

2024 Grain Market Outlook

“Winning-The-Game” Grain Marketing Webinars

Kansas State University

February 26, 2024

DANIEL O'BRIEN

EXTENSION AGRICULTURAL ECONOMIST

KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



U.S. & Global Weather

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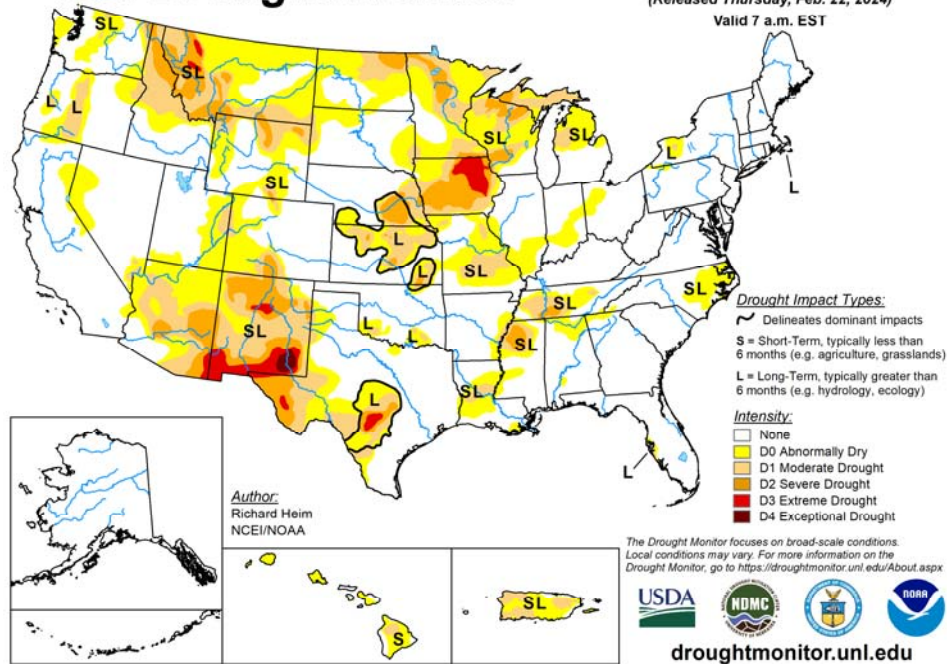
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Department of Agricultural Economics

U.S. Drought Monitor

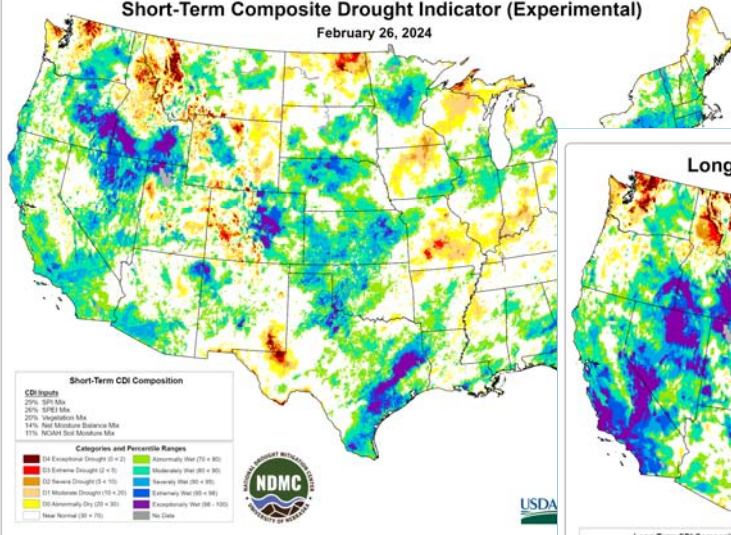
February 20, 2024
(Released Thursday, Feb. 22, 2024)
Valid 7 a.m. EST

3



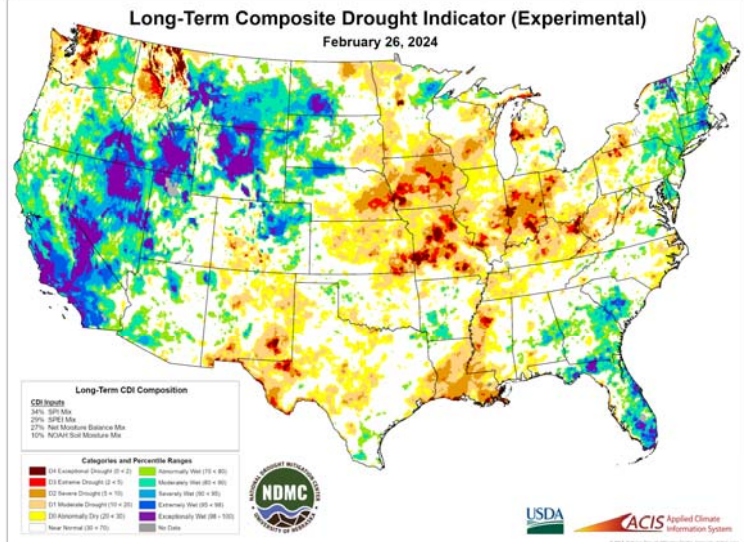
Short-Term Composite Drought Indicator (Experimental)

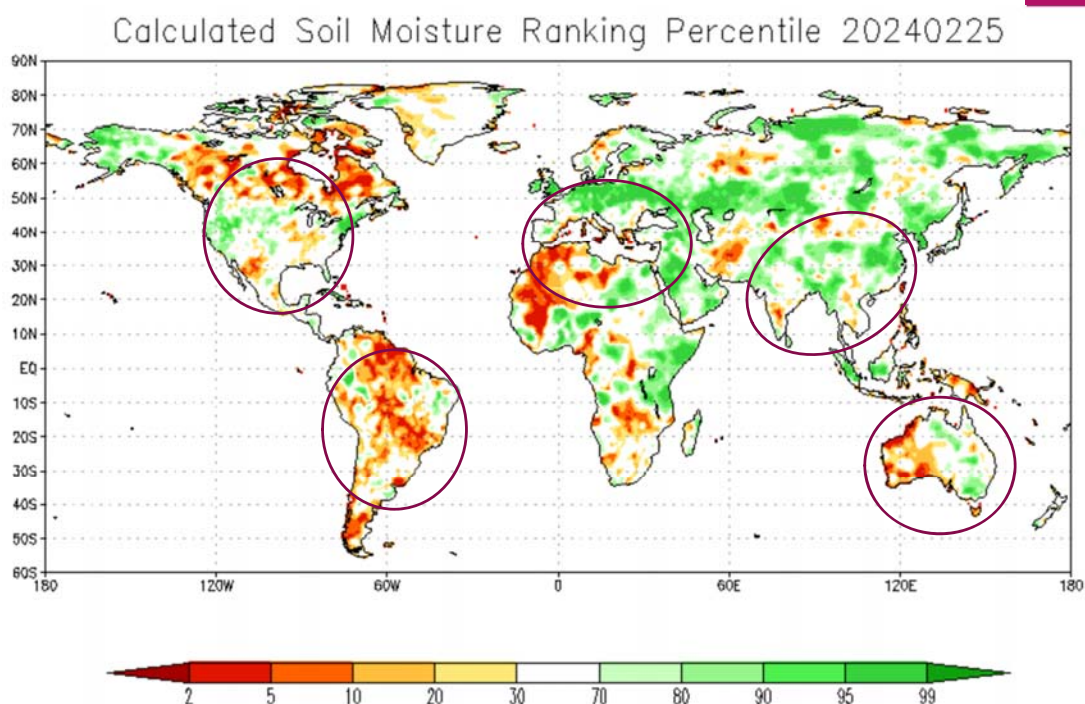
February 26, 2024



Long-Term Composite Drought Indicator (Experimental)

February 26, 2024





Feedgrain Markets

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ELEC. CORN (@C2024H)

Print

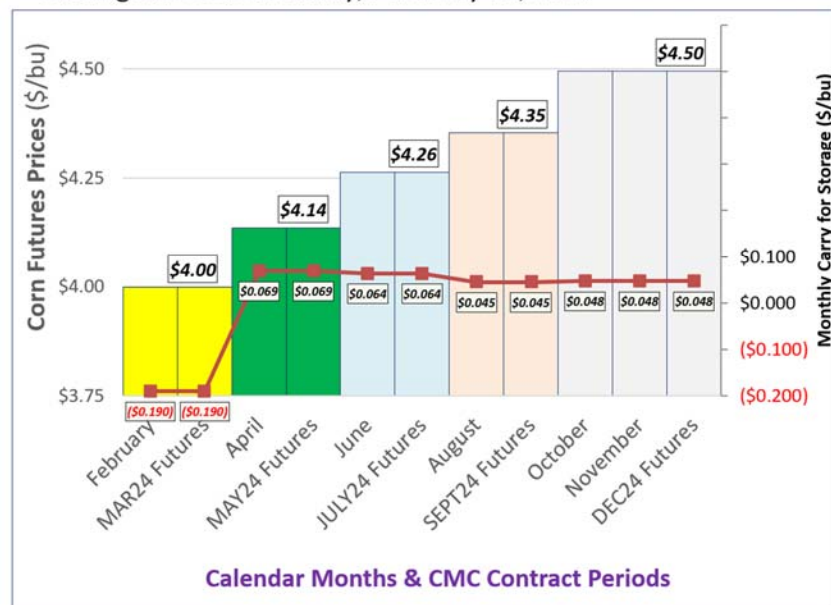
7



CME Corn Futures *Lead & Deferred Contracts*

8

Closing Prices as of Friday, February 23, 2024



Monthly Commodity Futures Price Chart

TFC Commodity Charts

Corn (Glo

ZC - Corn (Globex) - Monthly Chart

Change: -34.000

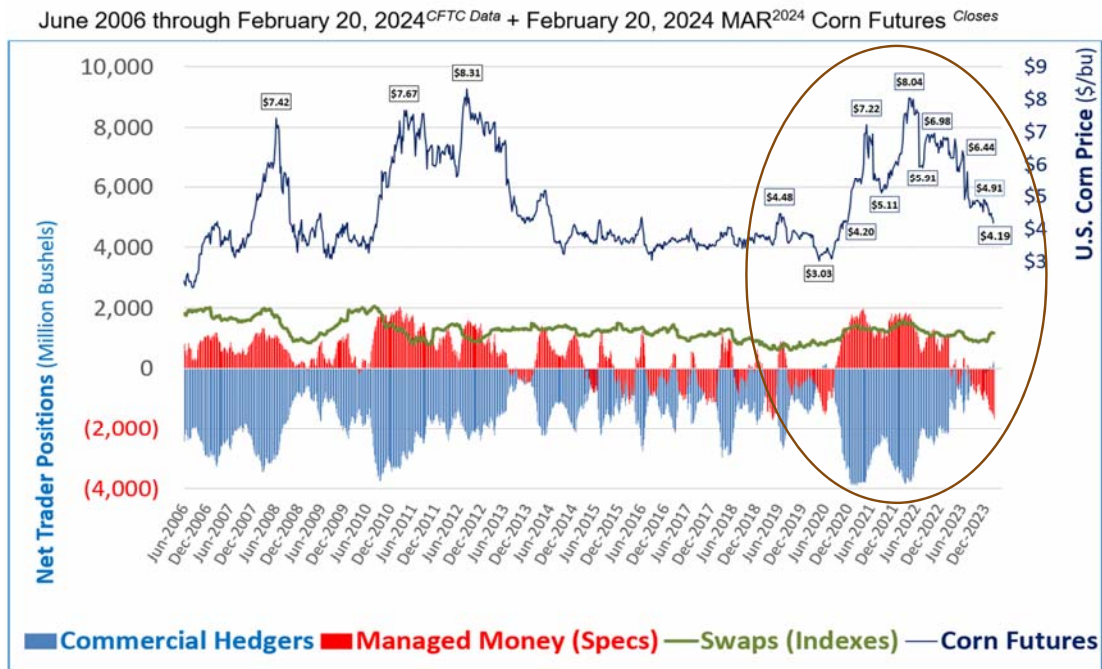
02/26/2024 O: 448.000 H: 448.750 L: 408.750 C: 414.000 Vol: 429017 OI: 160601



Kansas Cash & Futures Prices						
Date						
2/26/2024 Opening						
Grain Futures Contracts	Closing \$					
MAR 2024 Corn (2023/24 Lead Contract)	\$3.9525					
DEC 2024 Corn (2024 New Crop Harvest Forward Contract)	\$4.4625					
2/26/2024 Opening	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	Representing the highest bids available at each location					
Cash Market Spot & FC Bids	Colby ^{Area}	Salina ^{Area}	Topeka ^{Area}	Garden City ^{Area}	Hutchinson ^{Area}	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$	\$4.05	\$3.90	\$3.89	\$4.14	\$4.06	\$3.93
October Corn Harvest Cash Basis	\$0.10	(\$0.05)	(\$0.06)	\$0.19	\$0.11	(\$0.02)
Corn Harvest FC\$: Fall ²⁰²⁴	\$4.21	\$4.21	\$4.16	\$4.56	\$4.27	\$4.08
2024 New Crop Harvest Forward Contract	(\$0.25)	(\$0.25)	(\$0.30)	\$0.10	(\$0.19)	(\$0.38)
Grain Sorghum Spot Cash\$	\$4.05	\$4.24	\$4.09	\$3.99	\$4.51	\$3.52
October Sorghum Spot Cash Basis	\$0.10	\$0.29	\$0.14	\$0.04	\$0.56	(\$0.43)
Grain Sorghum Harvest FC\$: Fall ²⁰²⁴	\$3.96	\$4.21	\$4.01	\$4.11	\$4.46	\$3.81
2024 New Crop Harvest Forward Contract	(\$0.50)	(\$0.25)	(\$0.45)	(\$0.35)	(\$0.00)	(\$0.65)

