

Grain Market Outlook for 2024

Kansas Corn & Soybean School

Hesston, Kansas

January 17, 2024

DANIEL O'BRIEN

EXTENSION AGRICULTURAL ECONOMIST

KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



U.S. & Global Weather

2

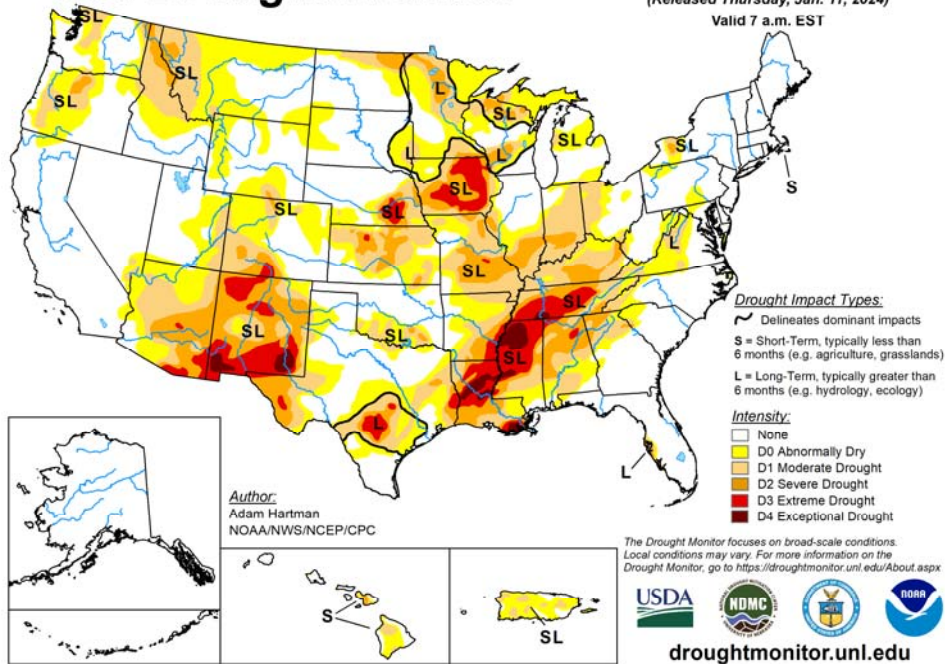


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U.S. Drought Monitor

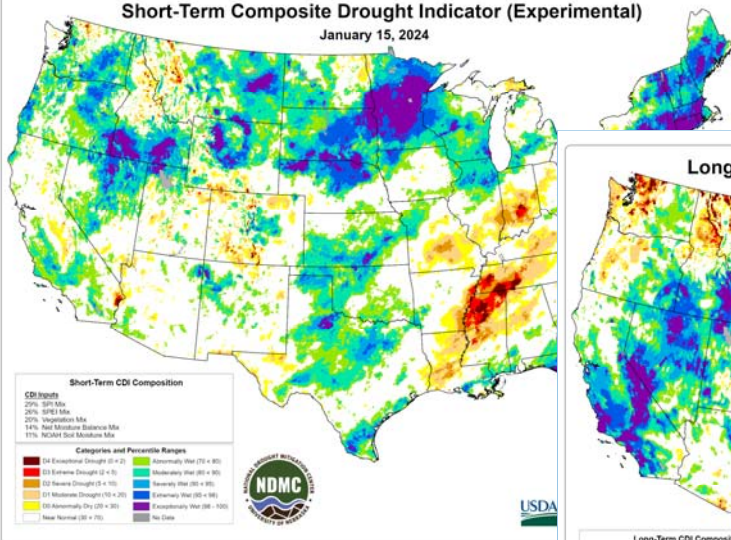
January 9, 2024
(Released Thursday, Jan. 11, 2024)
Valid 7 a.m. EST



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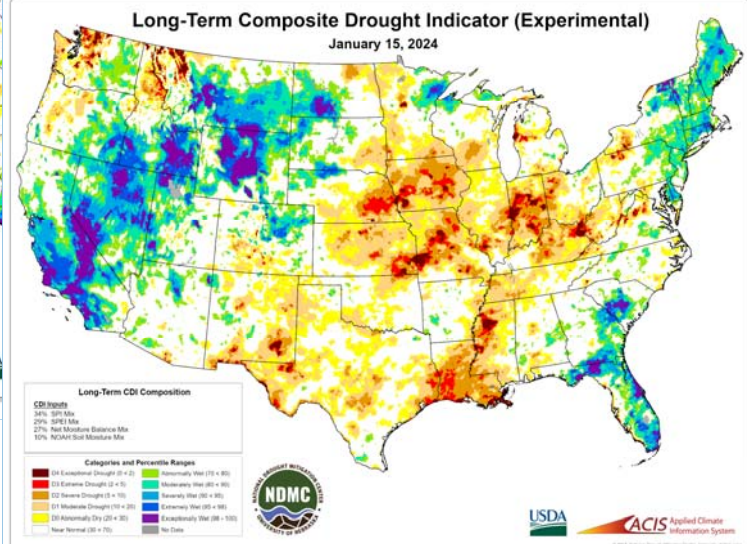
Short-Term Composite Drought Indicator (Experimental)

January 15, 2024

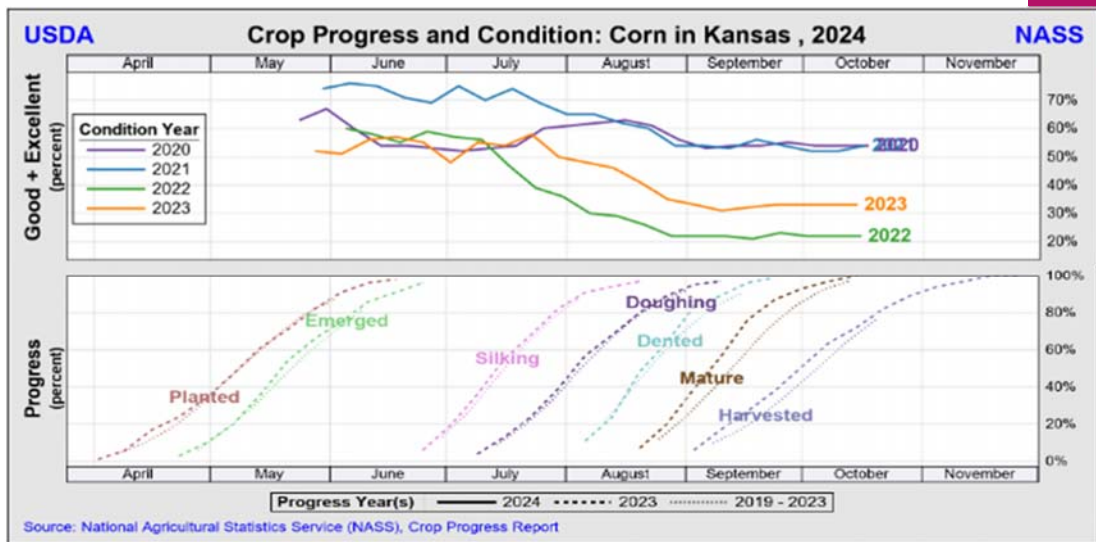
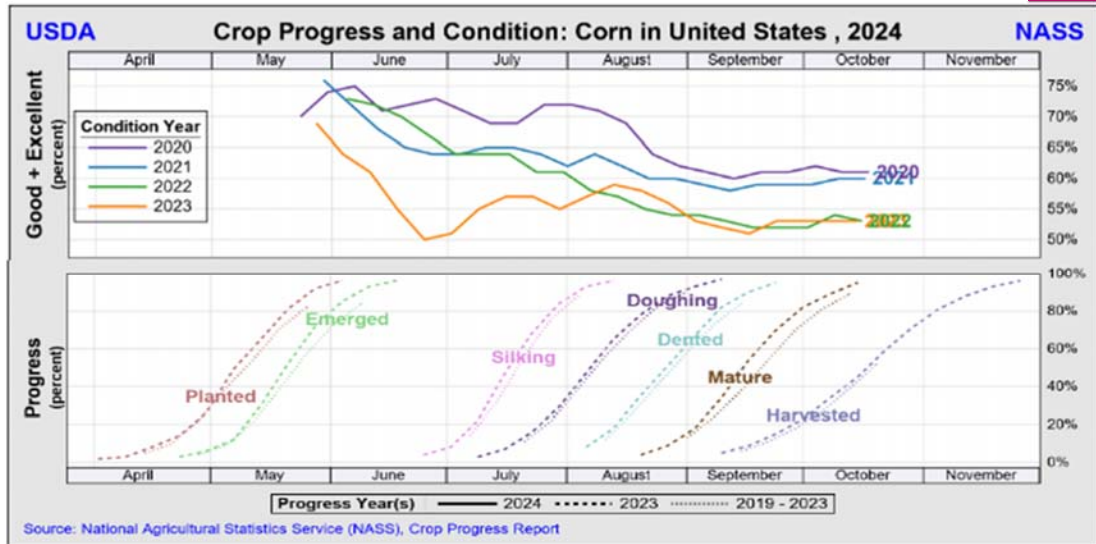


Long-Term Composite Drought Indicator (Experimental)

