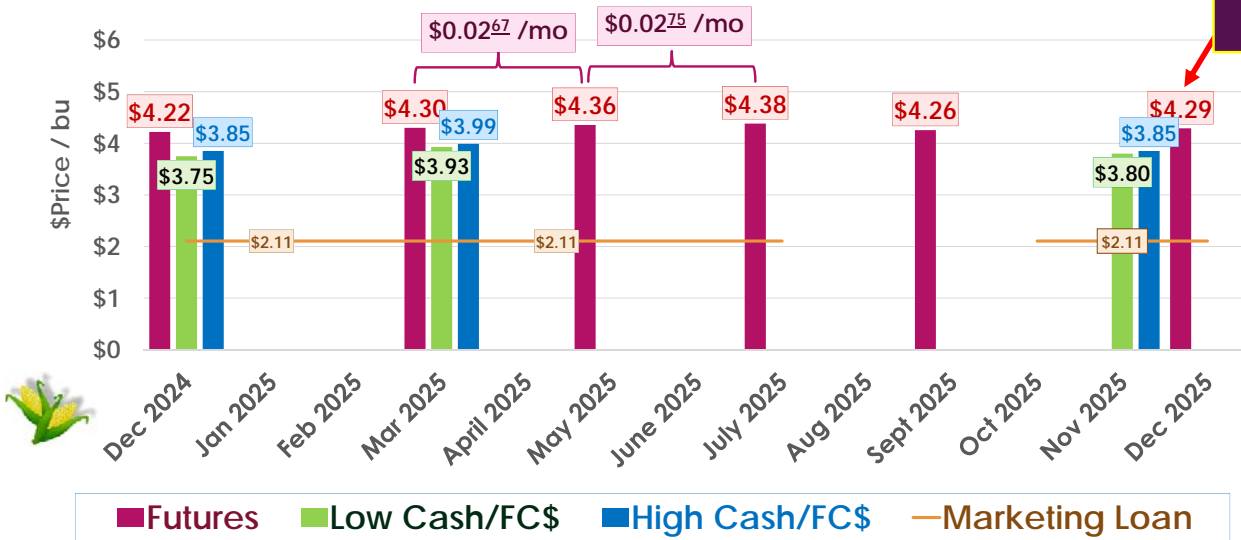


Monthly Chart: January 2005 – December 4, 2024



# Sorghum Cash & Corn Futures – Hays, KS

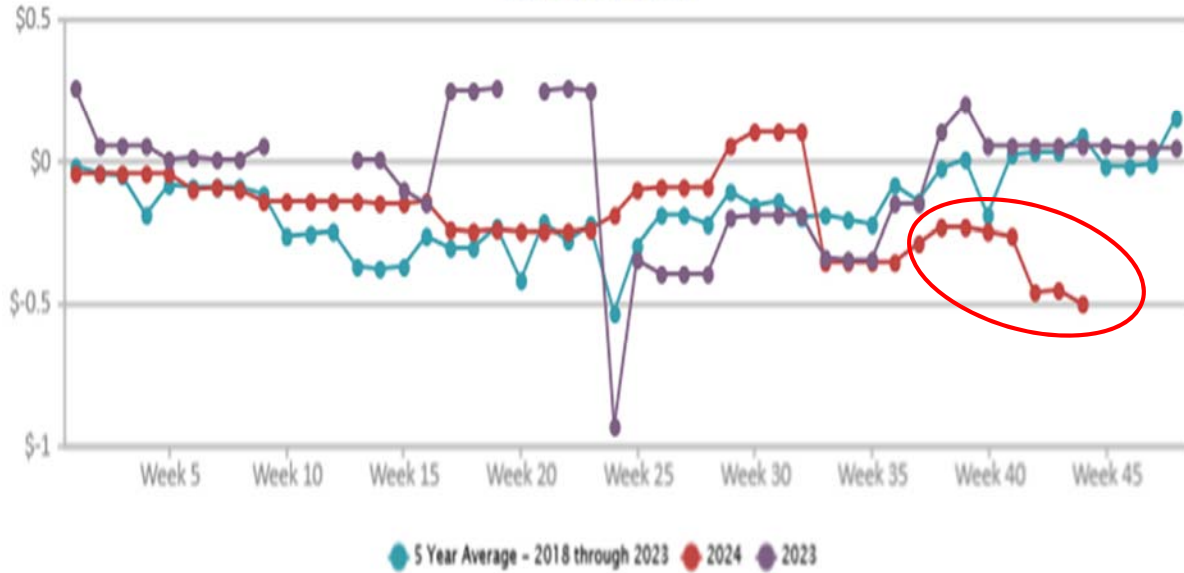
## Local Elevators – December 4, 2024



Kansas Cash & Futures Prices						
Date						
12/4/2024 - Closes						
Grain Futures Contracts		Closing \$				
MAR 2025 Corn	"New" MY 2024/25 Post-Harvest Futures	\$4.3000				
DEC 2025 Corn	"Next" MY 2025/26 Harvest Futures	\$4.2900				
12/4/2024 - Closes						
Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators						
Representing the highest bids available at each location						
Cash Market Spot & FC Bids	Hays <sup>Area</sup>	Colby <sup>Area</sup>	Salina <sup>Area</sup>	Garden City <sup>Area</sup>	Hutchinson <sup>Area</sup>	Columbus <sup>Area</sup>
	NW-Cent KS	NW KS	NC KS	SW KS	SC KS	SE KS
Grain Sorghum Spot Cash\$: Fall <sup>2024</sup>	\$3.85	\$3.95	\$3.90	\$4.05	\$4.15	\$3.68
2024 Harvest Cash Market Basis	(\$0.45)	(\$0.35)	(\$0.40)	(\$0.25)	(\$0.15)	(\$0.62)
Grain Sorghum Harvest FC\$: Fall <sup>2025</sup>	\$3.79	\$3.85	\$3.82	\$3.94	\$3.89	\$3.53
"Next Crop" MY 2025/26 Harvest Frwd Contract	(\$0.50)	(\$0.44)	(\$0.47)	(\$0.35)	(\$0.40)	(\$0.76)