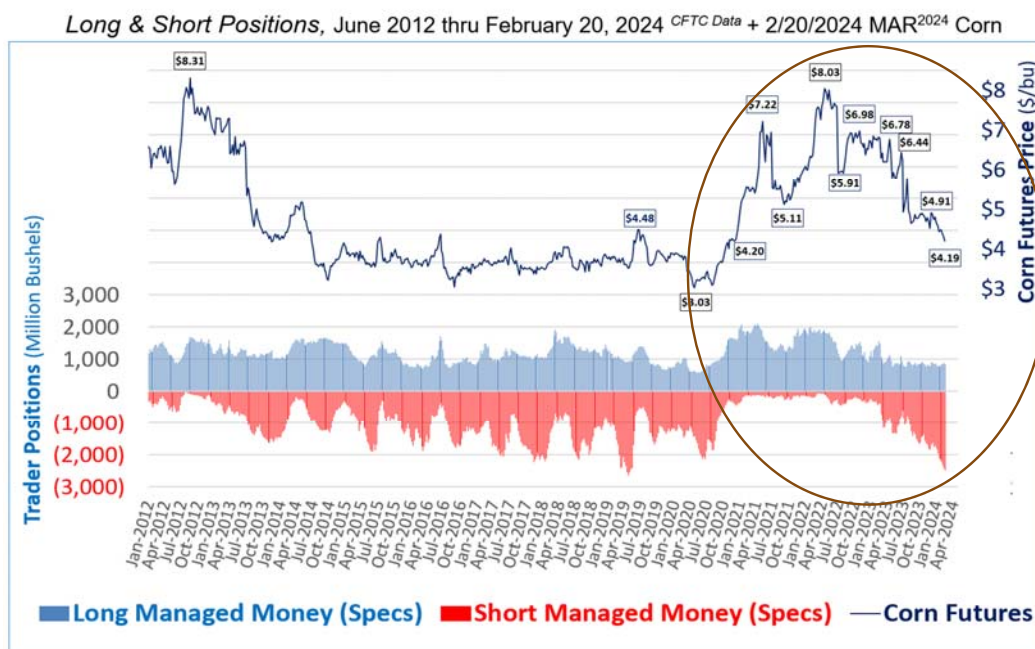
Corn Futures-Net Position of Traders

11



Corn Futures - Managed Money Traders Specs

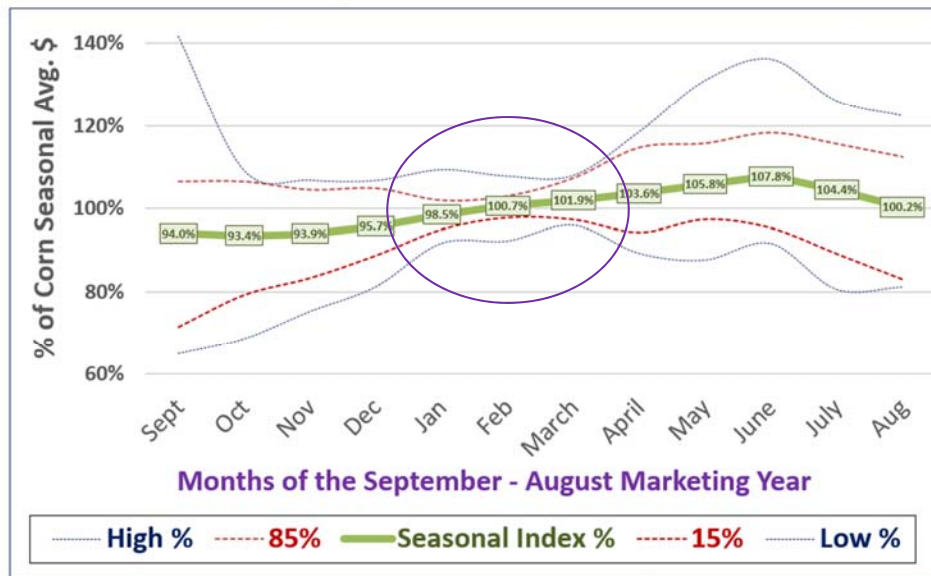
12



Corn Seasonal Price Index ^{Kansas}

13

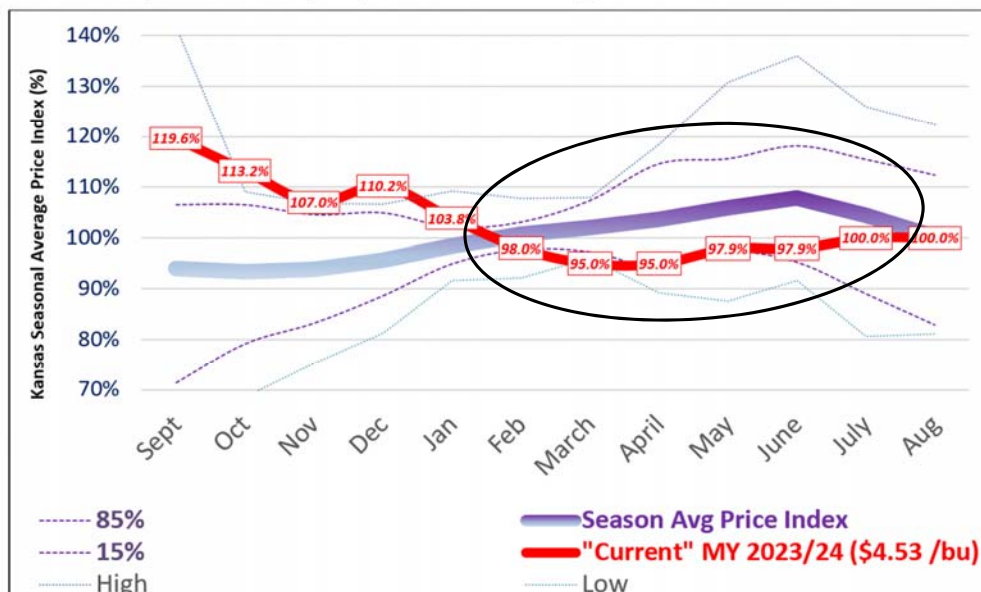
Last 24 Full Marketing Years: 1999/2000 - 2022/2023



U.S & Kansas Corn Seasonal \$'s

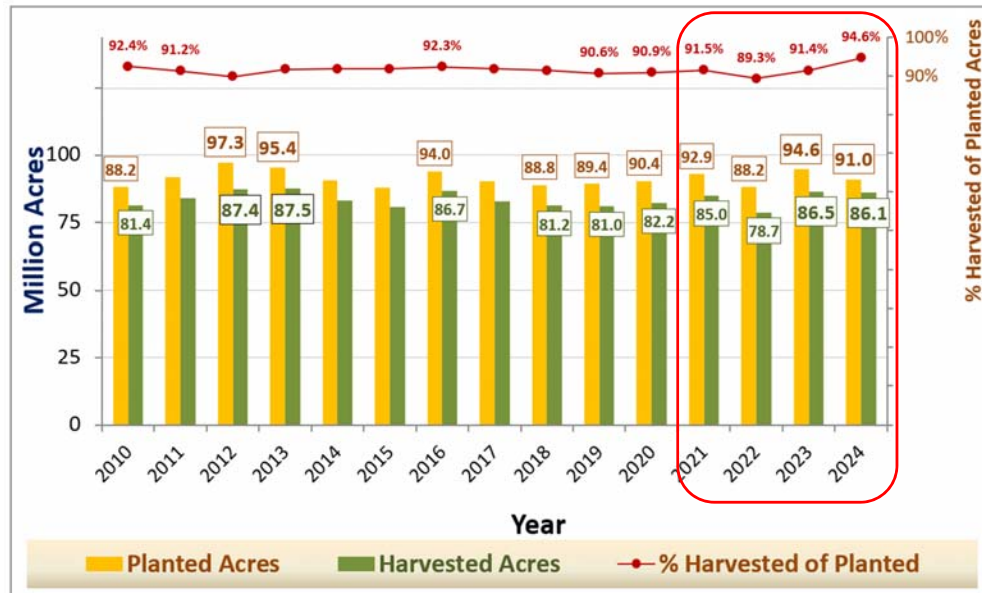
14

MY 1999/00 – MY 2022/23 plus "Current" 2023/24 as of 2/23/2024 – Futures Estimate



U.S. Corn Acres for 2010-2024

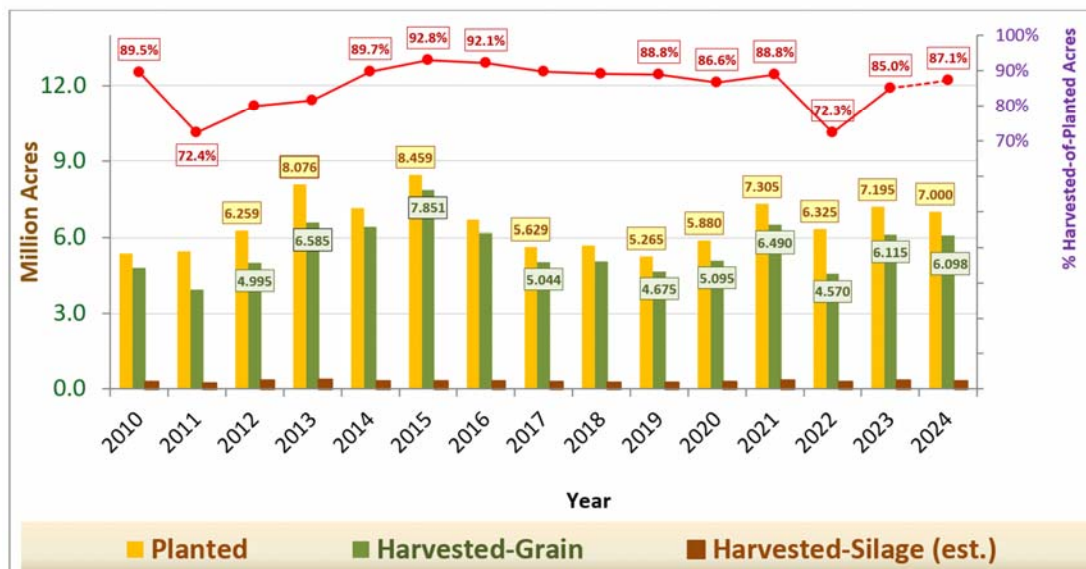
Sources: the 2024 USDA Agricultural Outlook Forum 2/15-16/2024



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U.S. Sorghum Acres

Years 2010 – 2024 as of the USDA Agricultural Outlook Forum, February 15-16, 2024