January 15, 2024



4

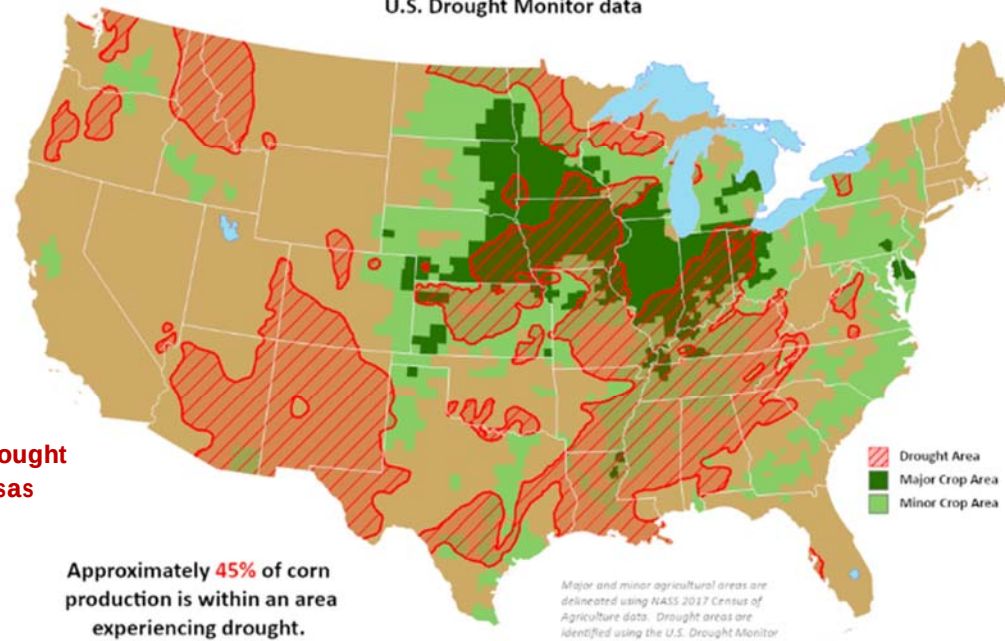


Corn Areas in Drought

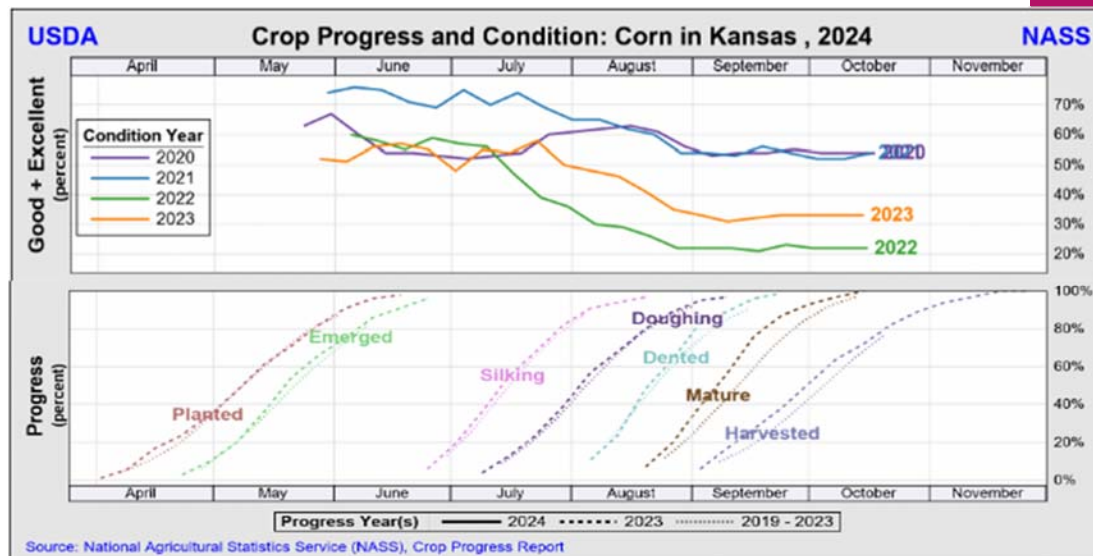
Reflects January 9, 2024
 U.S. Drought Monitor data

51% in drought
 in Kansas

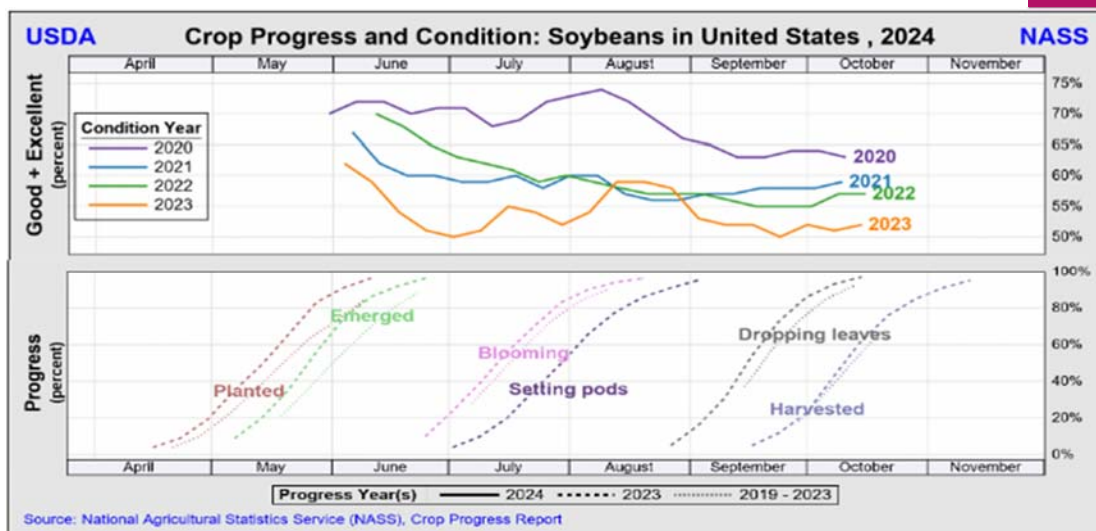
Approximately 45% of corn
 production is within an area
 experiencing drought.



7



8

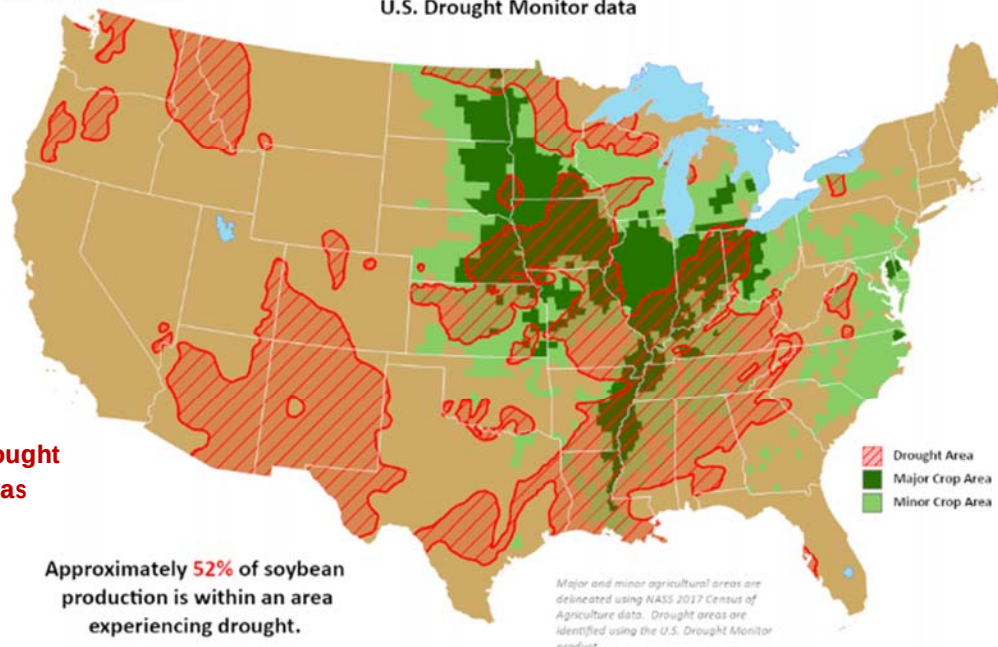


Soybean Areas in Drought

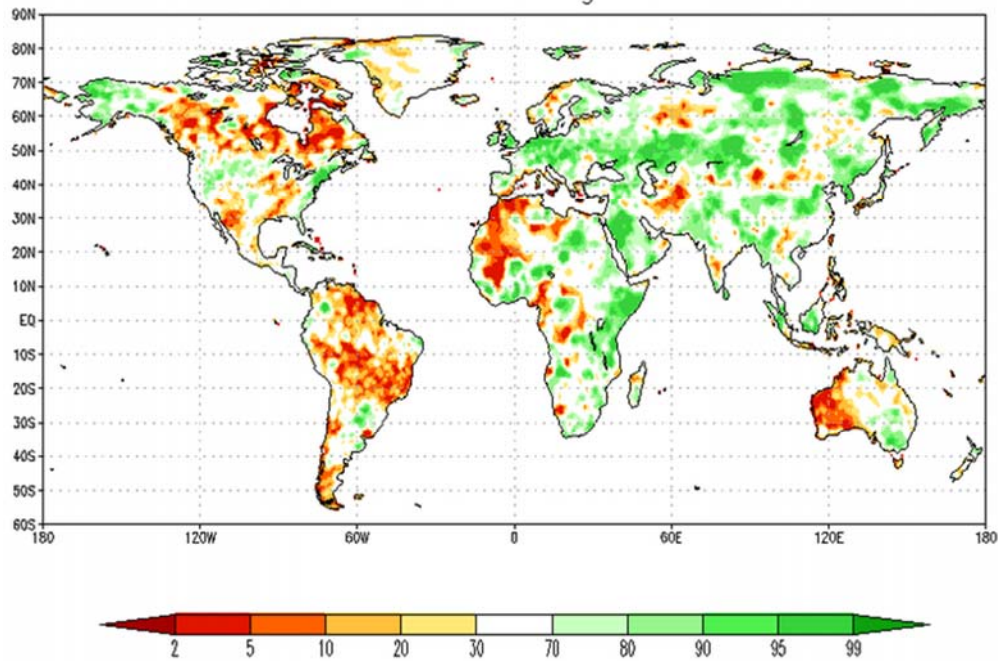
Reflects January 9, 2024
U.S. Drought Monitor data

60% in drought
in Kansas

Approximately 52% of soybean
production is within an area
experiencing drought.