# HAYS, KS: Grain Sorghum Basis - MIDLAND MARKETING

www.AgManager.info

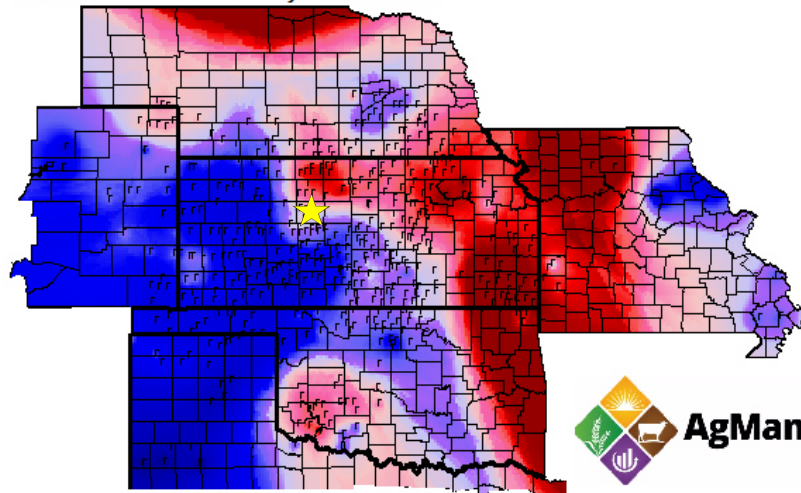
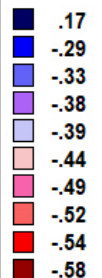


## Grain Sorghum Basis, 11-27-2024

Basis = Cash Price - Nearby Futures Price

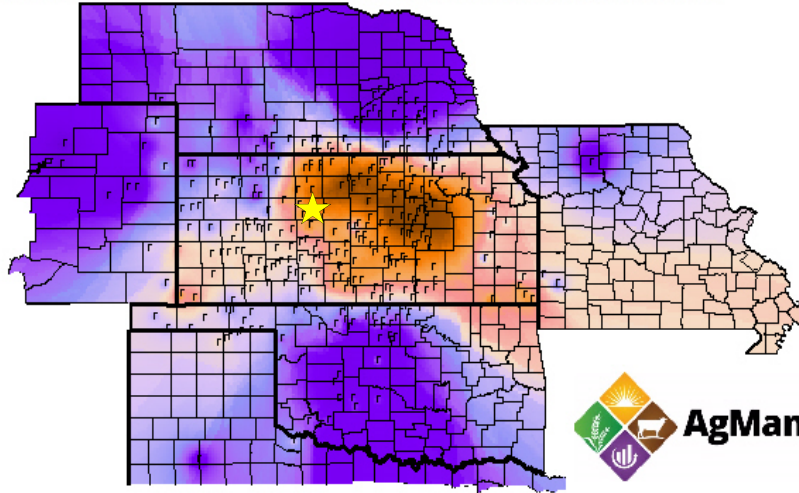
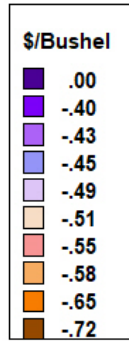
CBT Corn  
Dec Futures  
Price: \$4.16

\$/Bushel



## Grain Sorghum Basis Deviation, 11-27-2024

Basis Deviation = Current Basis - 3 Year Average Basis (2021, 2022, 2023)