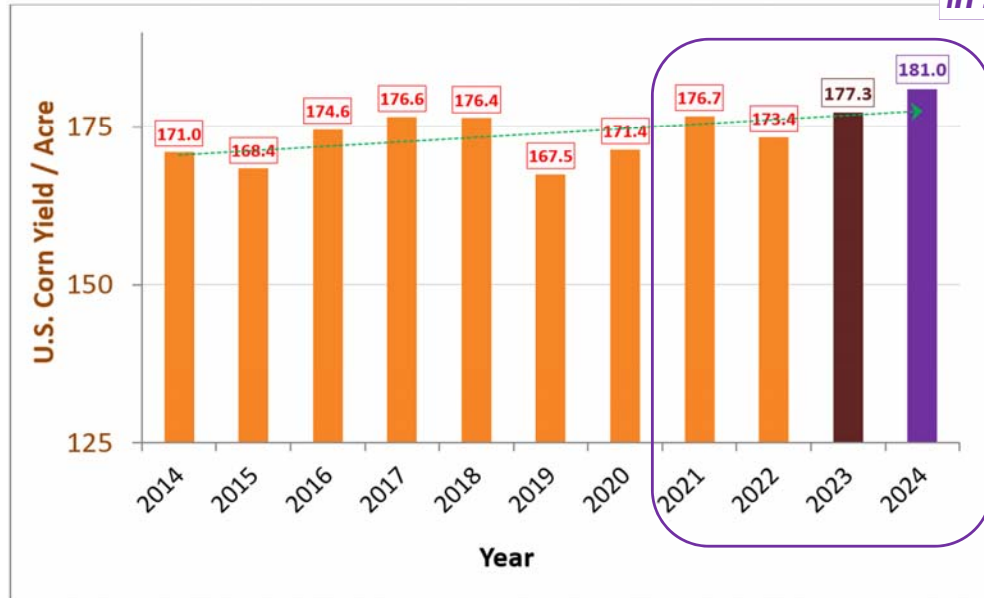


16

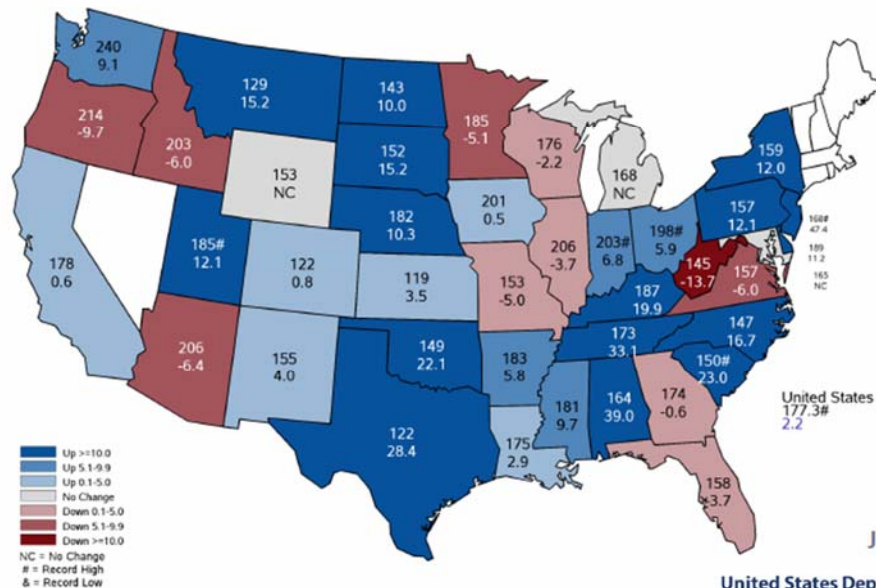
U.S. Corn Yields for 2014-2024

Source: the 2024 USDA Agricultural Outlook Forum February 15-16, 2024

177.3 bu/ac
in 2023 USDA



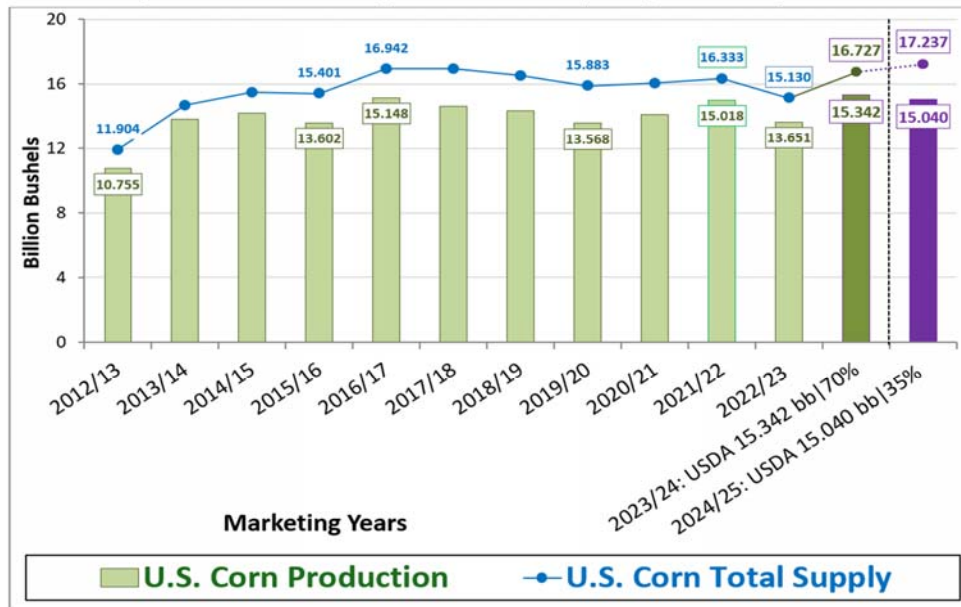
2023 Corn Yield Bushels and Percent Change from Previous Year



U.S. Corn Production & Supplies

19

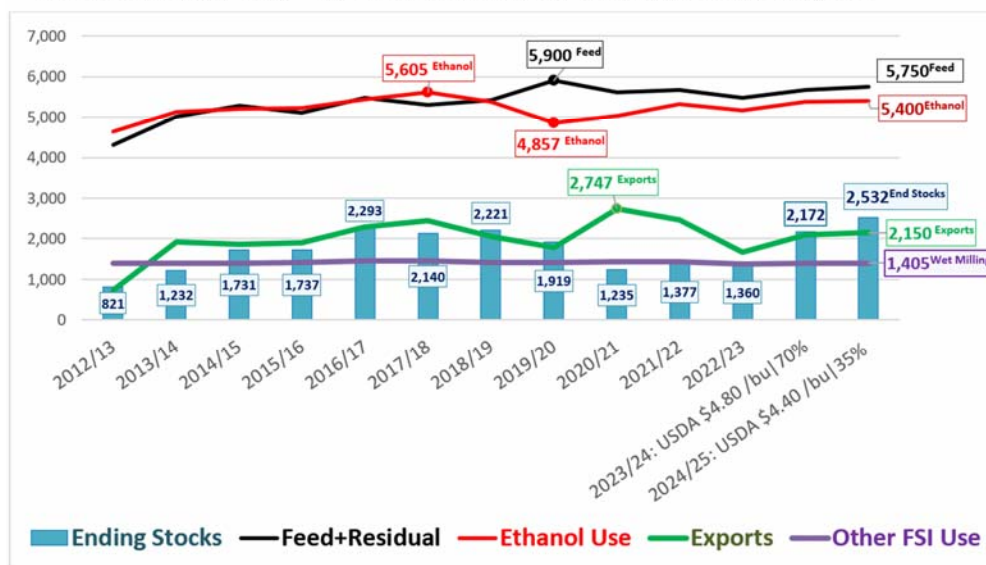
MY 2012/13 - "New" MY 2024/25: as of the February 15-16, 2024 USDA Agriculture Outlook Forum



U.S. Corn Use & Ending Stocks

20

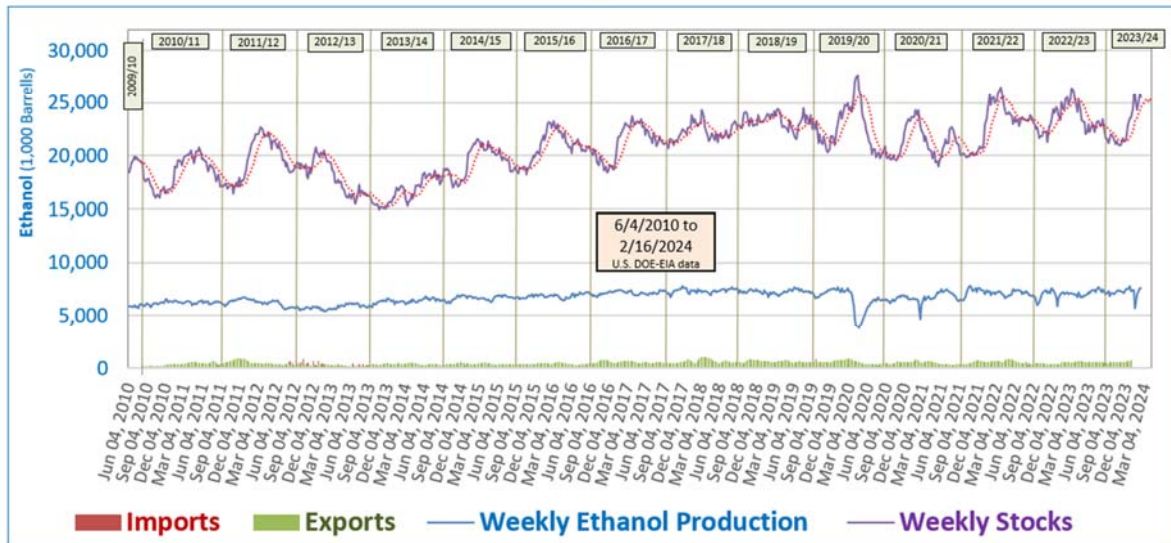
MY 2012/13 thru "New" 2024/25 as of USDA Ag Outlook Forum on February 15-16, 2024



U.S. Ethanol Production & Stocks Weekly

21

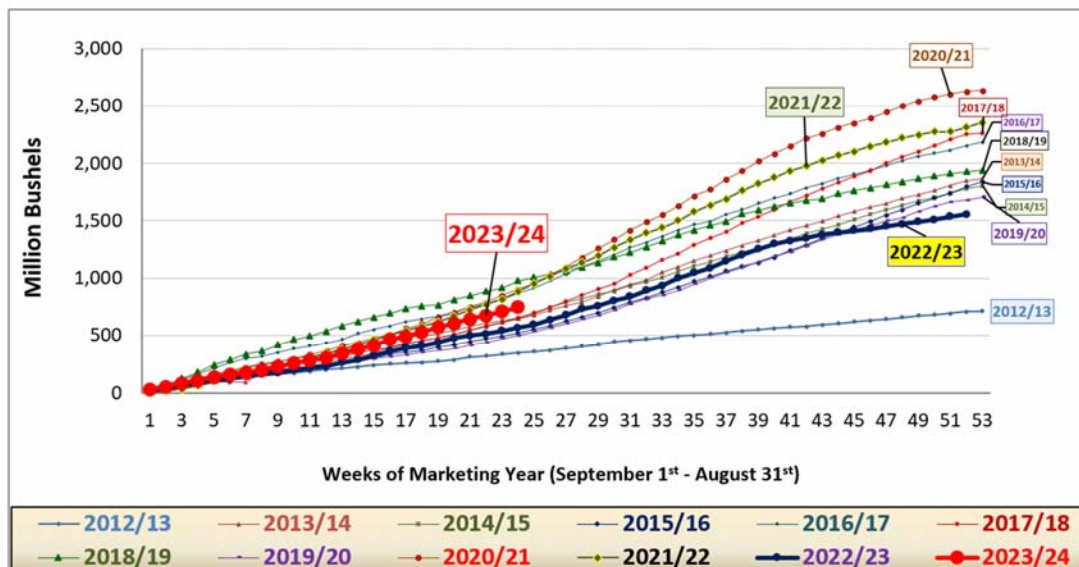
Based on U.S. DOE – EIA on U.S. Ethanol Industry Trends as of February 16, 2024



U.S. Corn Exports: MY 2012/13 thru "Current" MY 2023/24

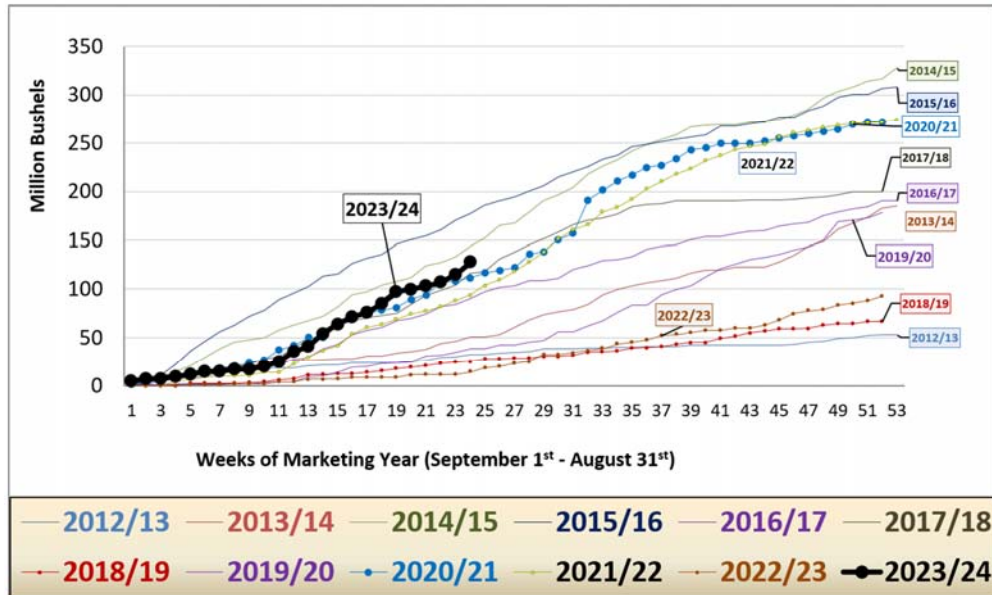
22

Based on USDA FAS Weekly Export reports through 2/15/2024



U.S. Grain Sorghum Exports

MY 2012/13 - "Current" MY 2023/24 as of February 15, 2024 - via USDA FAS



U.S. Corn Stocks & % Stocks-to-Use

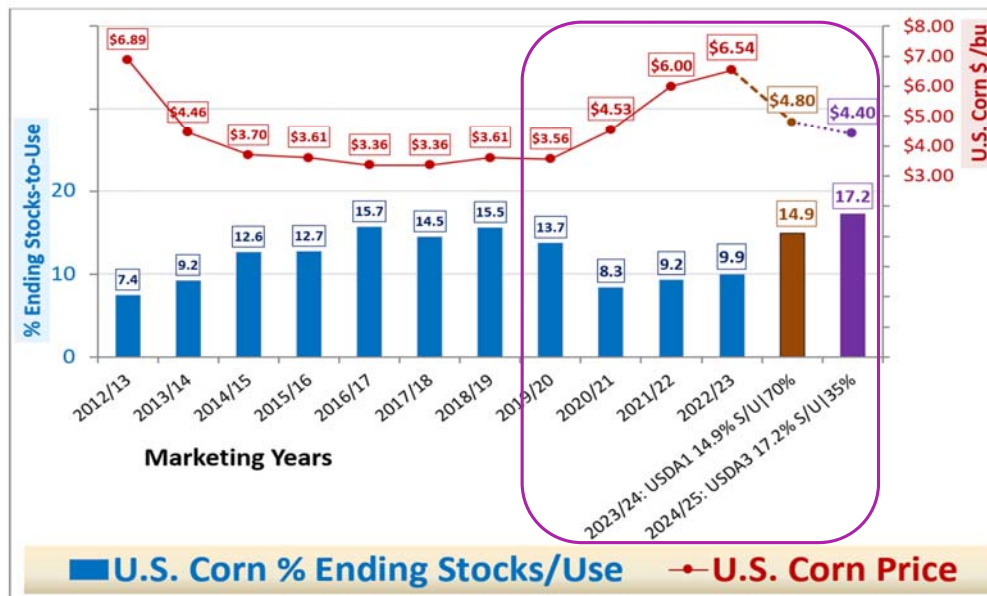
MY 2012/13 - "New" MY 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024