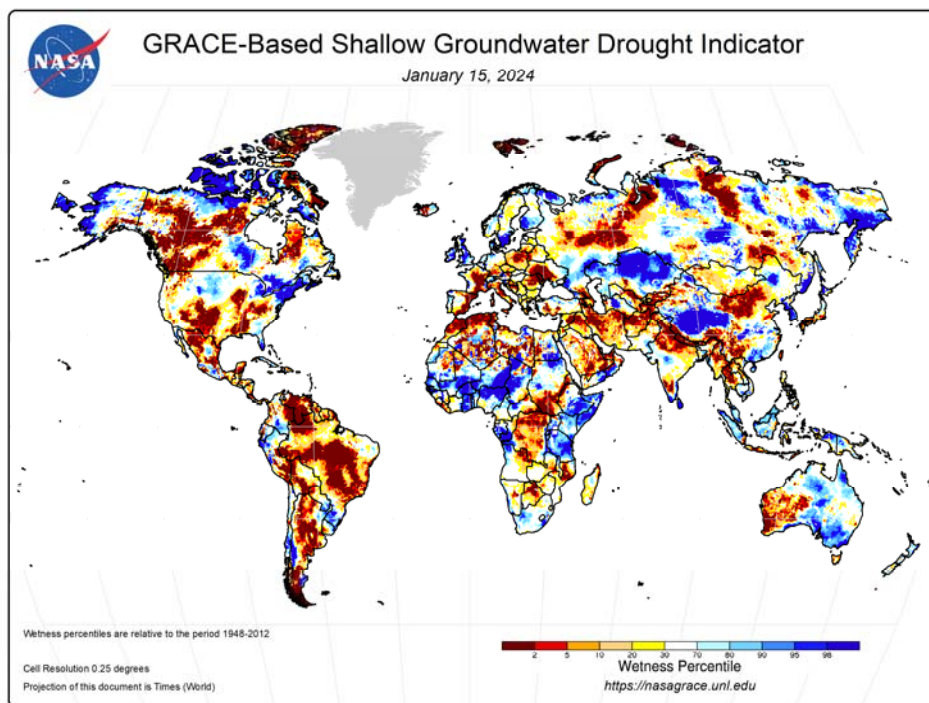
Calculated Soil Moisture Ranking Percentile 20240115



11

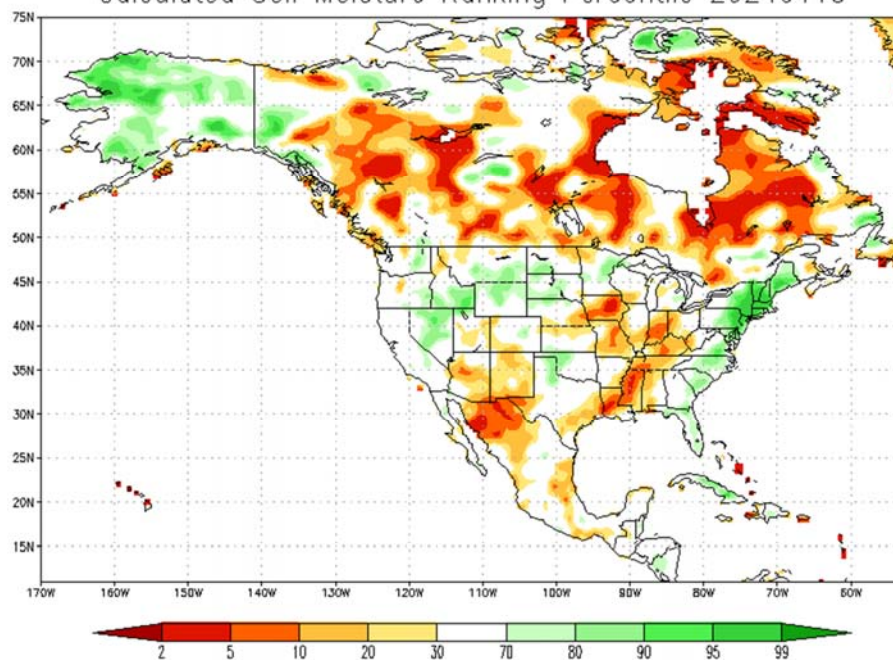
GRACE-Based Shallow Groundwater Drought Indicator

January 15, 2024



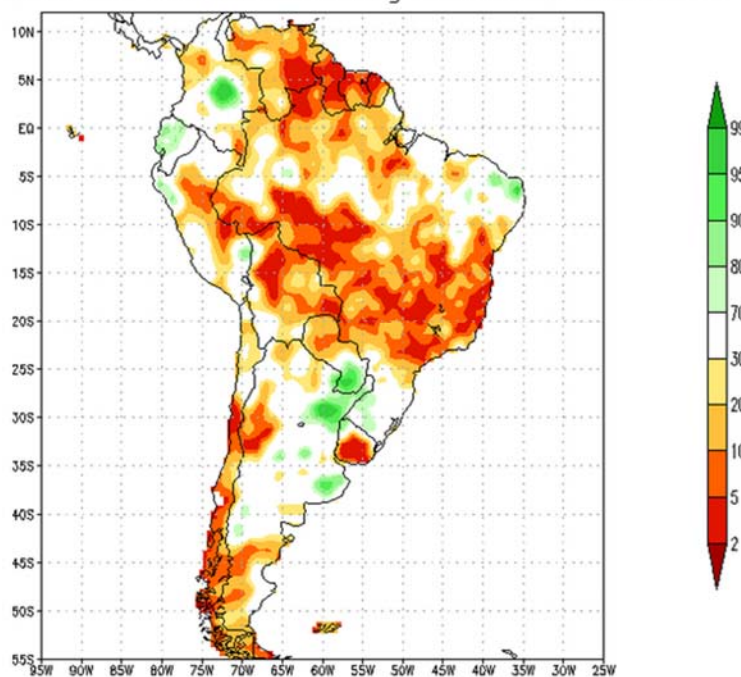
12

Calculated Soil Moisture Ranking Percentile 20240115



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Calculated Soil Moisture Ranking Percentile 20240115



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Corn Markets

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ELEC. CORN (@C2024H)