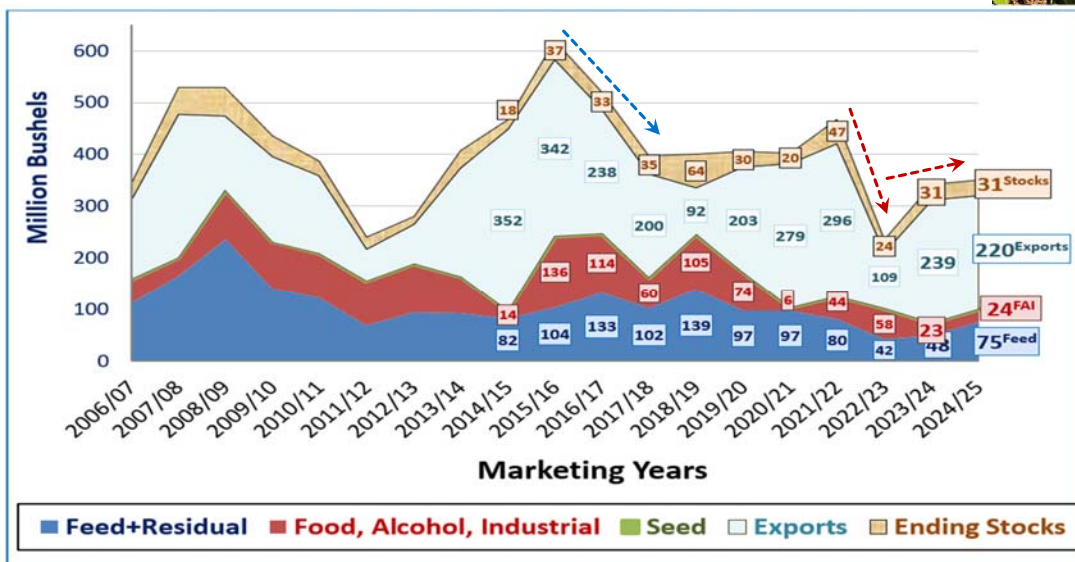
# U.S. Sorghum Production & Supplies

NY 2000/01 to "Next Crop" MY 2017/18



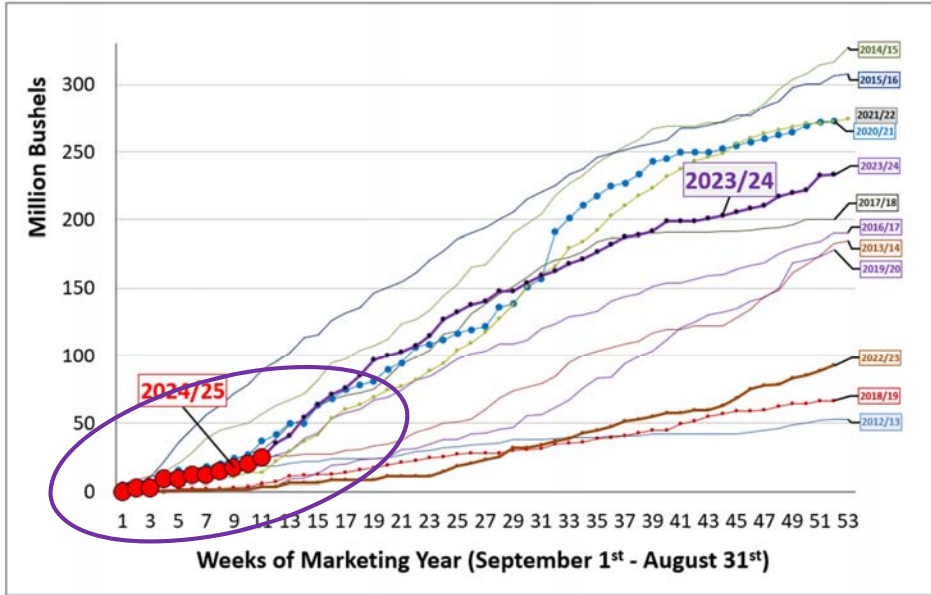
# U.S. Sorghum Use & Ending Stocks

MY 2006/07 to "New Crop" MY 2024/25



# U.S. Grain Sorghum Exports

MY 2012/13 - "New" MY 2024/25 as of November 21, 2024 - via USDA FAS



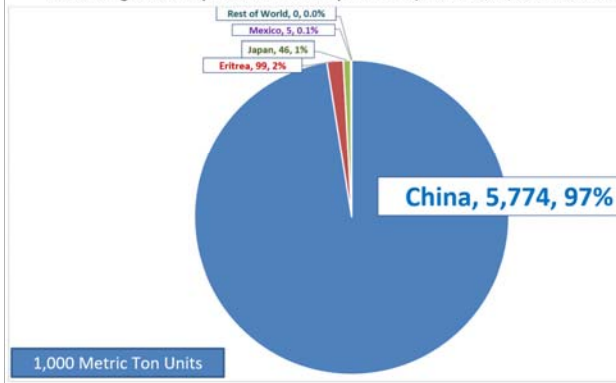
# U.S. Sorghum Use & Ending Stocks

MY 2006/07 to "New Crop" MY 2024/25



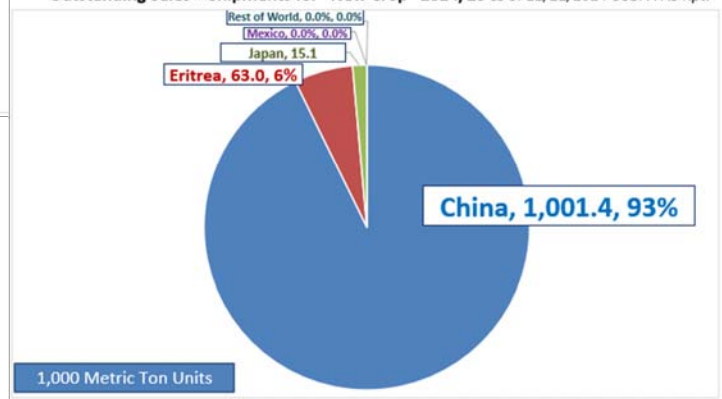
## U.S. Sorghum Export Buyers "Old Crop" MY 2023/24

Outstanding Sales + Shipments for "Old Crop" MY 2023/24 as of 8/29/2024 USDA FAS Reports



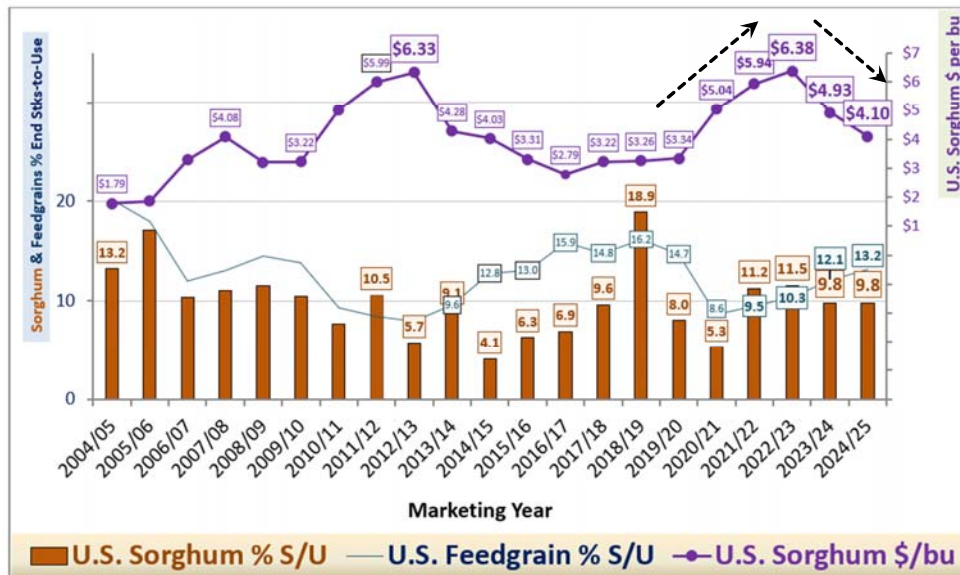
## U.S. Sorghum Export Buyers "New Crop" MY 2024/25

Outstanding Sales + Shipments for "New Crop" 2024/25 as of 11/21/2024 USDA FAS Rpt.



## U.S. Sorghum %S/U vs Cash \$

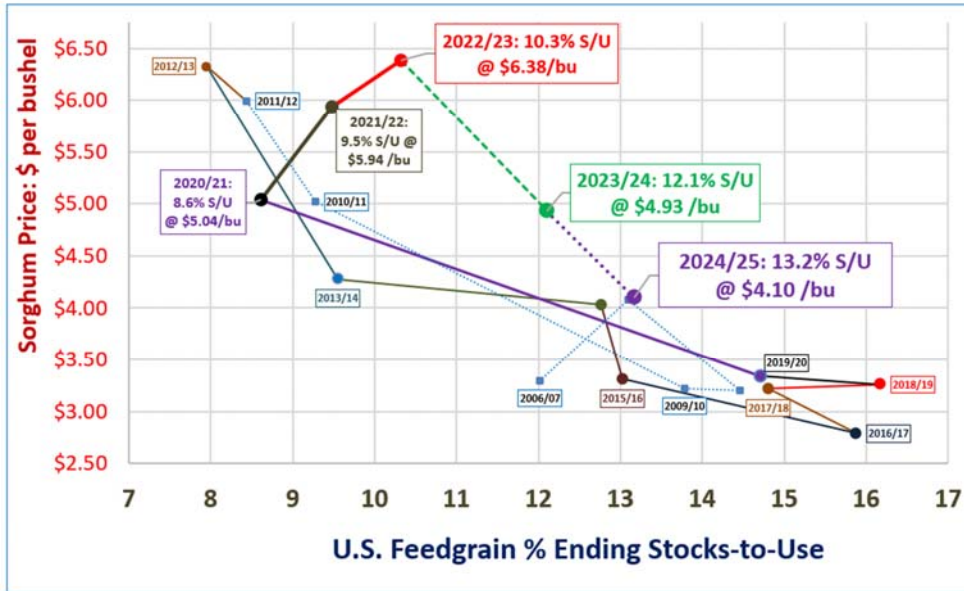
MY 2004/05 - "New Crop" MY 2024/25; as of the USDA 11/8/2024 WASDE Report