U.S. Corn % Stocks/Use vs Corn \$

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MY 2012/13 thru "New" MY 2023/24 from the USDA Ag Outlook Forum, February 15-16, 2024



U.S. Corn Supply-Demand Balance Sheet

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"Current" MY 2023/24 & "New" 2024/25 as of February 15-16, 2024 USDA Ag Outlook Forum + KSU Ests.:

Item	A. USDA #1 "Current" MY 2023/24 = 177.3 bu/ac 2.172 mb Ending Stocks	B. KSU #2 "Current" MY 2023/24 "Higher Ethanol, Exports" + 40 mb Ethanol & + 150 mb Exports	C. USDA #3 "New Crop" MY 2024/25 USDA Outlook Forum 181 bu/acre Yield 2.532 mb Ending Stocks	D. KSU #4 "New Crop" MY 2024/25 USDA Outlook Forum 176.0 bu/acre Yield 2.532 mb Ending Stocks
% Probability of Occurring (KSU)	70% ^{KSUest}	30% ^{KSUest}	33% ^{KSUest}	67% ^{KSUest}
Planted Area (million acres)	94.641	94.641	91.000	91.000
Harvested Area (million acres)	86.513	86.513	83.094	83.094
Yield / harvested acre (bu/ac)	177.3	177.3	181.0	176.0
Million Bushels				
Production (million bu.)	15,342	15,342	15,040	-415 mb 14,625
Total Supply (million bu.)	16,727	16,727	17,237	-415 mb 16,822
Ethanol for fuel Use (million bu.)	5,375	+ 40 mb 5,415	5,400	5,400
Exports (million bu.)	2,100	+ 150 mb 2,250	2,150	2,150
Feed & Residual Use (million bu.)	5,675	5,675	5,750	5,750
Total Use (million bu.)	14,555	+ 190 mb 14,745	14,705	14,705
Ending Stocks (million bu.)	2,172	- 190 mb 1,982	2,532	-415 mb 2,117
% Ending Stocks-to-Use	14.92%	13.44%	17.22%	14.40%
U.S. Corn Average Farm Price (\$/bushel)	\$4.80 ^{USDA} \$4.53 ^{KSU 2/23/2024}	\$5.30 ^{KSU}	\$4.40 ^{USDA}	\$5.00 ^{KSU}

U.S. Corn Stocks & % Stocks-to-Use

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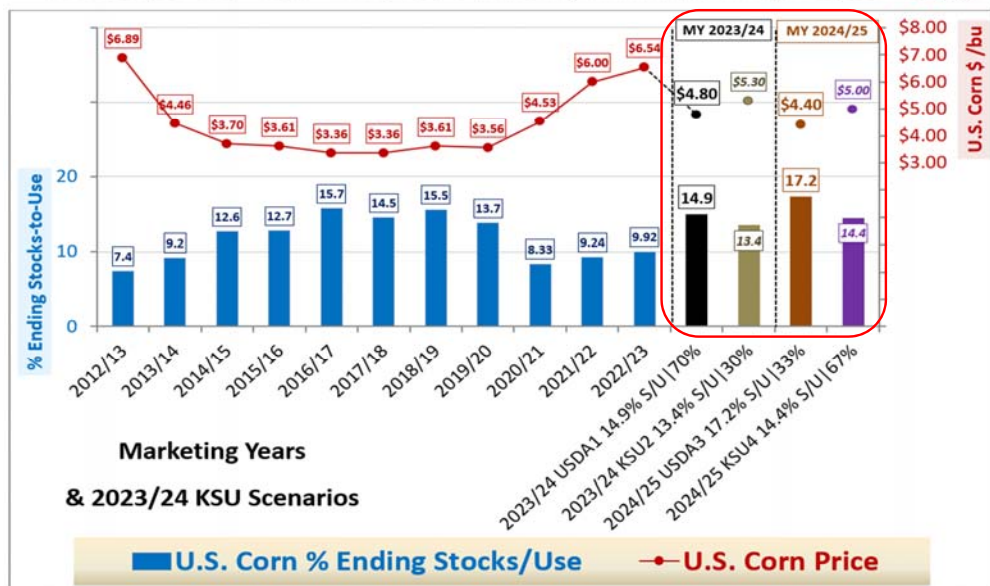
MY 2012/13 thru "New" 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024 + KSU Ests.



U.S. Corn % Stocks/Use vs Corn \$

28

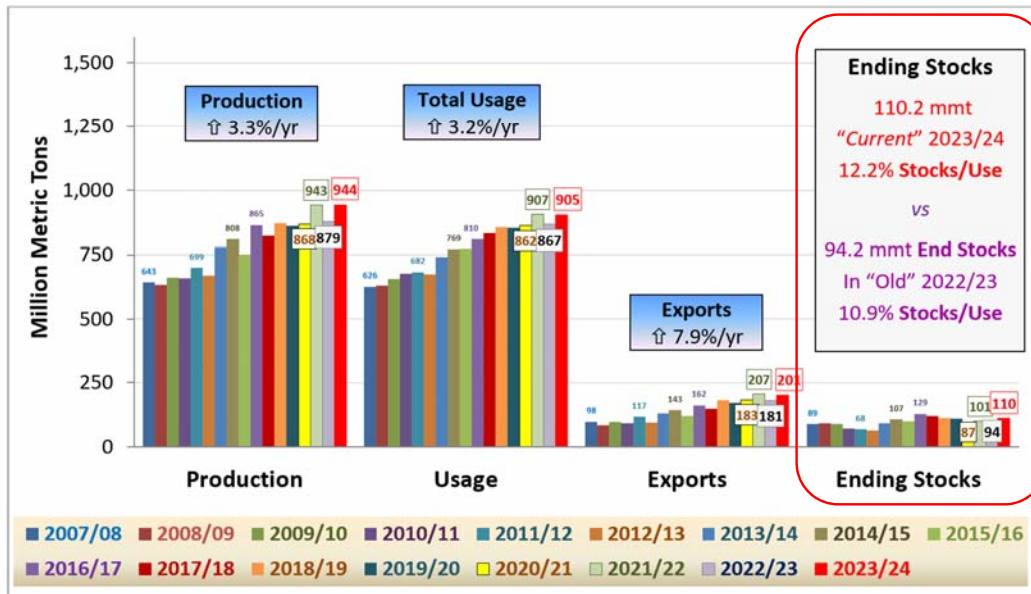
MY 2012/13 thru "New" 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024 + KSU Ests.



“World Less-China” Corn Supply-Demand

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MY 2007/08 – “Current” MY 2023/24 as of the February 8, 2024 USDA WASDE Report



World vs World Less-China Corn % Stocks-to-Use

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MY 2007/08 through “Current” MY 2023/24, as of the February 8, 2024 USDA WASDE report



Brazil Corn Supply-Demand

MY 2007/08 – "Current" MY 2023/24, as of the February 8, 2024 USDA WASDE report



Argentina Corn Supply-Demand

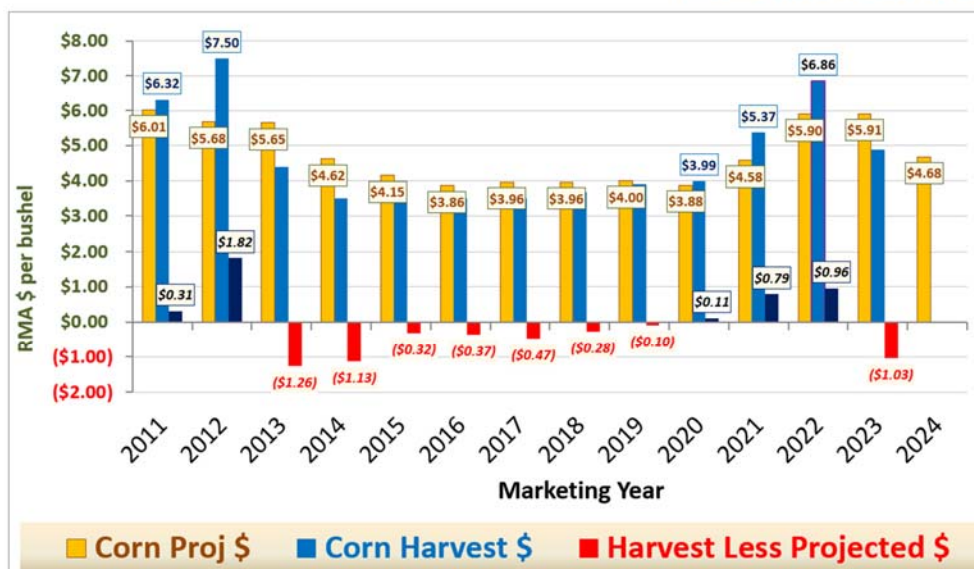
MY 2007/08 – "Current" MY 2023/24, as of the February 8, 2024 USDA WASDE report



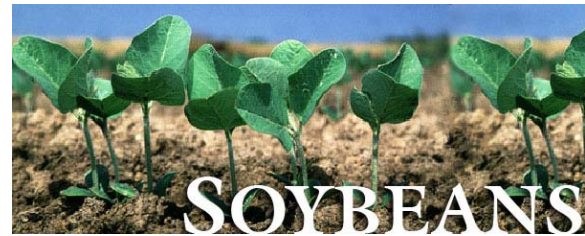
31

Corn Projected & Harvest \$'s ^{RMA}

Kansas \$'s, Years 2011-2024 ^{RMA\$'s 2/23/2024} (Price increases 5 of last 13 years)



32



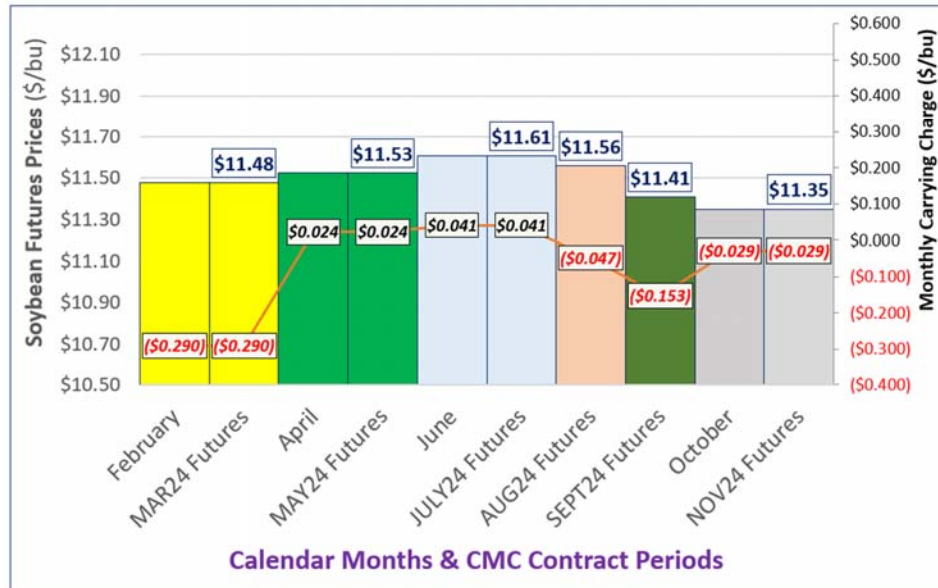
Department of Agricultural Economics



CME Soybean Futures *Lead & Deferred Contracts*

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Closing Prices as of Friday, February 23, 2024



Monthly Commodity Futures Price Chart Soybeans (Globex) (CBOT)

TFC Commodity Charts

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ZS - Soybeans (Globex) - Monthly Chart