Symbol Search | Symbol Lookup

Historical Chart | Chart | Options | Futures Chain | Spread Matrix

Current Month: Mar 2024 prev next

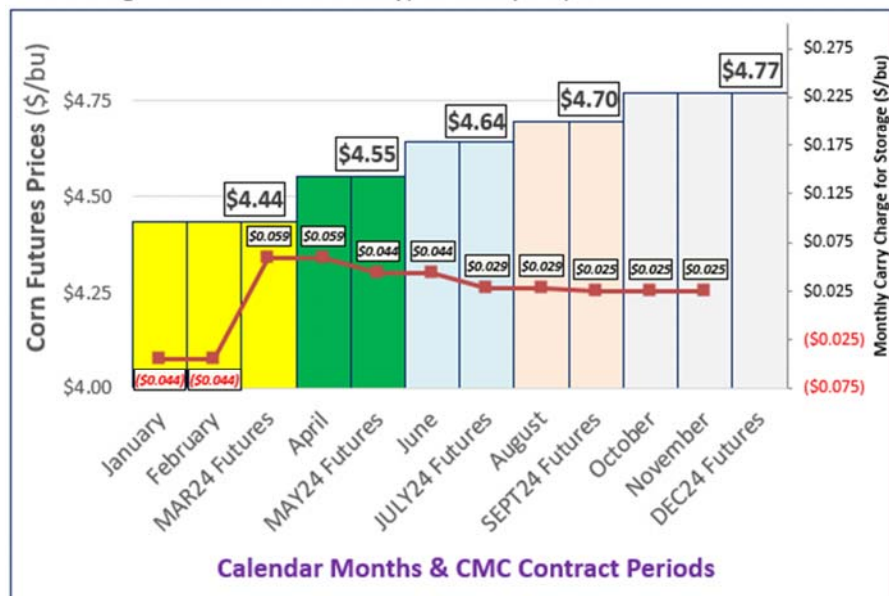


16

\$4.43 1/2 /bu

CME Corn Futures *Lead & Deferred Contracts*

Closing Prices as of Tuesday, January 16, 2024



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

TFC Commodity Charts

ZC - Corn (Globex) - Monthly Chart

Change: -29.250

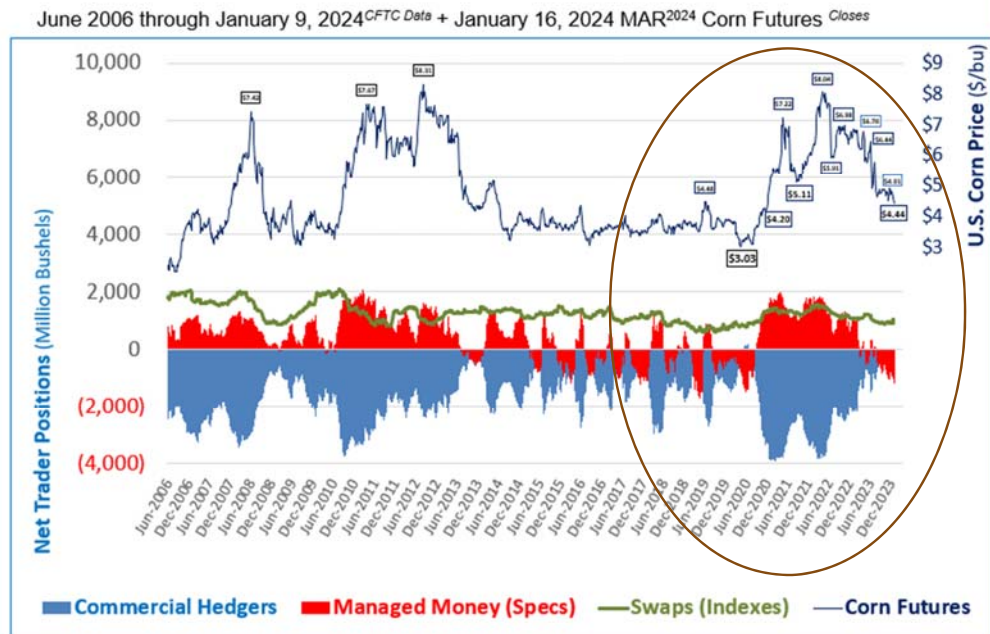
01/17/2024 O: 470.500 H: 470.750 L: 441.000 C: 441.250 Vol: 304144 OI: 1405831



18

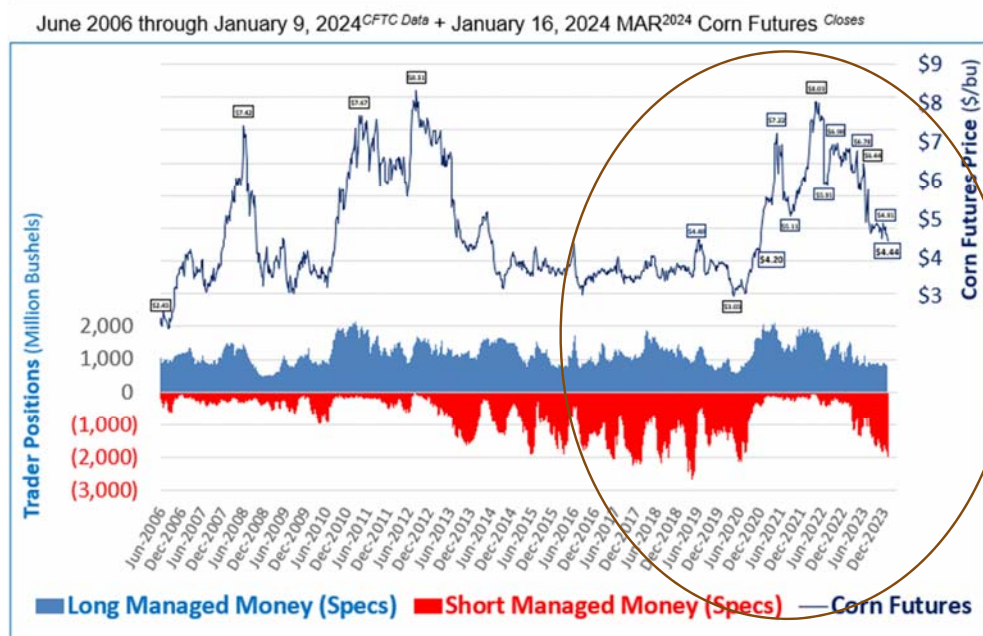
Corn Futures-Net Position of Traders

19



Corn Futures-Managed Money Traders (Specs): Long & Short Positions

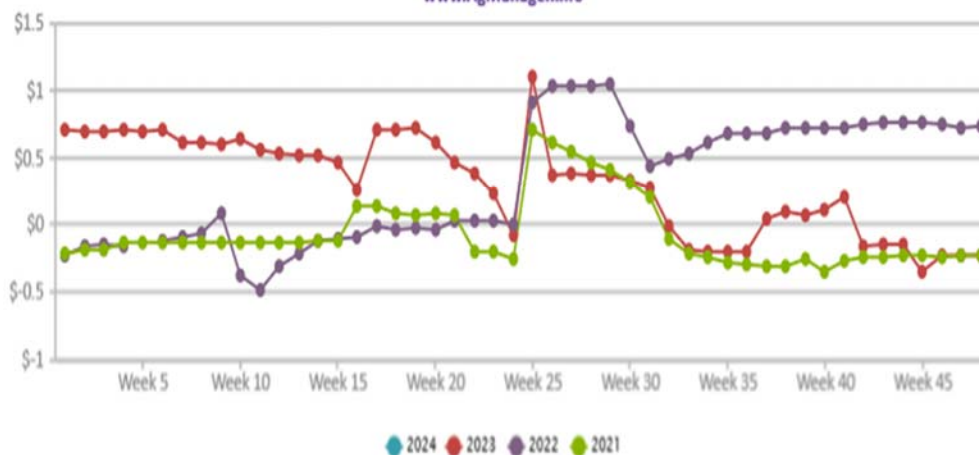
20



Kansas Cash & Futures Prices						
Date						
1/16/2024 Closes						
Grain Futures Contracts	Closing \$					
MAR 2024 Corn (2023/24 Lead Contract)	\$4.4350					
DEC 2024 Corn (2024 New Crop Harvest Forward Contract)	\$4.7725					
1/16/2024 Closes	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	<i>Representing the highest bids available at each location</i>					
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\$	\$4.39	\$4.39	\$4.33	\$4.63	\$4.48	\$4.29
<i>October Corn Harvest Cash Basis</i>	<i>(\$0.04)</i>	<i>(\$0.04)</i>	<i>(\$0.11)</i>	<i>\$0.20</i>	<i>\$0.05</i>	<i>(\$0.15)</i>
Corn Harvest FC\$: Fall²⁰²⁴	\$4.53	\$4.52	\$4.47	\$4.87	\$4.67	\$4.37
<i>2024 New Crop Harvest Forward Contract</i>	<i>(\$0.24)</i>	<i>(\$0.25)</i>	<i>(\$0.30)</i>	<i>\$0.10</i>	<i>(\$0.10)</i>	<i>(\$0.40)</i>

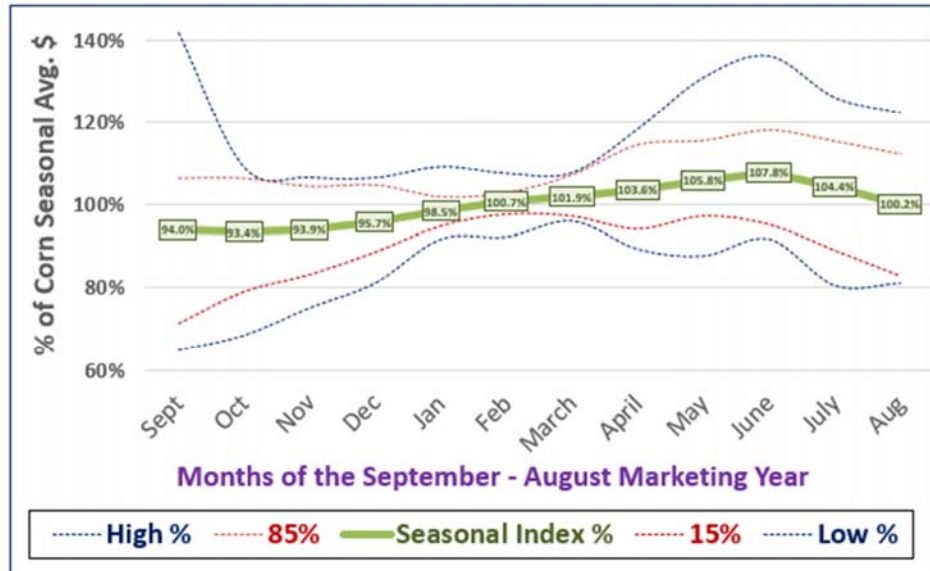
NORTH NEWTON, KS: Corn Basis - MID KANSAS COOP

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Corn Seasonal Price Index *Kansas*