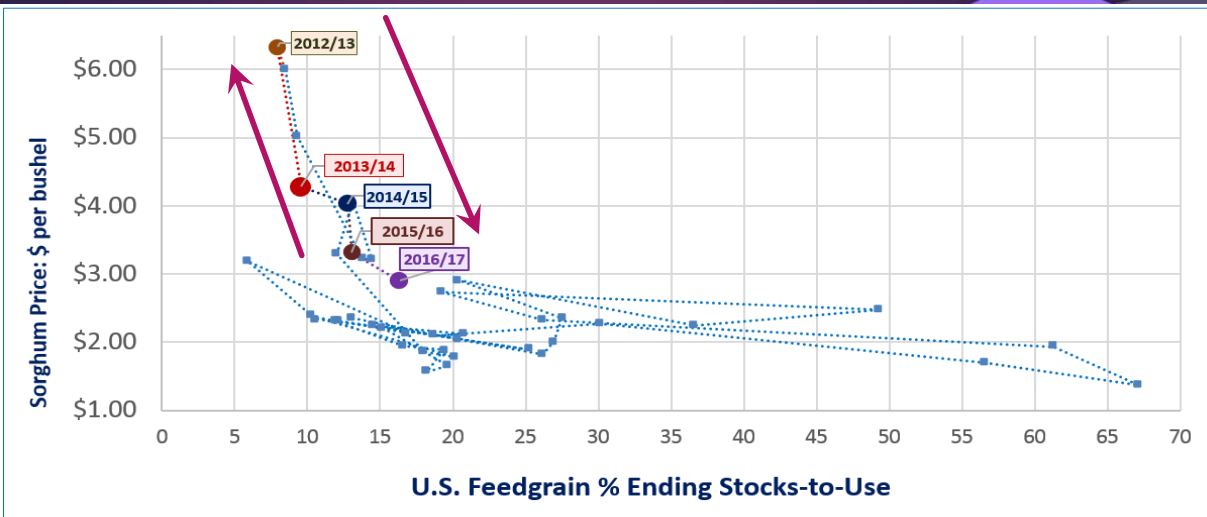
# U.S. Sorghum \$ vs Feedgrain % S/U

MY 1975/76 - "New Crop" 2024/25 as of the November 8, 2024 USDA WASDE Report



# U.S. Sorghum \$ vs U.S. Feedgrain % S/U

MY 1973/74 through "Current" MY 2016/17



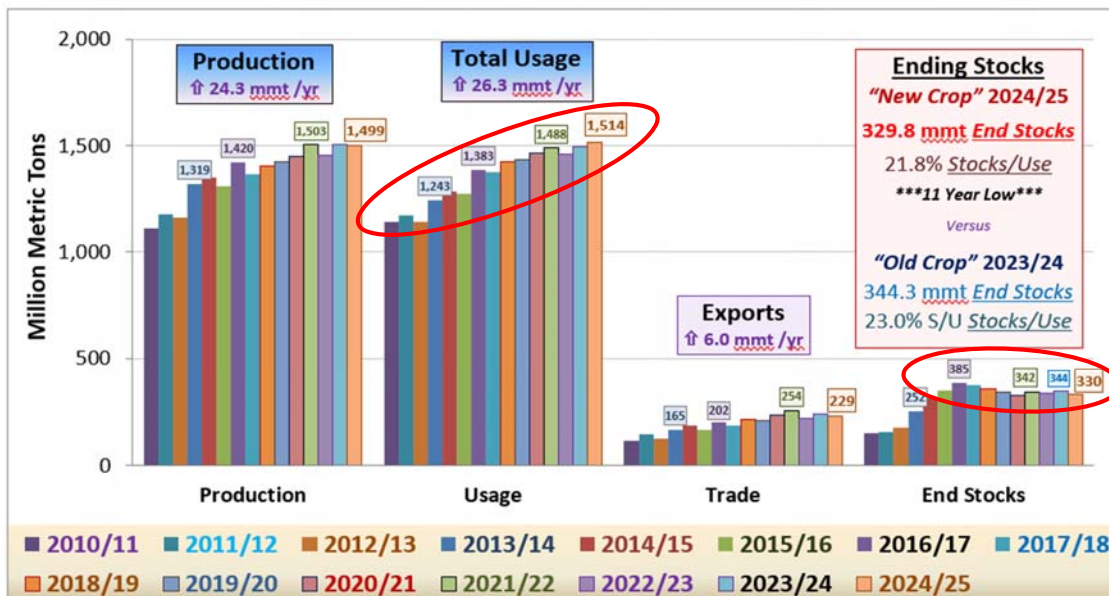
# U.S. Sorghum S-D “New Crop” MY 2024/25

As of the September 12, 2024 USDA WASDE + 11/8/2024 Grain Stocks, with KSU Scenarios <sup>11/3/2024</sup>