Change: -84.500

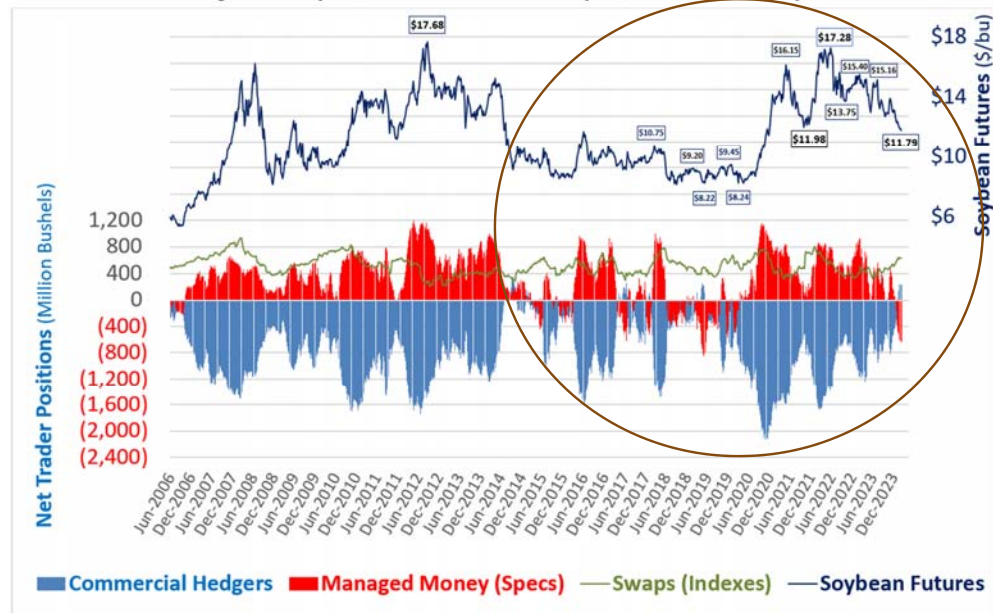
02/26/2024 O: 1221.250 H: 1221.750 L: 1135.000 C: 1136.750 Vol: 282923 OI: 77901



Kansas Cash & Futures Prices						
Date						
2/26/2024 Opening						
Grain Futures Contracts		Closing \$				
MAR 2024 Soybeans (2023/24 Lead Contract)	\$11.3425					
NOV 2024 Soybeans (2024 New Crop Harvest Forward Contract))	\$11.2975					
2/26/2024 Opening		Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators				
		Representing the highest bids available at each location				
Cash Market Spot & FC Bids	Colby ^{Area}	Salina ^{Area}	Topeka ^{Area}	Garden City ^{Area}	Hutchinson ^{Area}	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Soybean Spot Cash\$	\$10.24	\$10.78	\$10.91	\$10.46	\$11.14	\$10.88
October Soybean Spot Cash Basis	(\$1.10)	(\$0.56)	(\$0.43)	(\$0.88)	(\$0.20)	(\$0.46)
Soybean Harvest FC\$: Fall ²⁰²⁴	\$10.28	\$10.68	\$10.63	\$10.43	\$10.89	\$10.73
2024 New Crop Harvest Forward Contract	(\$1.02)	(\$0.62)	(\$0.67)	(\$0.87)	(\$0.41)	(\$0.57)
"Spot Cash" Soybean vs Corn \$ Ratio	2.53	2.76	2.80	2.53	2.74	2.77
"New Crop" Soybean vs Corn \$ Ratio	2.44	2.54	2.56	2.29	2.55	2.63

Soybean Futures-Net Position of Traders

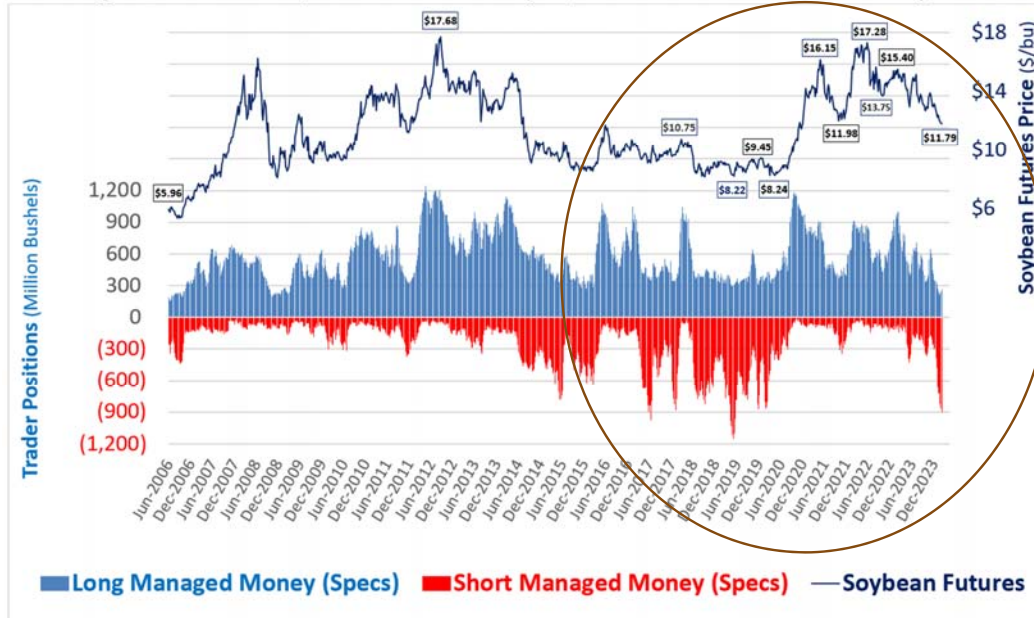
June 2006 through February 20, 2024 CFTC Data + February 20, 2024 MAR²⁰²⁴ Soybean Futures



Soybean Futures - Managed Money Traders Specs

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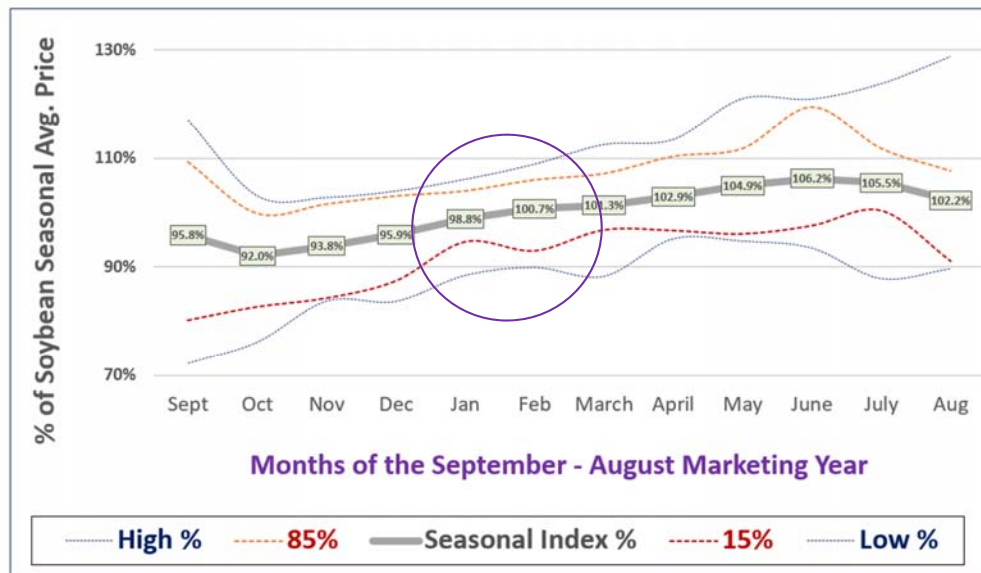
Long & Short Positions, June 2006 thru February 20, 2024 CFTC Data + 2/20/2024 MAR²⁰²⁴ Soybeans



Kansas Soybean Seasonal Price Index

40

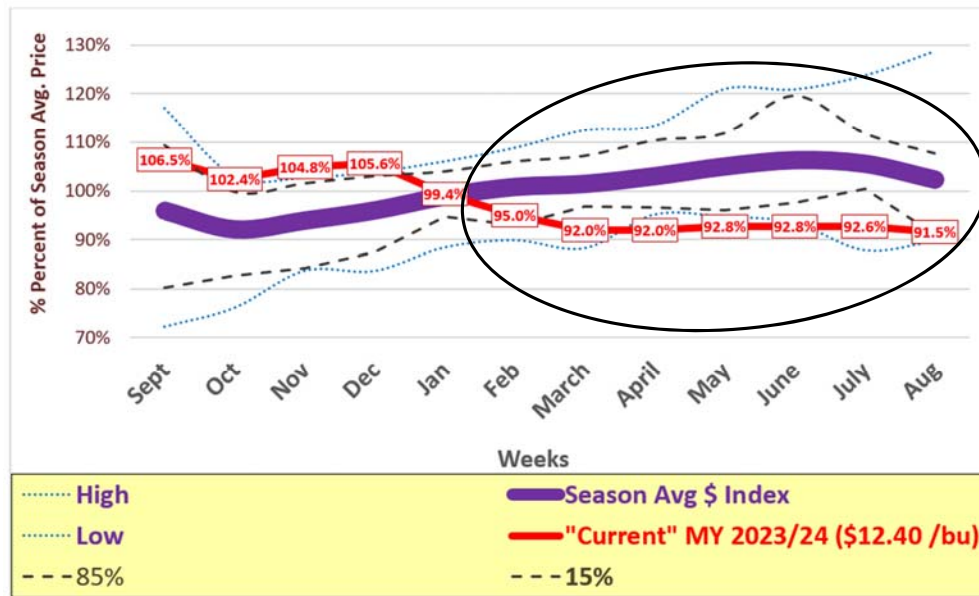
(MY 1999/00 – MY 2022/23) – Source: KSU Seasonal Grain Price Indices



U.S. & Kansas Soybean Seasonal Prices

41

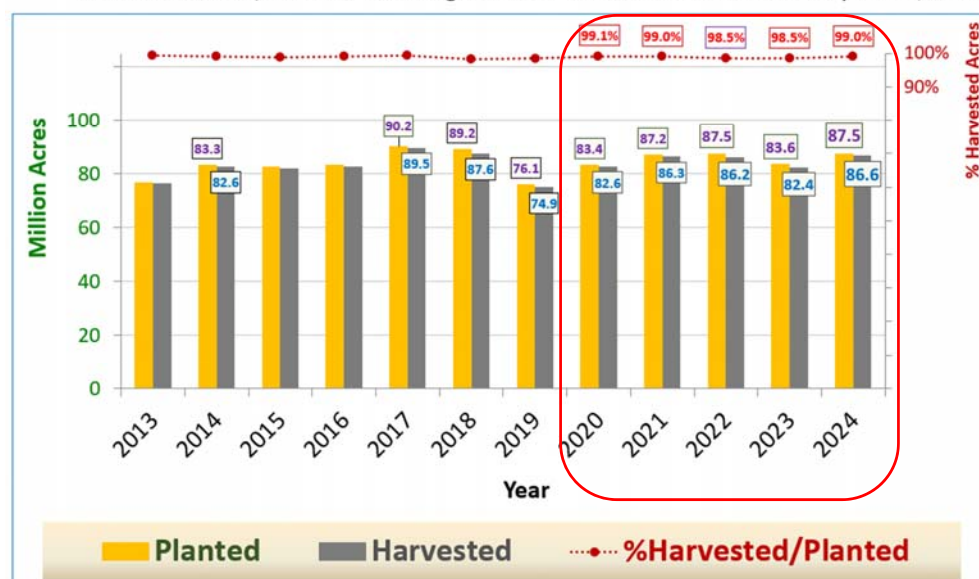
MY 1999/00 – 2022/23 Last 24 Years & "Current" MY 2023/24, on 2/23/2024



U.S. Soybean Acres for 2013-2024

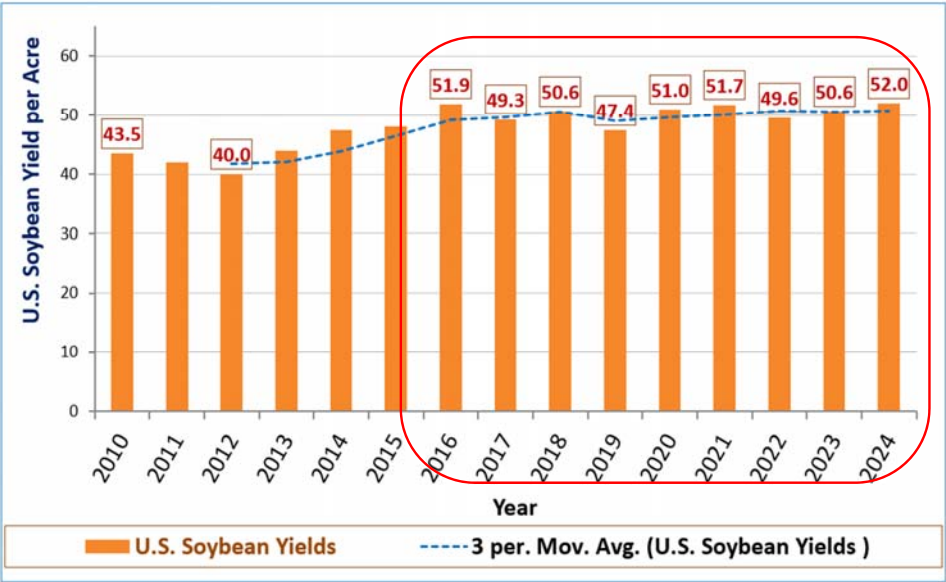
42

Years 2013-2024, as of the USDA Agricultural Outlook Forum on February 15-16, 2024