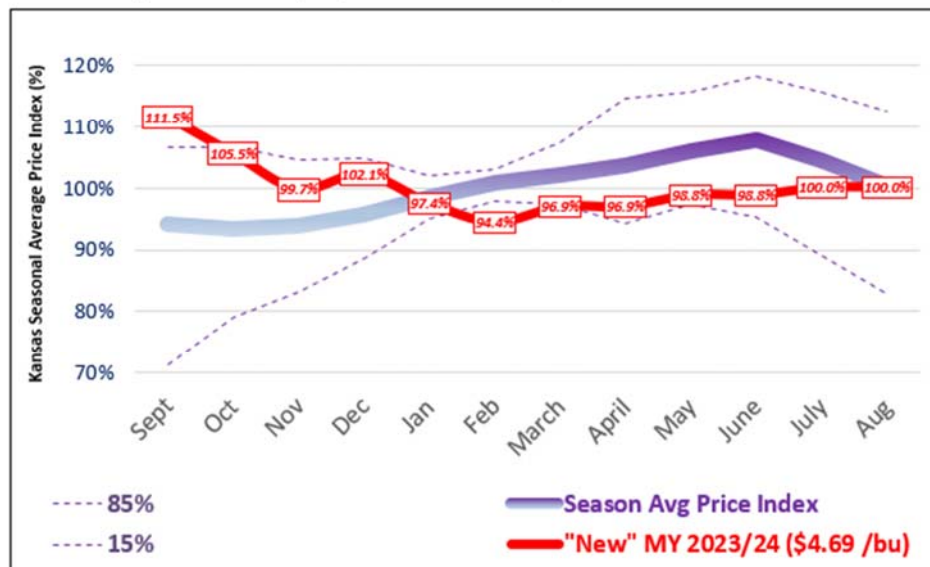
Last 24 Full Marketing Years: 1999/2000 - 2022/2023



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U.S & Kansas Corn Seasonal Prices

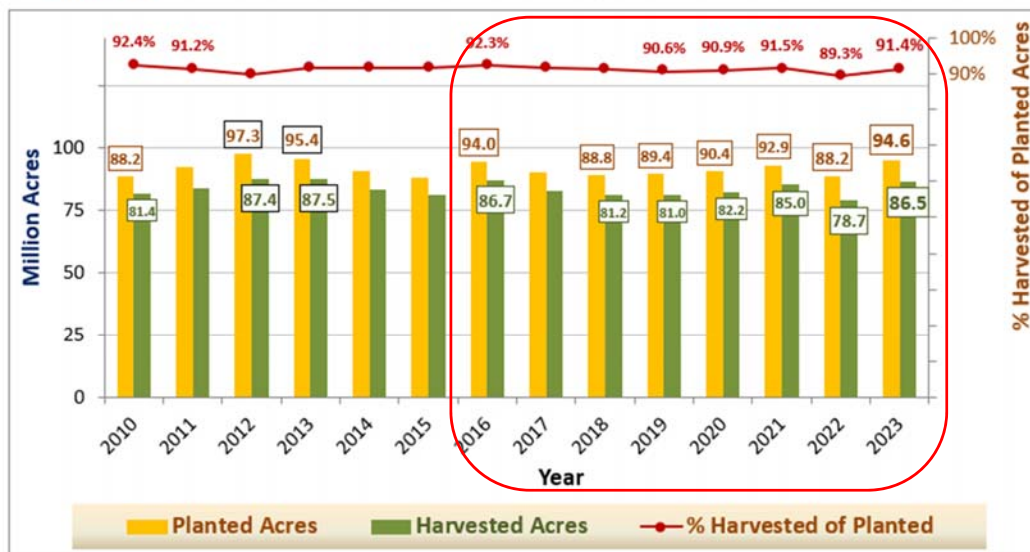
MY 1999/00 – MY 2022/23 plus "Current" 2023/24 as of 1/16/2024 – Futures Estimate



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U.S. Corn Acreage for 2010-2023

Sources: USDA Crop Production & WASDE Reports ^{1/12/2024}



U.S. Corn Yields for 2014-2023

Through USDA reports ^{on January 12, 2024} + 90% USDA Production Forecast Confidence Interval

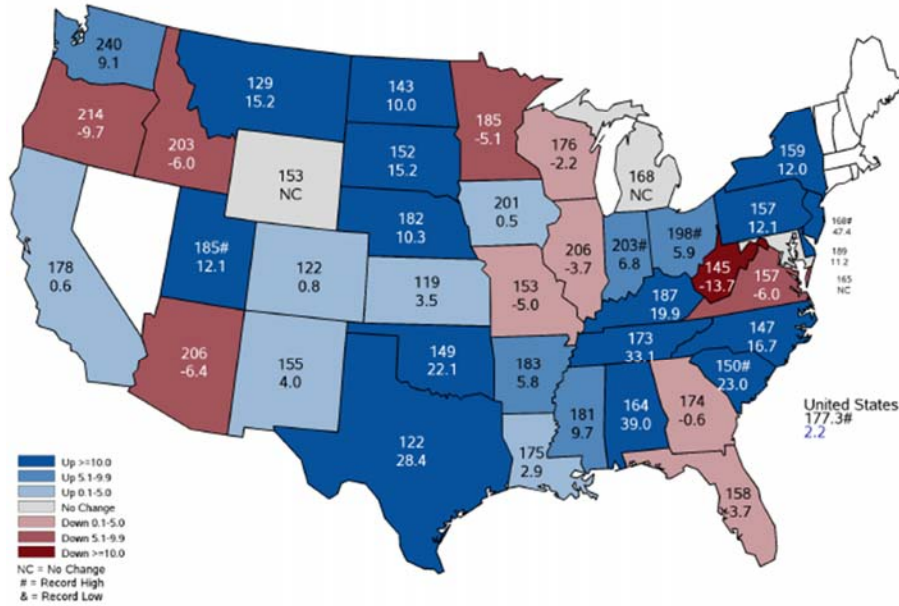
177.3 bu/ac
in 2023 ^{USDA}





2023 Corn Yield

Bushels and Percent Change from Previous Year

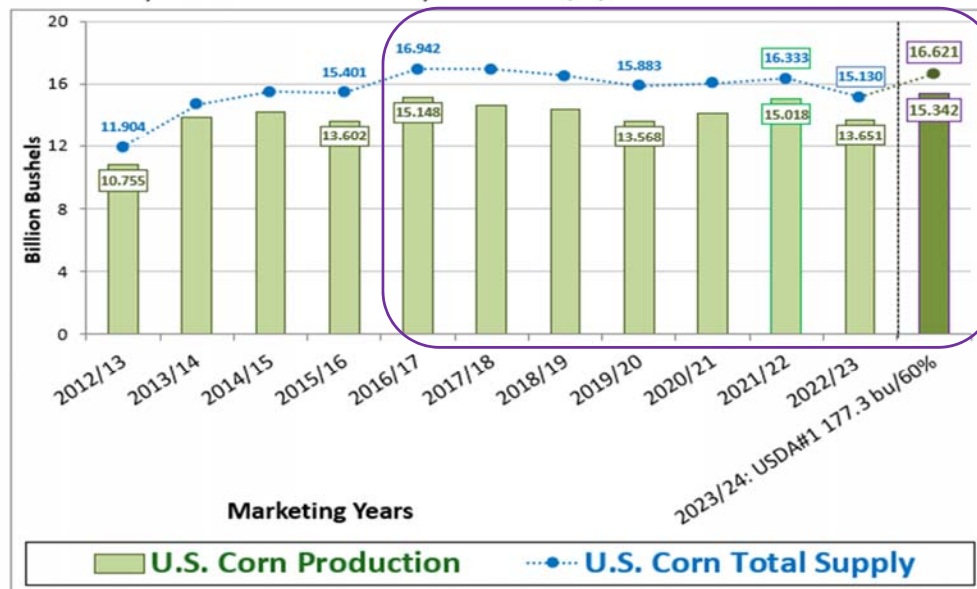


January 12, 2024

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U.S. Corn Production & Total Supplies

MY 2012/13 - "Current" MY 2023/24: as of the 1/12/2024 USDA #s w. KSU Estimates

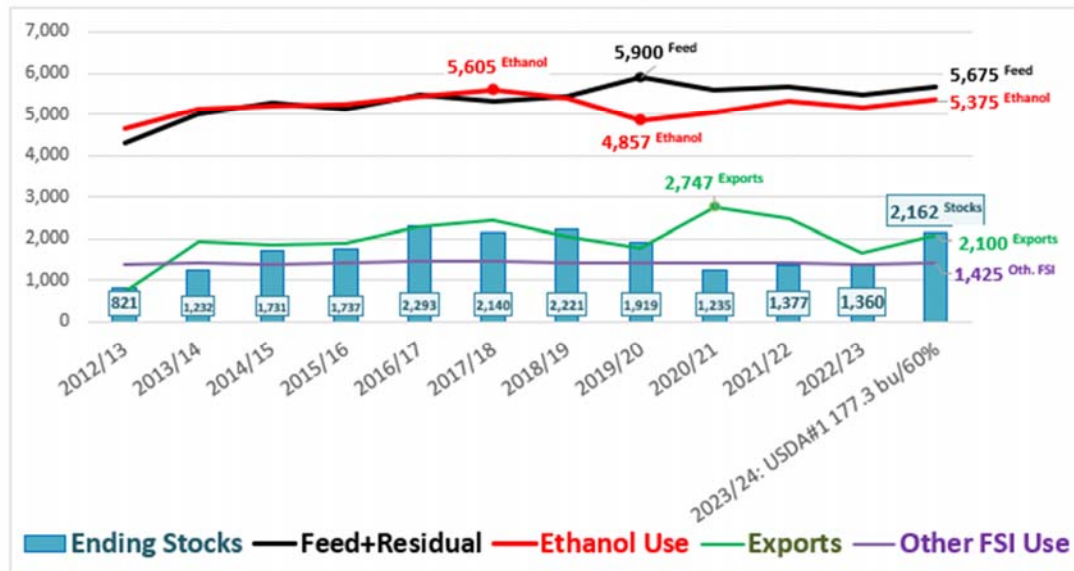


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U.S. Corn Use & Ending Stocks