Item	USDA Scenario #1 11/8/2024 WASDE	KSU Scenario #2 Lower Exports = 195 mb (-25 mb)	KSU Scenario #3 Higher Exports = 245 mb (+25 mb)
<b>% Prob. of Occurring (KSU)</b>	<b>65% KSU Est.</b>	<b>25% KSU Est.</b>	<b>10% KSU Est.</b>
Planted Area (million acres)	6.300	6.300	6.300
Harvested Area (million acres)	5.275	5.275	5.275
Yield / harvested acre (bu/ac)	57.3	57.3	57.3
<b>Beginning Stocks</b> (million bu.)	<b>30.5</b>	<b>30.5</b>	<b>30.5</b>
<b>Production</b> (million bu.)	<b>320.7</b>	<b>320.7</b>	<b>320.7</b>
<b>Total Supply</b> (million bu.)	<b>351.3</b>	<b>351.3</b>	<b>351.3</b>
Food & Industrial Use (mln bu.)	24.1	24.1	24.1
<b>Exports</b> (million bu.)	<b>220</b>	<b>-25 mb 195</b>	<b>+25 mb 245</b>
Feed & Residual Use (million bu.)	75	<b>+10 mb 85</b>	<b>-13.7 mb 61.3</b>
<b>Total Use</b> (million bu.)	<b>305</b>	<b>-25 mb 280</b>	<b>+11.3 mb 315</b>
<b>Ending Stocks</b> (million bu.)	<b>22</b>	<b>+15 mb 46.3</b>	<b>-11.3 mb 20</b>
% Ending Stocks-to-Use	9.77%	15.69%	6.03%
<b>U.S. Sorghum Avg. Farm \$</b> (\$/bu)	<b>\$4.10 USDA</b> \$4.21 Futures 11/3/2024	<b>\$3.85 KSU</b> \$4.21 Futures 11/3/2024	<b>\$4.45 KSU</b> \$4.21 Futures 11/3/2024

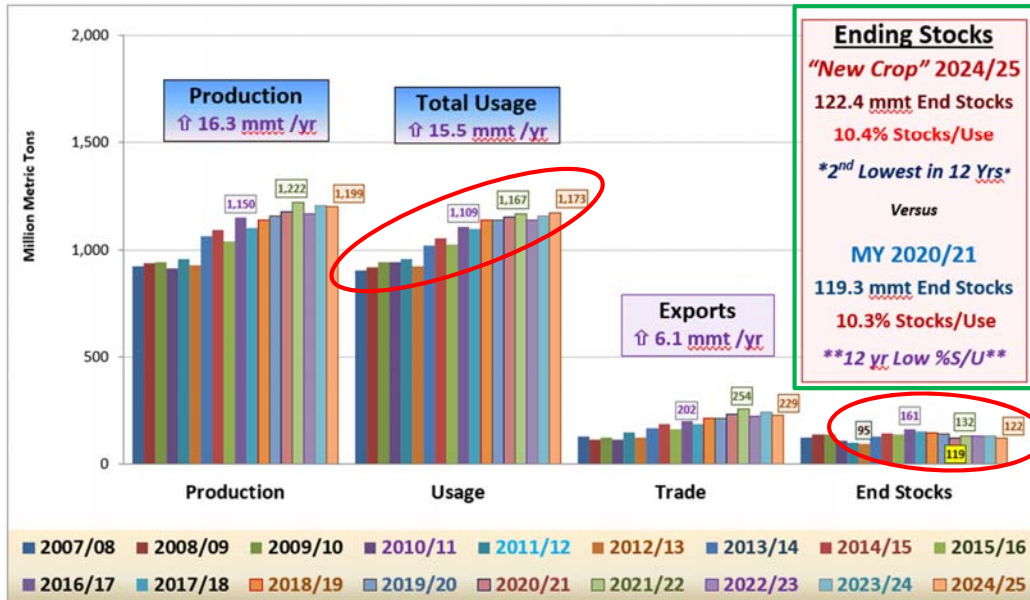
# World Coarse Grain Supply-Demand

MY 2007/08 thru “New Crop” 2024/25 as of the November 8, 2024 USDA WASDE



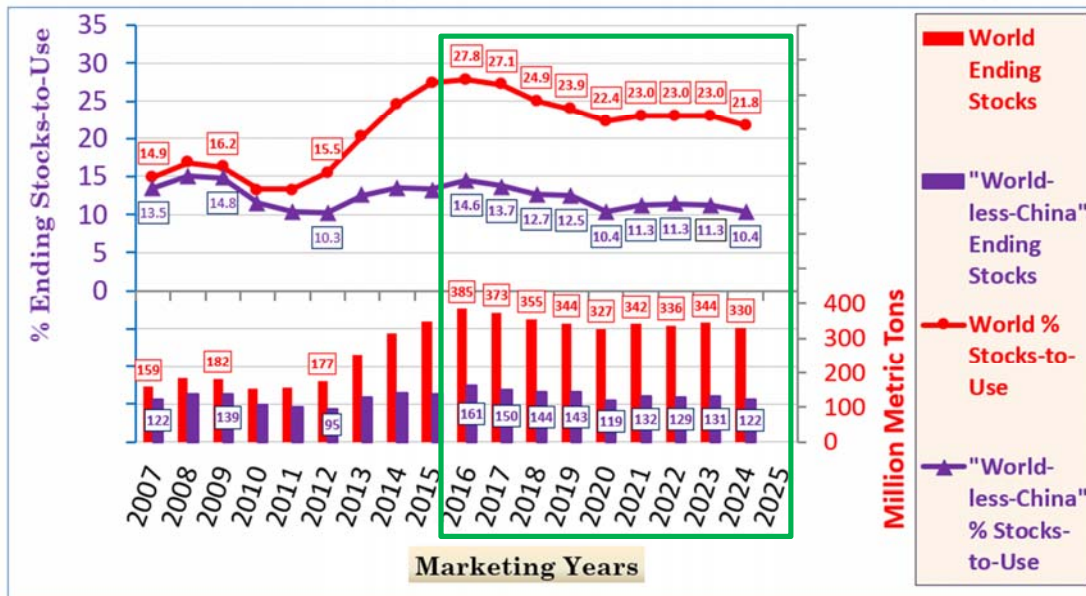
# World *Less-China* Coarse Grain Supply-Demand