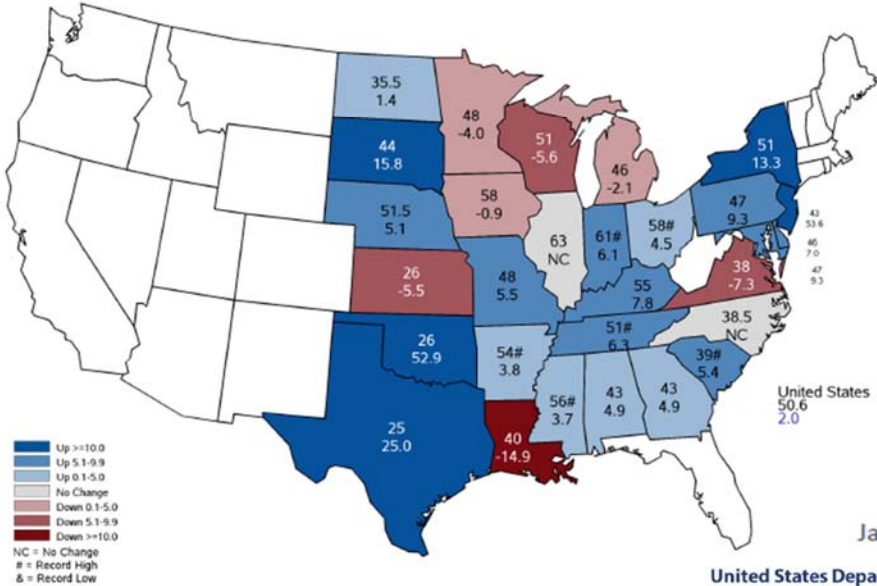


U.S. Soybean Yields: 2010-2024

Years 2013-2024, as of the USDA Agricultural Outlook Forum on February 15-16, 2024



2023 Soybean Yield Bushels and Percent Change from Previous Year



January 12, 2024

United States Department of Agriculture
National Agricultural Statistics Service

U.S. Soybean Use & Ending Stocks

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MY 2012/13 – “New” MY 2024/25 as of the USDA Agricultural Outlook Forum on February 15-16, 2024



U.S. Soybean Stocks & % Stocks-to-Use

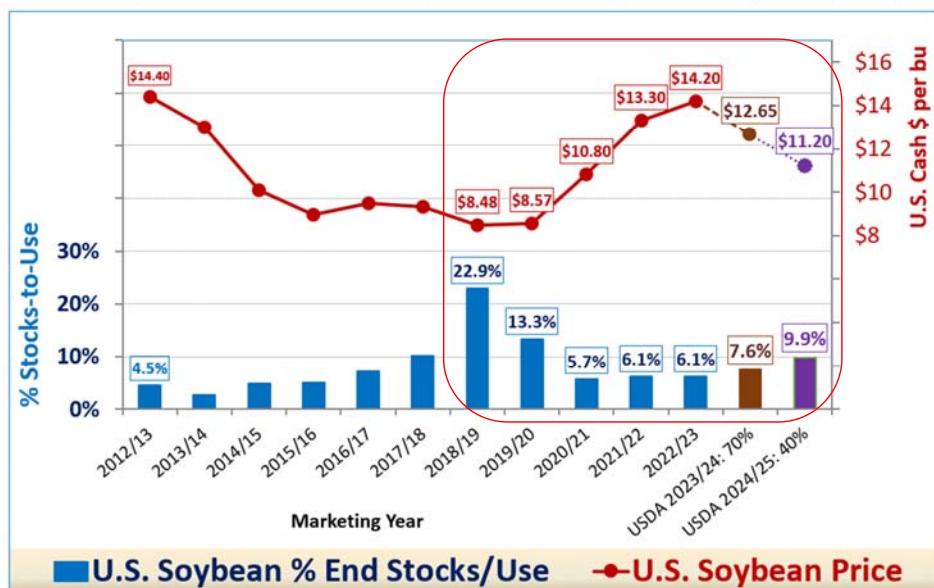
48

MY 2012/13 thru “New” MY 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024



U.S. Soybean % Stocks/Use vs Price\$

MY 2012/13 thru "New" MY 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024



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U.S. Soybean Projected S-D "Current" MY 2023/24 & "New Crop" MY 2024/25

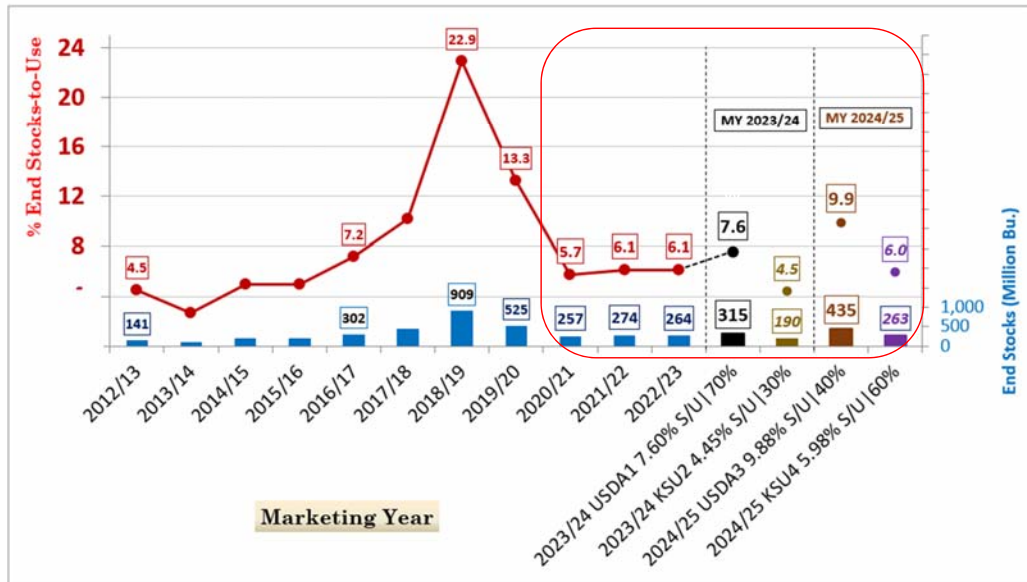
"Current" MY 2023/24 & "New" 2024/25 as of February 15-16, 2024 USDA Ag Outlook Forum + KSU Ests. 2/21/2024

Item	A. USDA Scenario #1 "Current" MY 2023/24 = 50.6 bu/ac 315 mb Ending Stocks	B. KSU Scenario #2 "Current" MY 2023/24 "Higher Crush, Exports" + 50 mb Ethanol & + 100 mb Exports	C. USDA Scenario #3 "New" MY 2024/25 = 52.0 bu/ac 435 mb Ending Stocks	D. KSU Scenario #4 "New" MY 2024/25 = 50.0 bu/ac 263 mb Ending Stocks
% Probability of Occurring (KSU)	70% ^{KSUest}	30% ^{KSUest}	40% ^{KSUest}	60% ^{KSUest}
Planted Area (million acres)	83.600	83.400	87.500	87.500
Harvested Area (million acres)	82.356	82.356	86.365	86.365
Yield / harvested acre (bu/ac)	50.6	50.6	52.0	50.0
Production (million bu.)	4,165	4,165	4,505	(-187 mb) 4,318
Total Supply (million bu.)	4,459	4,459	4,835	(-187 mb) 4,663
Domestic Crushings	2,300	(+50 mb) 2,350	2,400	2,400
Exports	1,720	(+75 mb) 1,795	1,875	1,875
Total Use	4,144	(+125 mb) 4,269	4,400	4,400
Ending Stocks	315	(-125 mb) 190	435	(-187 mb) 263
% Ending Stocks-to-Use	7.60%	4.45%	9.88%	5.98%
U.S. Avg. Farm Price (\$/bu)	\$12.65 ^{USDA} \$12.42 ^{KSU 2/22/2024}	\$14.50 ^{KSU}	\$11.20 ^{USDA} \$11.37 ^{KSU 2/23/2024}	\$13.50 ^{KSU}

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U.S. Soybean Stocks & % Stocks-to-Use

MY 2012/13 thru "New" MY 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024



U.S. Soybean % S/U vs U.S. Cash\$

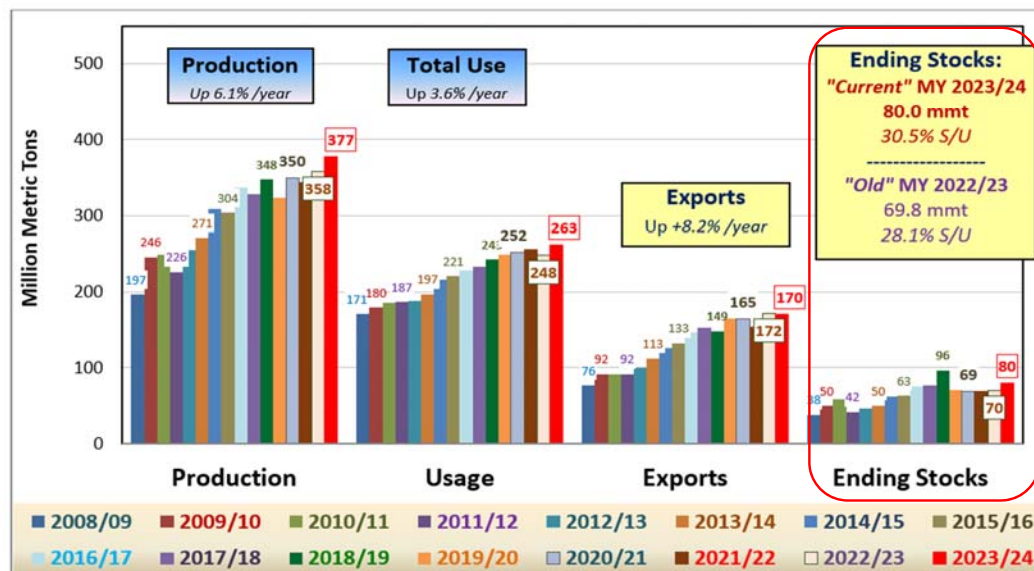
MY 2012/13 thru "New" MY 2024/25 as of the USDA Ag Outlook Forum, February 15-16, 2024



World *Less-China* Soybean Use & End Stocks

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MY 2008/09 - "Current" MY 2023/24 as of the 2/8/2024 WASDE Report



World vs "World *Less-China*" Soybean % S/U

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MY 2007/08 through "Current" MY 2023/24, as of the February 8, 2024 USDA WASDE report



Brazil Soybean Supply-Demand

MY 2007/08 – "Current" MY 2023/24 as of the February 8, 2024 USDA WASDE Report



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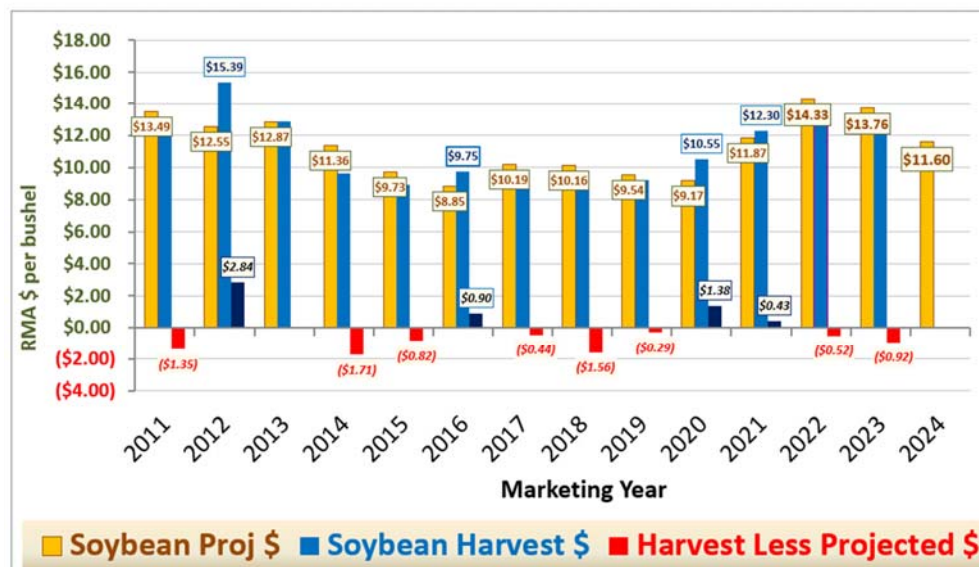
Argentina Soybean Supply-Demand

MY 2007/08 – "Current" MY 2023/24 as of the February 8, 2024 USDA WASDE Report



Soybean Projected & Harvest \$'s RMA

Kansas \$'s, Years 2011-2024 As of 2/23/2024 (Price increases in 4 of 13 years)



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Wheat Markets

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ELEC. HRW WHEAT (@KW2024H)