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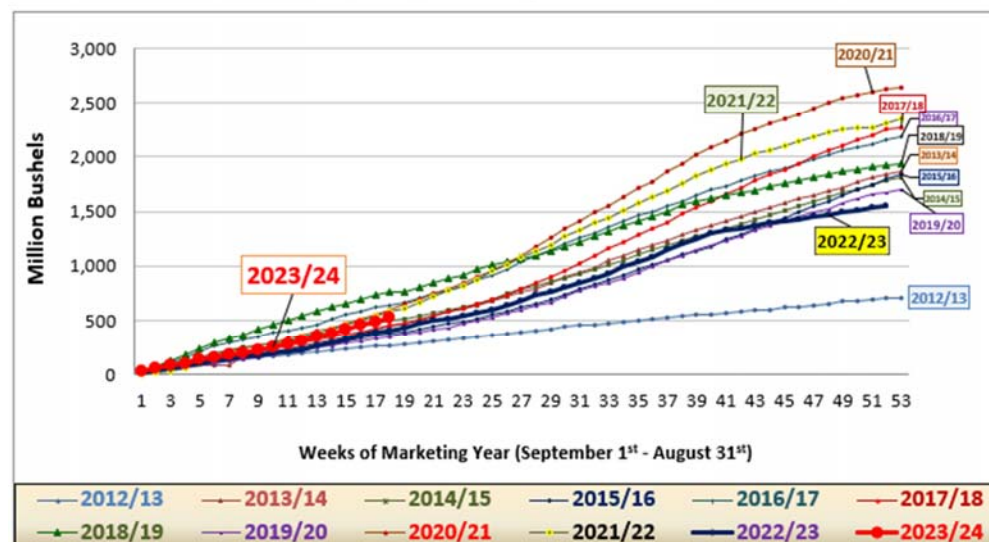
MY 2012/13 thru "New Crop" MY 2023/24 as of USDA Reports thru January 12, 2024



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

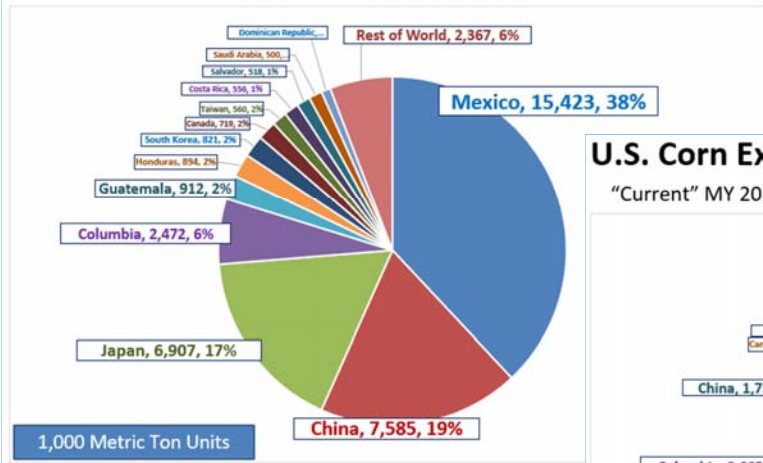
30

Based on USDA FAS Weekly Export reports through 1/4/2024



U.S. Corn Export Outstanding Sales + Shipments

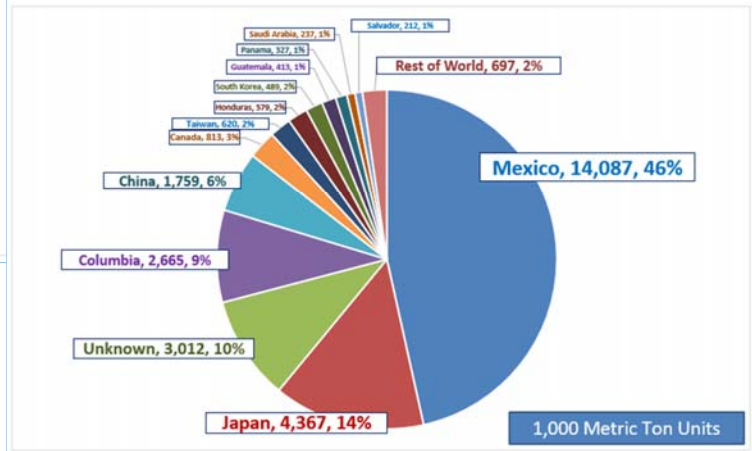
"Old Crop" MY 2022/23 as of the 8/31/2023 USDA U.S. Export Forward Purchases (1,000 mt)



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U.S. Corn Export Outstanding Sales + Shipments

"Current" MY 2023/24 as of the 1/4/2024 USDA U.S. Export Forward Purchases (1,000 mt)



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

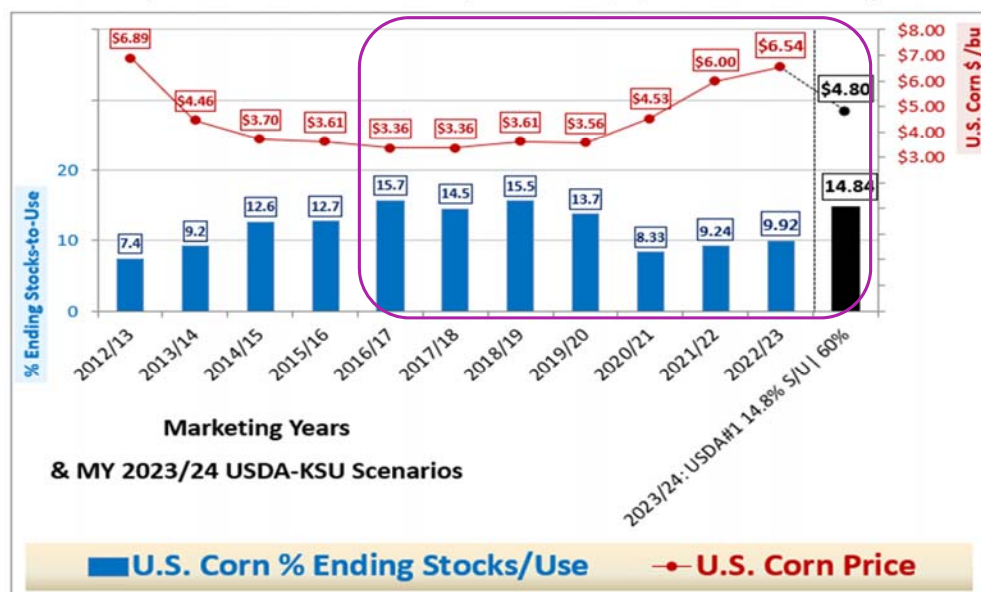
MY 2012/13 thru "Current" MY 2023/24 as of the 1/12/2024 USDA + KSU Estimates



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

MY 2012/13 thru "Current" MY 2023/24 as of the 1/12/2024 USDA WASDE Report



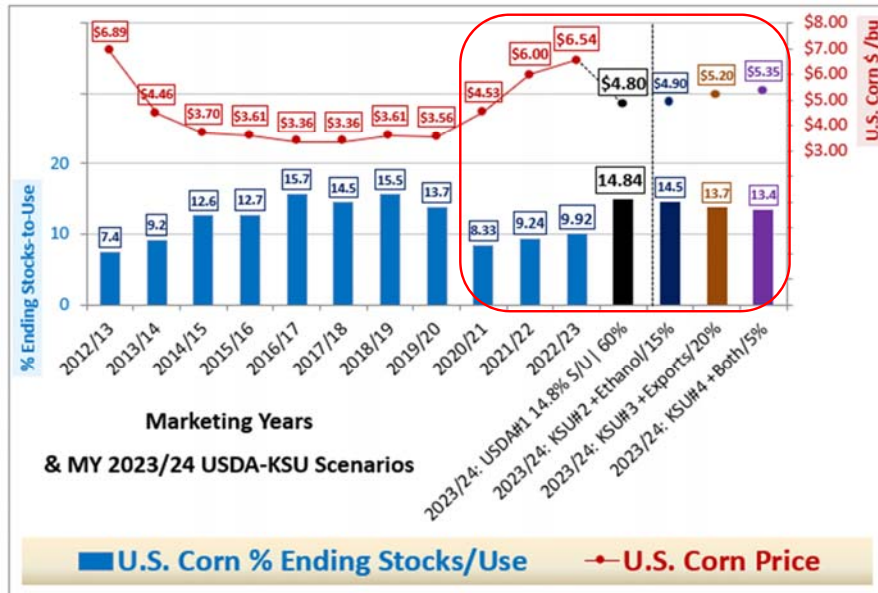
U.S. Corn Supply-Demand Balance Sheet

"New Crop" MY 2023/24 as of the January 12, 2024 USDA WASDE + KSU Estimates As of 1/16/2024