MY 2007/08 thru "New Crop" 2024/25 as of the November 8, 2024 USDA WASDE



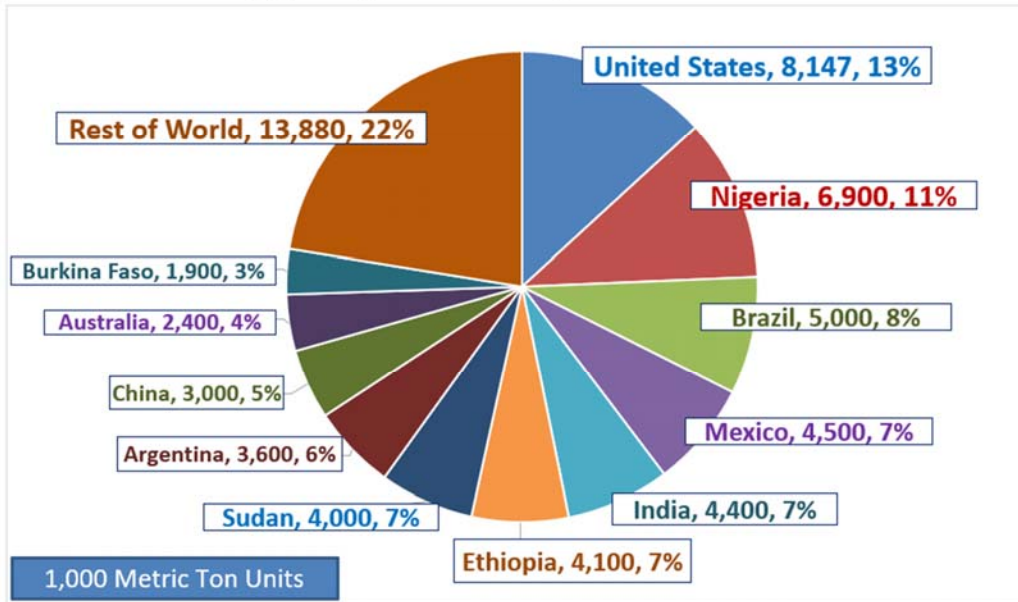
# World vs World *Less-China* Coarse Grain % S/U

MY 2007/08 thru "New Crop" 2024/25 as of the 11/8/2024 USDA WASDE report



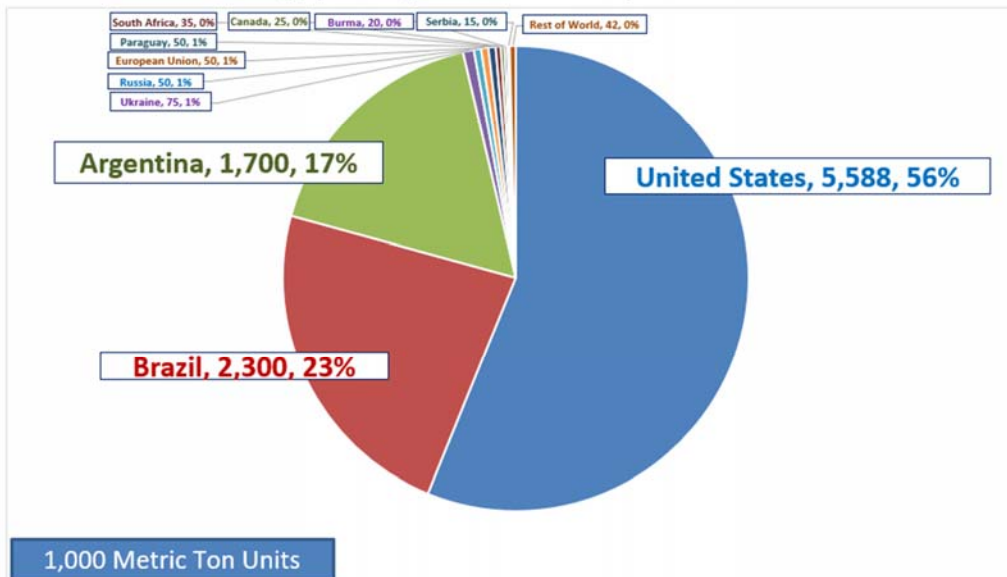
# World Sorghum Producers "New Crop" MY 2024/25

USDA FAS PSD-Online, (1,000 mt); as of November 8, 2024



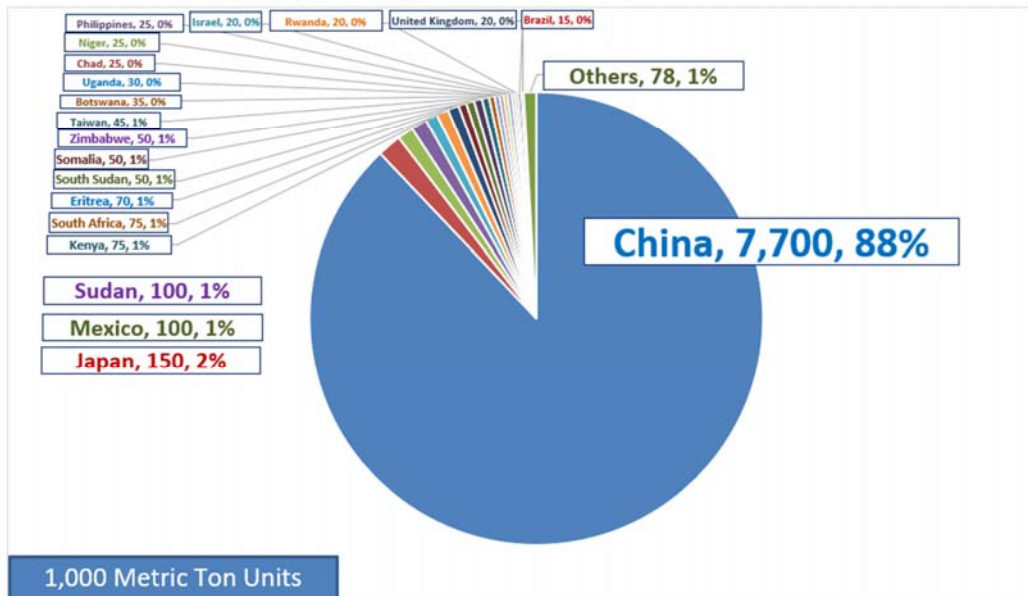
# World Sorghum Exporters "New Crop" MY 2024/25