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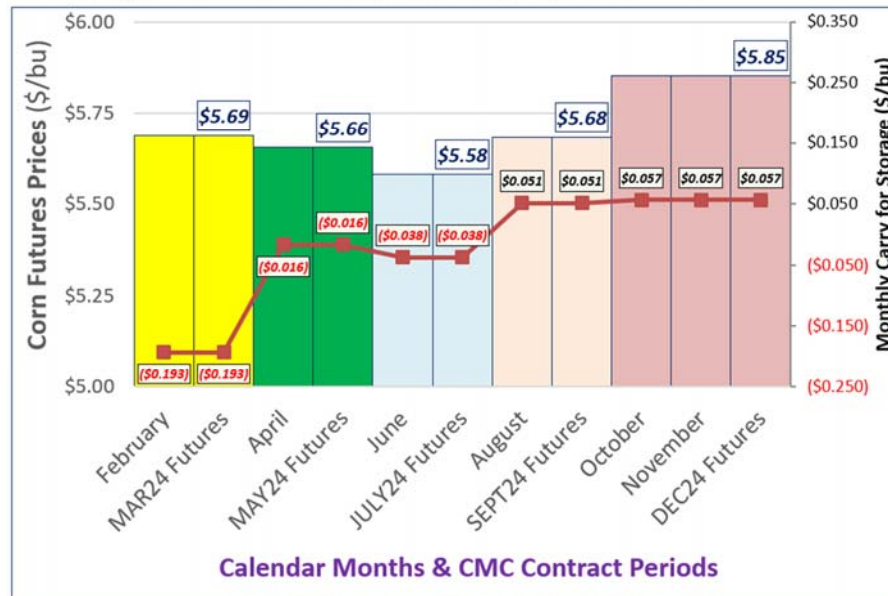
58



CME HRW Wheat Futures *Lead & Deferred Contracts*

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Closing Prices as of Friday, February 23, 2024



Monthly Commodity Futures Price Chart Wheat (Kansas) (Electronic) (KCBT)

TFC Commodity Charts

60

KE - Wheat (Kansas) (Electronic) - Monthly Chart

Change: -50.500

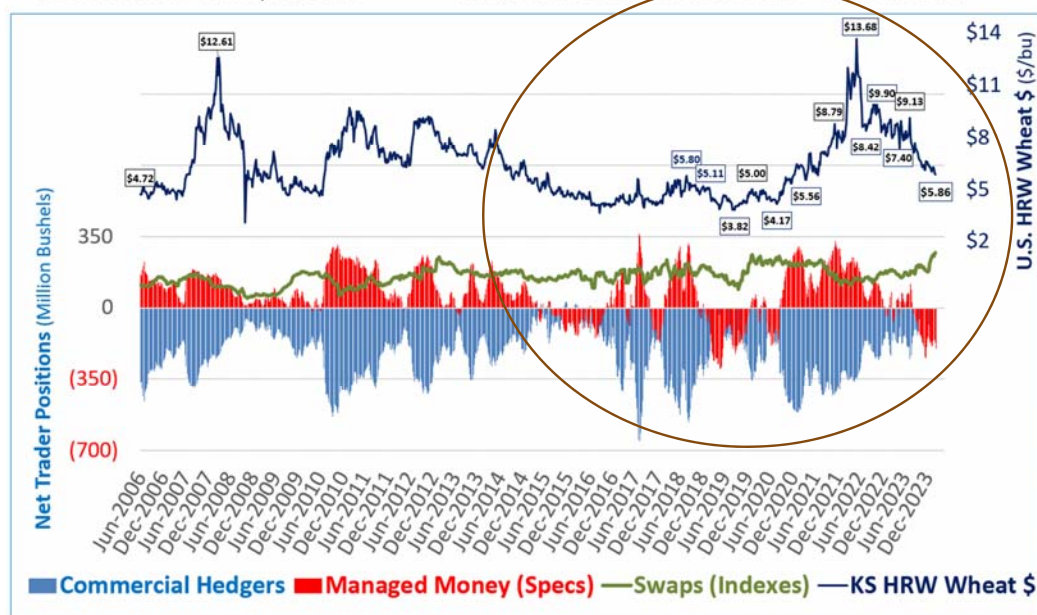
02/26/2024 O: 621.750 H: 634.500 L: 556.750 C: 571.250 Vol: 74393 OI: 24805



Kansas Cash & Futures Prices							
Date							
2/26/2024 Opening							
Grain Futures Contracts		Closing \$					
MAR 2024 KC HRW Wheat (2023/24 Lead Contract)		\$5.7225					
SEPT 2024 KC HRW Wheat (2024 Harvest Forward Contract)		\$5.6875					
2/26/2024 Opening		Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
		Representing the highest bids available at each location					
Cash Market Spot & FC Bids	Colby ^{Area}	Salina ^{Area}	Topeka ^{Area}	Garden City ^{Area}	Hutchinson ^{Area}	Columbus ^{Area}	
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS	
KC HRW Wheat Harvest Spot Cash\$		\$4.96	\$5.51	\$5.46	\$5.16	\$5.55	\$5.25
HRW Wheat Pre-Harvest Spot Cash Basis		(\$0.76)	(\$0.21)	(\$0.26)	(\$0.56)	(\$0.17)	(\$0.47)
KC HRW Wheat FC\$ - Next Harvest ²⁰²⁴		\$4.98	\$5.22	\$5.27	\$5.08	\$5.35	\$5.06
HRW Wheat 2024 Harvest FC\$ Basis		(\$0.71)	(\$0.47)	(\$0.42)	(\$0.61)	(\$0.34)	(\$0.63)
"Spot Cash" HRW Wheat vs Corn \$ Ratio		1.22	1.41	1.40	1.25	1.37	1.34
"New Crop" HRW Wheat vs Corn \$ Ratio		1.18	1.24	1.27	1.11	1.25	1.24

CME KS HRW Wheat Net Position of Traders w. Futures \$'s

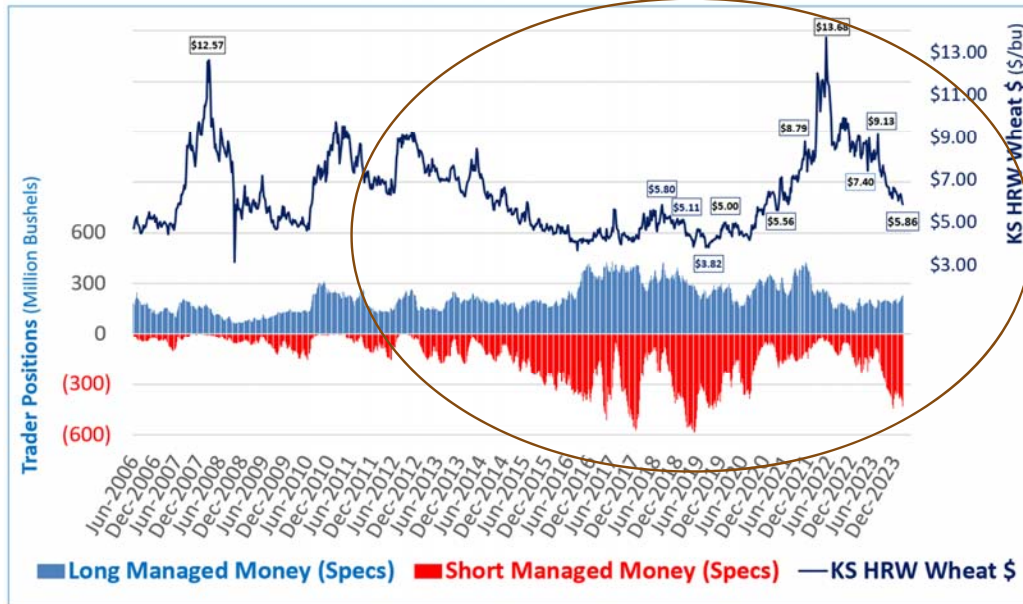
June 2006 thru February 20, 2024 (Weekly CFTC Data) with 2/20/2024 Futures Market Closes for MAR 2024 Kansas HRW Wheat



CME KS HRW Wheat Managed Money Traders Specs

63

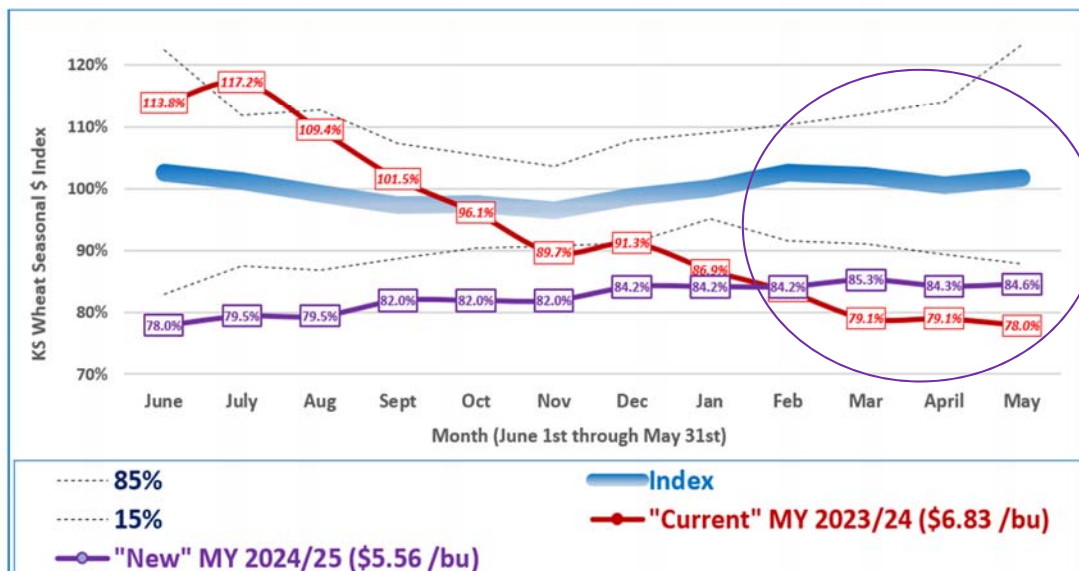
Long/Short Positions + Futures \$'s: June 2006 – 2/20/2024 CFTC Data with 2/30/2024 Futures for MAR 2024 KS HRW Wheat



Hard Red Winter ^{HRW} Wheat Seasonal \$'s

64

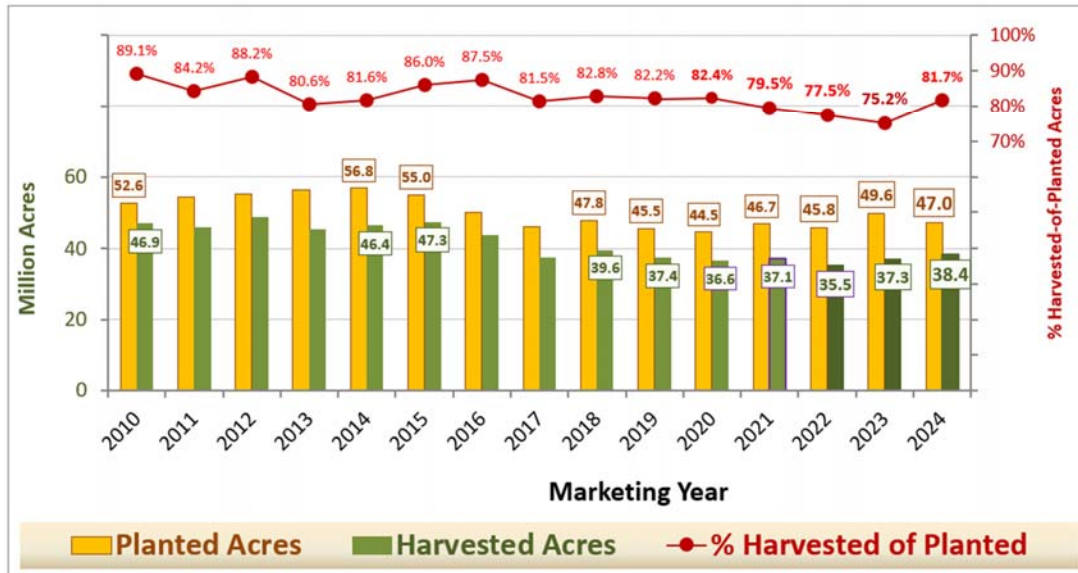
MY 1999/00 – 2022/23 + "Current" 2023/24 & "New" 2024/25 as of 2/23/2024



U.S. Wheat Planted & Harvested Acres

65

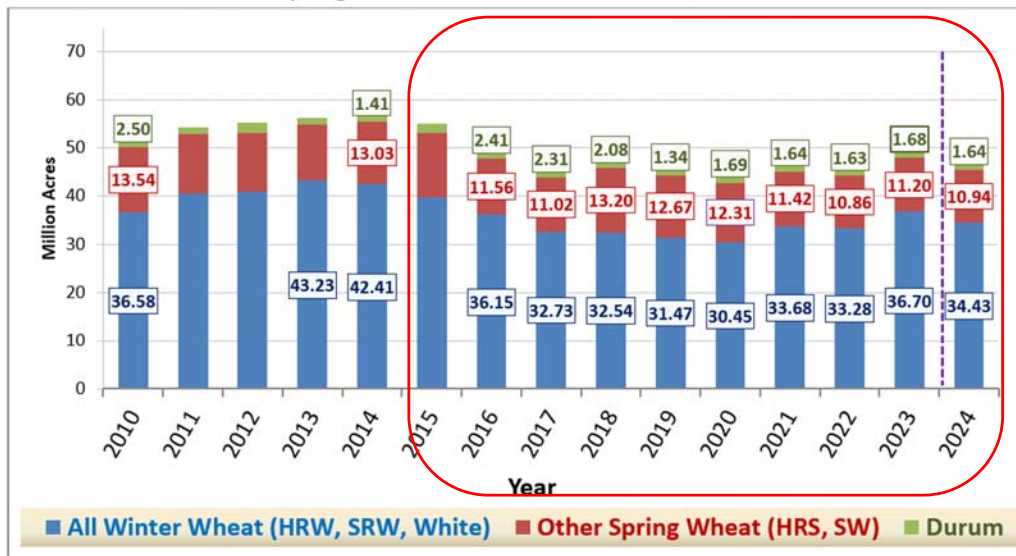
(MY 2010/11 – MY 2023/24) as of the February 15-16, 2024 USDA Agricultural Outlook Forum