Item	A. USDA #1 "Current" MY 2023/24 = 177.3 bu/ac 15,342 mb Corn Crop	B. KSU #2 "New Crop" MY 2023/24 "Higher Ethanol" + 40 mb @ 5.415 bb Higher Ethanol Use	C. KSU #3 "New Crop" MY 2023/24 "Higher Exports" + 150 mb @ 2.250 bb Higher Exports	D. KSU #4 "New Crop" MY 2023/24 "Higher Ethanol, Exports" + 40 mb Ethanol & + 150 mb Exports
% Probability of Occurring (KSU)	60% ^{KSUest}	15% ^{KSUest}	20% ^{KSUest}	5% ^{KSUest}
Planted Area (million acres)	94,641	94,641	94,641	94,641
Harvested Area (million acres)	86,513	86,513	86,513	86,513
Yield / harvested acre (bu/ac)	177.3	177.3	177.3	177.3
Million Bushels				
Production (million bu.)	15,342	15,342	15,342	15,342
Total Supply (million bu.)	16,727	16,727	16,727	16,727
Ethanol for fuel Use (million bu.)	5,375	+ 40 mb 5,415	5,375	+ 40 mb 5,415
Exports (million bu.)	2,100	2,100	+ 150 mb 2,250	+ 150 mb 2,250
Feed & Residual Use (million bu.)	5,675	5,675	5,675	5,675
Total Use (million bu.)	14,565	+ 40 mb 14,605	+ 150 mb 14,715	+ 190 mb 14,755
Ending Stocks (million bu.)	2,162	- 40 mb 2,122	- 150 mb 2,012	- 190 mb 1,972
% Ending Stocks-to-Use	14.84%	14.53%	13.67%	13.37%
U.S. Corn Average Farm Price (\$/bushel)	\$4.75 ^{USDA} \$4.69 ^{KSU 1/16/2024}	\$4.90 ^{KSU} \$4.69 ^{KSU 1/16/2024}	\$5.20 ^{KSU} \$4.69 ^{KSU 1/16/2024}	\$5.35 ^{KSU} \$4.69 ^{KSU 1/16/2024}

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

MY 2012/13 thru "Current" MY 2023/24 as of the 1/12/2024 USDA WASDE + KSU Estimates



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Brazil Corn Supply-Demand

MY 2007/08 – "Current" MY 2023/24, as of the January 12, 2024 USDA WASDE report



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Argentina Corn Supply-Demand

MY 2007/08 – "Current" MY 2023/24, as of the January 12, 2024 USDA WASDE report



Ukraine Corn Supply-Demand

MY 2007/08 – "Current" 2023/24, as of the January 12, 2024 USDA WASDE Report



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European Union Corn Supply-Demand

MY 2007/08 – "Current" 2023/24, as of the January 12, 2024 USDA WASDE



China Corn Supply-Demand

MY 2007/08 – "Current" MY 2023/24, as of the January 12, 2024 USDA WASDE report

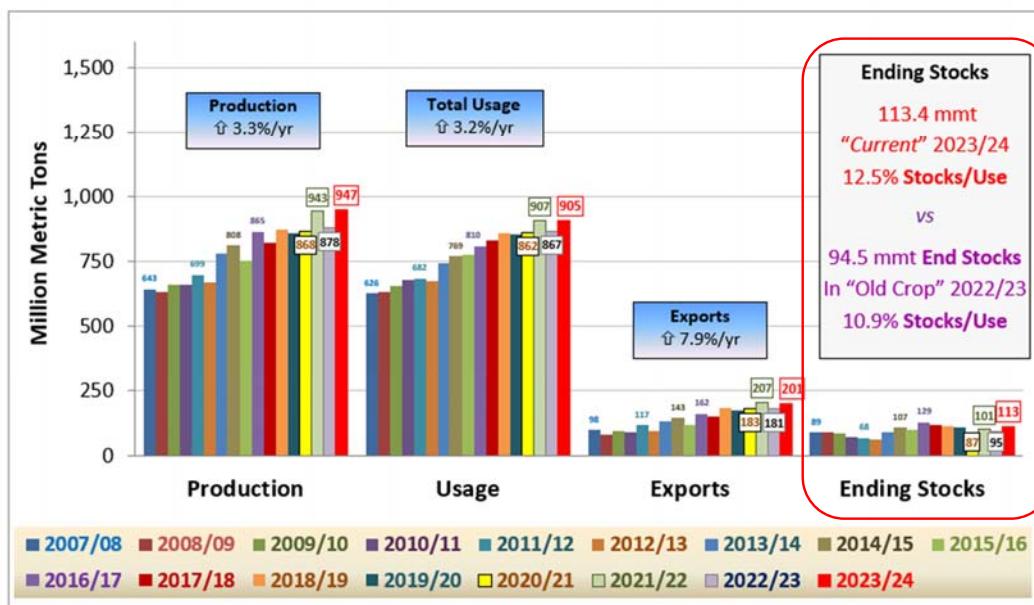


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"World Less-China" Corn Supply-Demand

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MY 2007/08 – "Current" MY 2023/24 as of the January 12, 2024 USDA WASDE Report



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

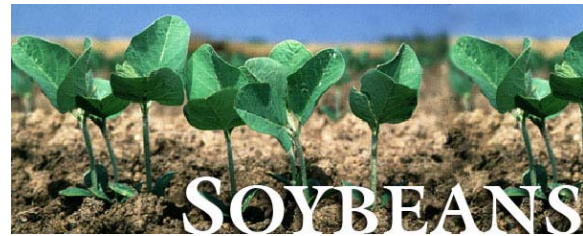
40

MY 2007/08 through "Current" MY 2023/24, as of the January 12, 2024 USDA WASDE report



Soybean Markets

41



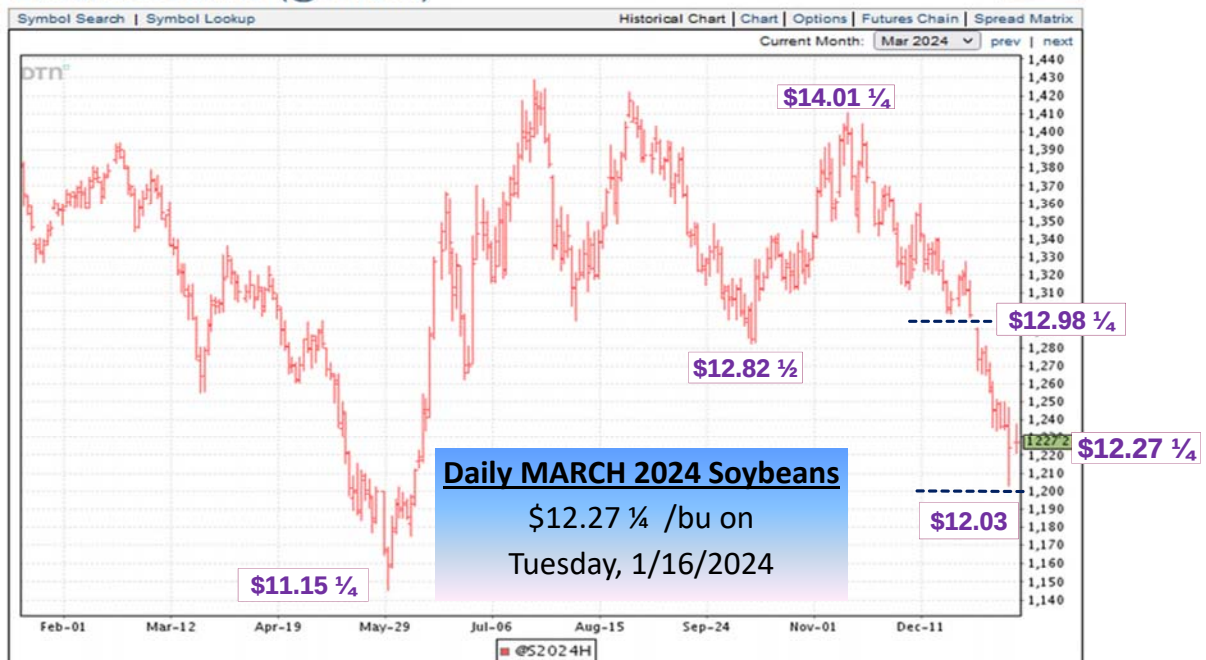
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ELEC. SOYBEANS (@S2024H)

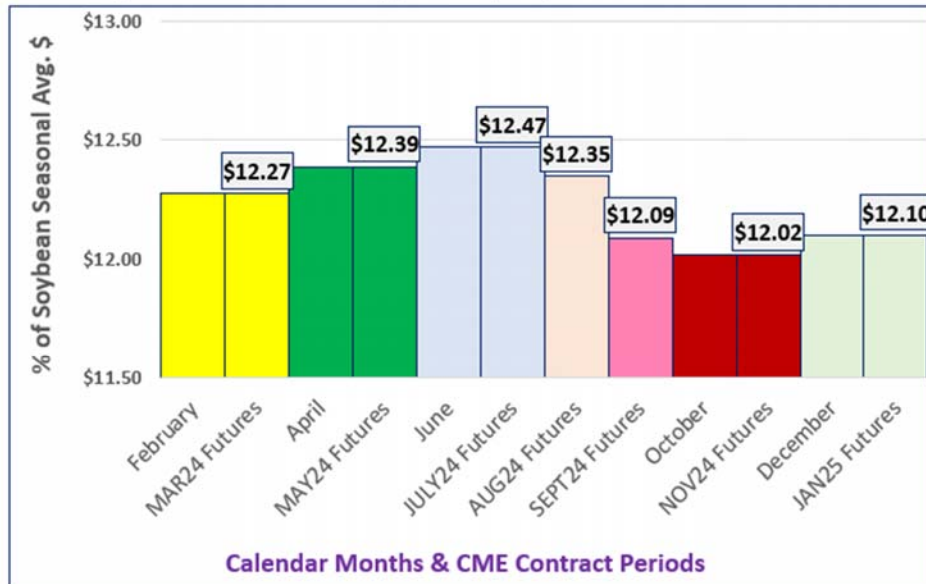
Print

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CME Soybean Futures *Lead & Deferred Contracts*