USDA FAS PSD-Online, (1,000 mt); as of November 8, 2024



# World Sorghum Importers "New Crop" 2024/25

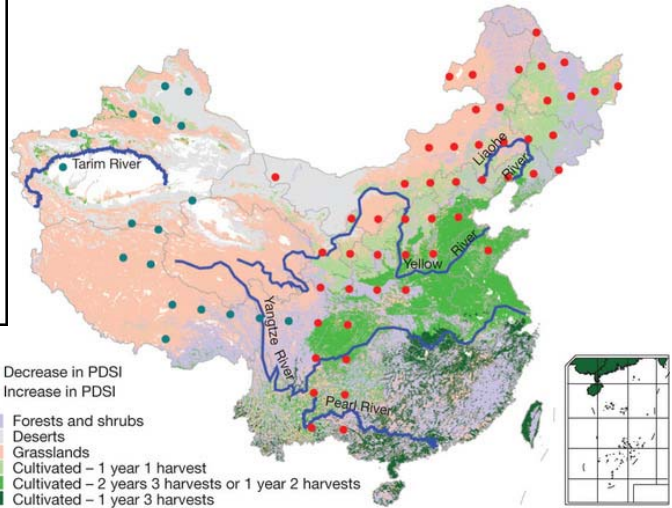
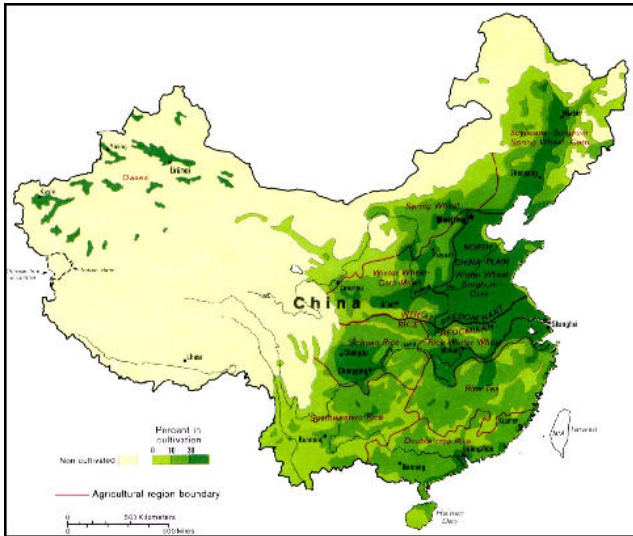
USDA FAS PSD-Online, (1,000 mt); as of November 8, 2024



# China Sorghum Supply-Demand

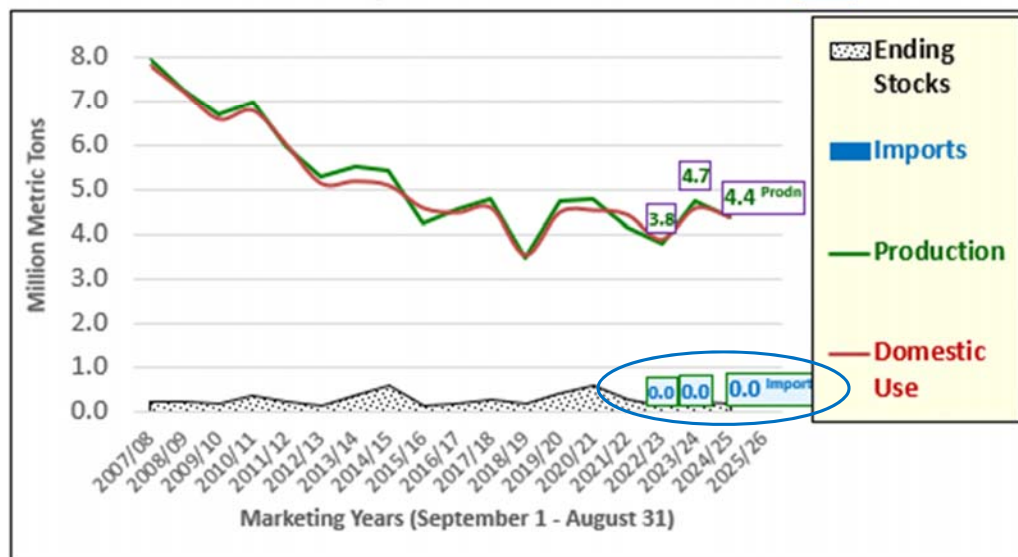
MY 2007/08 – "New Crop" 2024/25 as of the November 8, 2024 USDA WASDE report