U.S. Wheat Planted Acreage 2010-2024

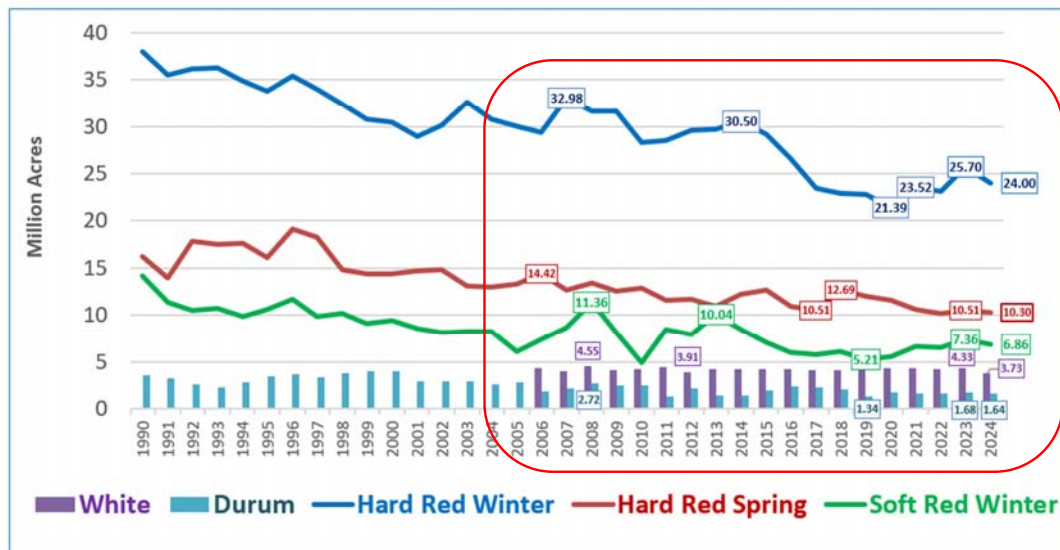
66

All Winter, Other Spring & Durum (since MY 2000/01) – 2024 Ag Outlook Forum, 2/15-16/2024



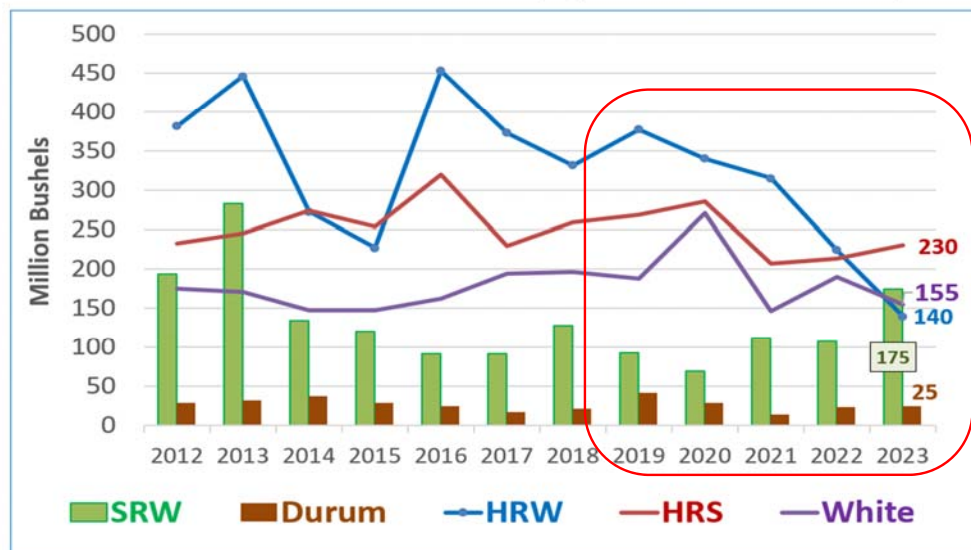
U.S. Wheat Planted Acres by Class

Since Year 1990 as of the USDA Agricultural Outlook Forum, February 15-16, 2024



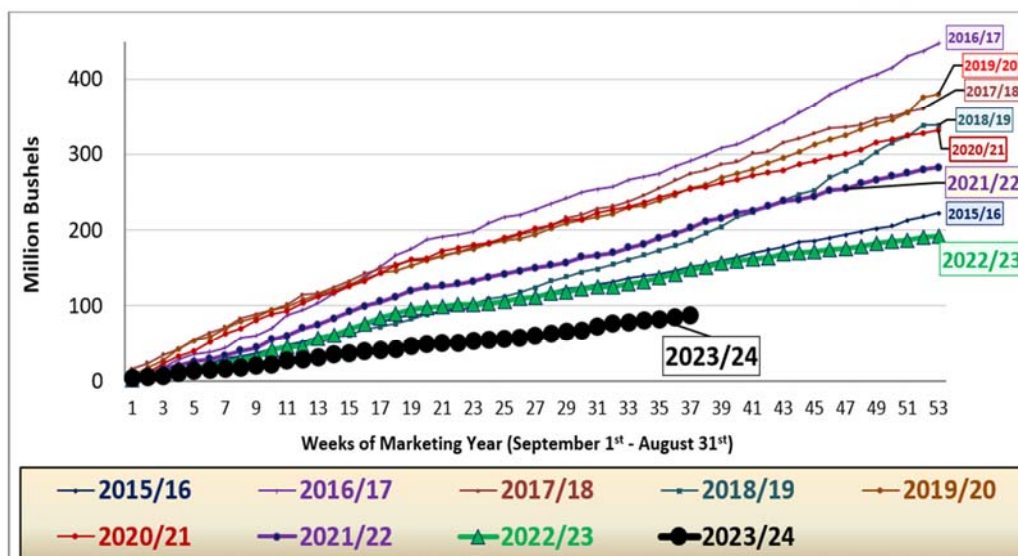
U.S. Wheat Exports by Class

Since Year 1990 as of the February 8, 2024 USDA WASDE Report



U.S. HRW Wheat Exports

MY 2015/16 - "Current" 2023/24 as of 2/15/2024 USDA FAS Weekly Exports



U.S. Wheat Use & Ending Stocks

MY 2012/13 - "Current" 2023/24 as of the January 12, 2024 USDA Reports



U.S. Wheat % Stocks/Use vs Cash \$'s

MY 2012/13 thru "New" MY 2024/25 – USDA Ag Outlook Forum, February 15-16, 2024



U.S. Wheat Market Outcomes for "New" MY 2024/25

USDA & KSU Projections based on the February 8, 2024 USDA Report + KSU Scenarios

Item	USDA Scenario #1 "New" 2024/25 2/8/2024 USDA	KSU Scenario #2 "New" 2024/25 KSU: 650 mb Exports 40.7% Stocks/Use	KSU Scenario #3 "New" 2024/25 KSU: 600 mb Exports 44.7% Stocks/Use	KSU Scenario #4 "New" 2024/25 KSU: 48.3 bu/ac Prodn: -1.96 Frst Est ⁵⁰
% Probability of Happening ^{KSU est.}	33% prob	25% prob.	25% prob	17% prob.
Planted Area (million acres)	47.000	47.000	47.000	47.000
Harvested Area (million acres)	38.384	38.384	38.384	38.384
Yield / harvested acre (bu/ac)	49.5	46.0	52.0	49.5
		Million		
Production	1,900	1,766	1,996	1,900
Total Supply (million bushels)	2,678	- 134 mb 2,544	+ 96 mb 2,774	2,678
Exports	775	775	775	- 50 mb 725
Total Use (million bushels)	1,909	1,909	1,909	- 50 mb 1,859
Ending Stocks (million bushels)	769	- 134 mb 635	+ 96 mb 865	+ 50 mb 819
% Ending Stocks-to-Use	40.28%	33.26%	45.31%	44.06%
U.S. Wheat Avg. Farm Price (\$/bushel)	\$6.00 Vs \$6.92 /bu 4/19/2024 KSU-HRW Futures	\$8.00	\$5.00	\$5.25

U.S. Wheat % S/U vs U.S. Cash \$'s

73

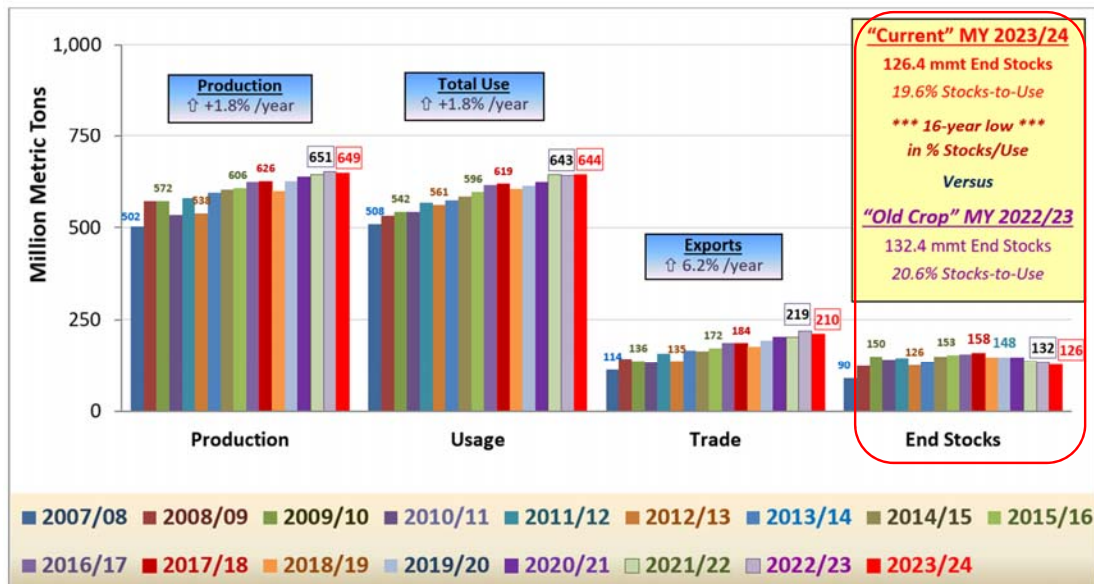
MY 2012/13 thru "New" MY 2024/25 – USDA Ag Outlook Forum, February 15-16, 2024



"World Less-China" Wheat Usage & Ending Stocks

74

MY 2007/08 - "Current" MY 2023/24 as of the February 8, 2024 USDA WASDE Report



World vs "World Less-China" Wheat Stocks & % S/U

MY 2007/08 - "Current" MY 2023/24 as of the February 8, 2024 USDA WASDE report



Russia Wheat Supply-Demand

MY 2013/14 - "Current" 2023/24 as of the February 8, 2024 USDA WASDE report



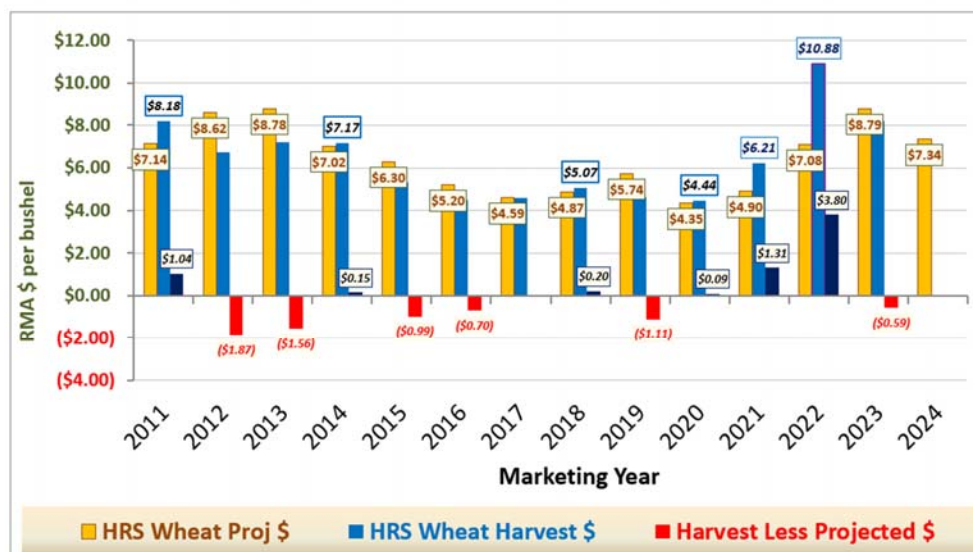
Ukraine Wheat Supply-Demand

MY 2013/14 - "Current" MY 2023/24 as of the February 8, 2024 USDA WASDE report



HRW Wheat Projected & Harvest \$'s ^{RMA}

Kansas \$'s, Years 2011-2024 (Price increases in 6 of 13 years)



Closing Perspectives

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Questions?

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