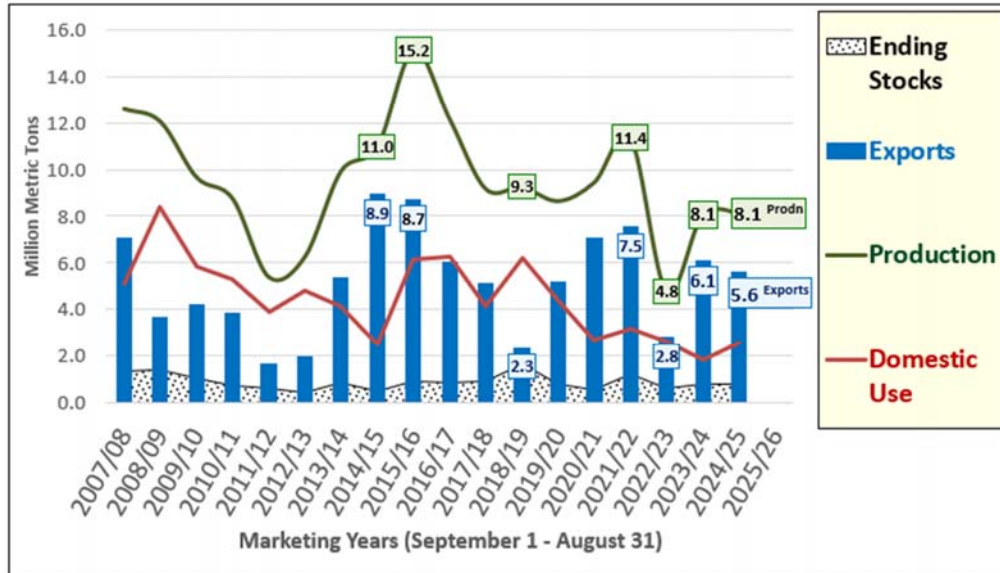
# India Sorghum Supply-Demand

MY 2007/08 – “New Crop” 2024/25 as of the November 8, 2024 USDA WASDE



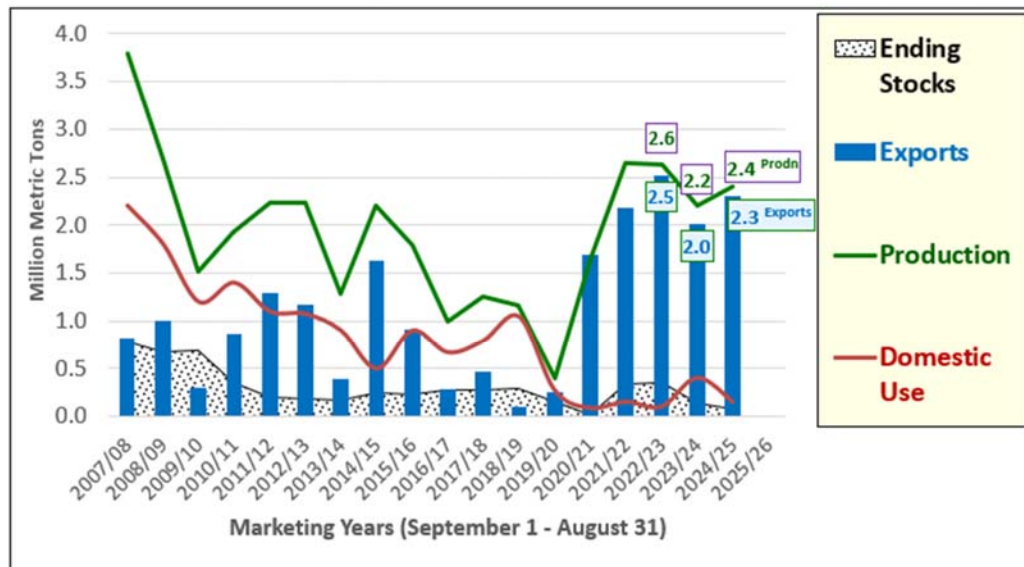
# U.S. Sorghum Supply-Demand

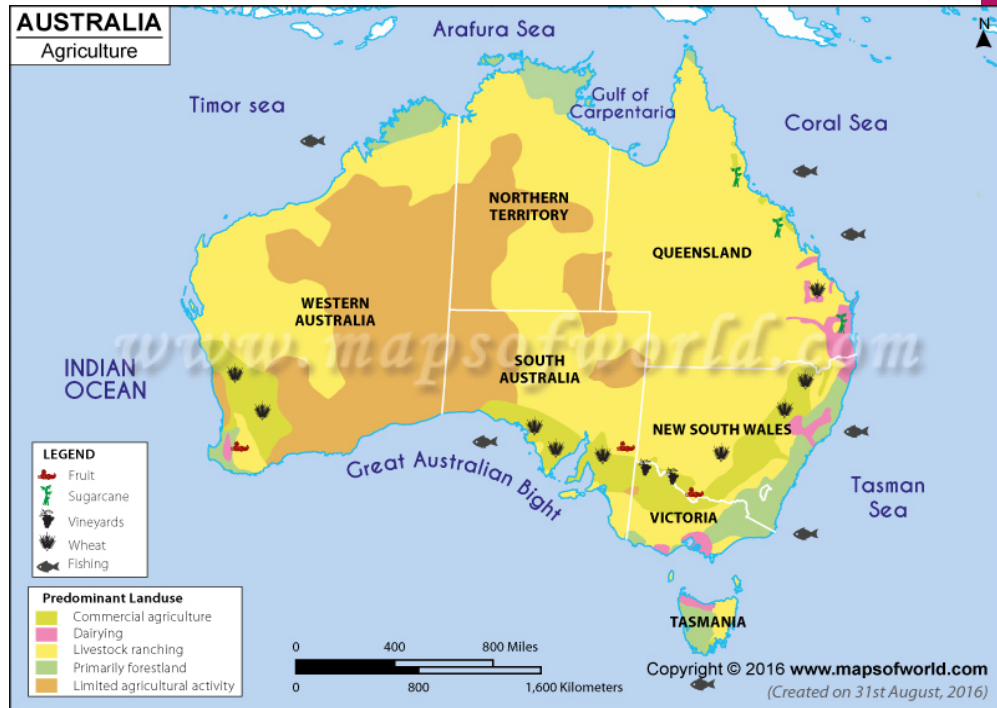
MY 2007/08 – “New Crop” 2024/25 as of the November 8, 2024 USDA WASDE



# Australia Sorghum S-D

MY 2007/08 – “New Crop” 2024/25 as of the November 8, 2024 USDA WASDE





# Argentina Sorghum S-D

MY 2007/08 – “New Crop” 2024/25 as of the November 8, 2024 USDA WASDE





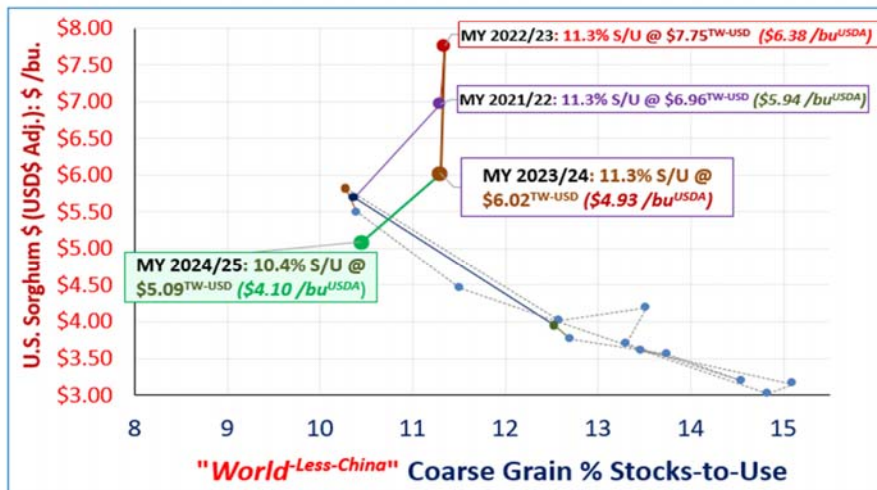
# Brazil Sorghum Supply-Demand

MY 2007/08 – “New Crop” 2024/25 as of the November 8, 2024 USDA WASDE



## U.S. Sorghum Prices *USD\$ Adj.* vs Coarse Grain *World-Less-China* % S/U

MY 2007/08 thru “New Crop” 2024/25 as of the 11/8/2024 USDA WASDE



# Questions?

Daniel O'Brien – Kansas State University

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