Closing Prices as of Tuesday, January 16, 2024



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

ZS - Soybeans (Globex) - Monthly Chart

Change: -75.500

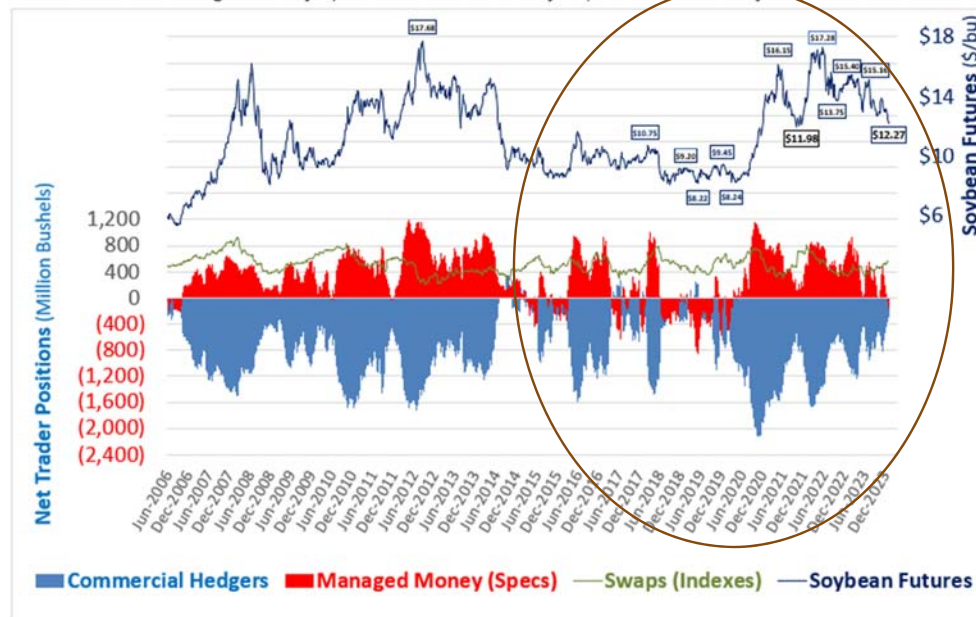
01/17/2024 O: 1290.500 H: 1290.750 L: 1203.000 C: 1215.000 Vol: 208652 OI: 657985



44

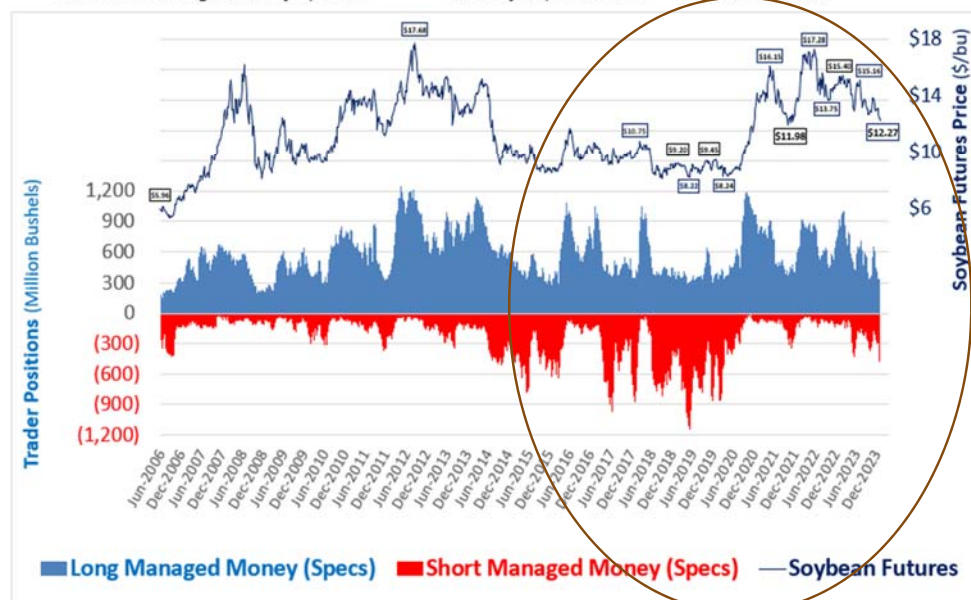
Soybean Futures-Net Position of Traders

June 2006 through January 9, 2024 CFTC Data + January 16, 2024 MAR²⁰²⁴ Soybean Futures



Soybean Futures-Managed Money Traders (Specs): Long & Short Positions

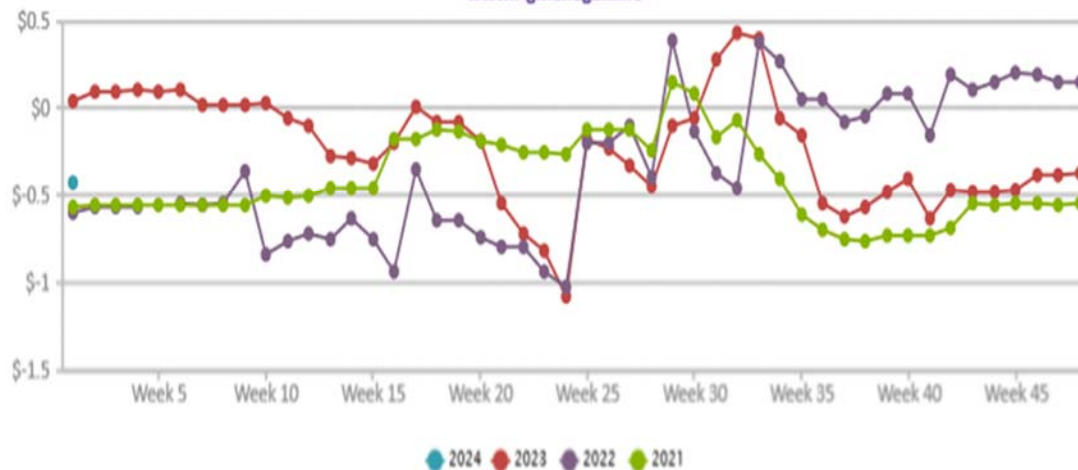
June 2006 through January 9, 2024 CFTC Data + January 16, 2024 MAR²⁰²⁴ Soybean Futures



Kansas Cash & Futures Prices						
Date						
1/16/2024 Closes						
Grain Futures Contracts		Closing \$				
MAR 2024 Soybeans (2023/24 Lead Contract)		\$12.2725				
NOV 2024 Soybeans (2024 New Crop Harvest Forward Contract))		\$12.0125				
1/16/2024 Closes		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\$	\$11.12	\$11.77	\$11.92	\$11.32	\$12.22	\$11.87
October Soybean Spot Cash Basis	(\$1.15)	(\$0.50)	(\$0.35)	(\$0.95)	(\$0.05)	(\$0.40)
Soybean Harvest FC\$: Fall 2024	\$11.01	\$11.36	\$11.36	\$11.16	\$11.51	\$11.45
2024 New Crop Harvest Forward Contract	(\$1.00)	(\$0.65)	(\$0.65)	(\$0.85)	(\$0.50)	(\$0.56)
"Spot Cash" Soybean vs Corn \$ Ratio	2.53	2.68	2.75	2.44	2.73	2.77
"New Crop" Soybean vs Corn \$ Ratio	2.43	2.51	2.54	2.29	2.46	2.62

NORTH NEWTON, KS: Soybeans Basis - MID KANSAS COOP

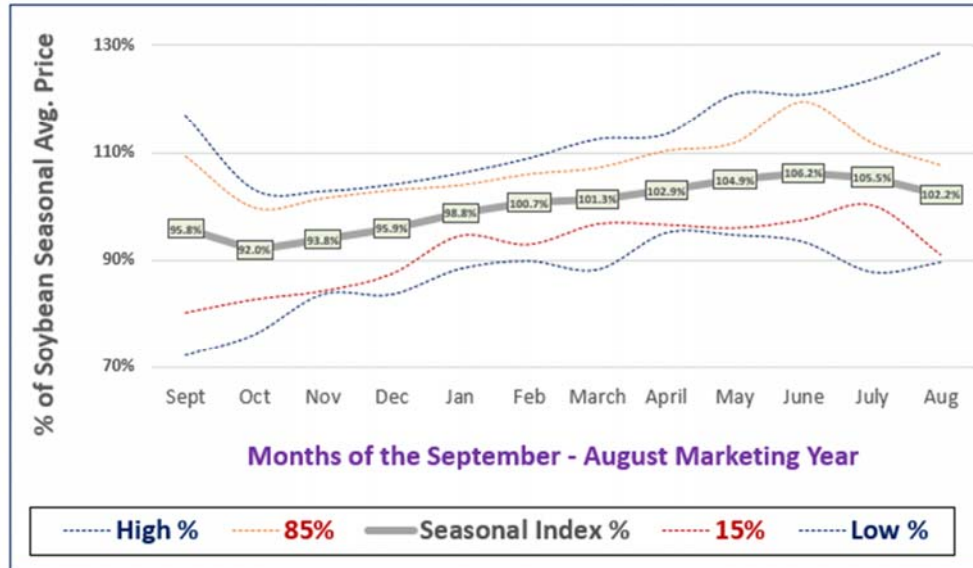
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Kansas Soybean Seasonal Price Index

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

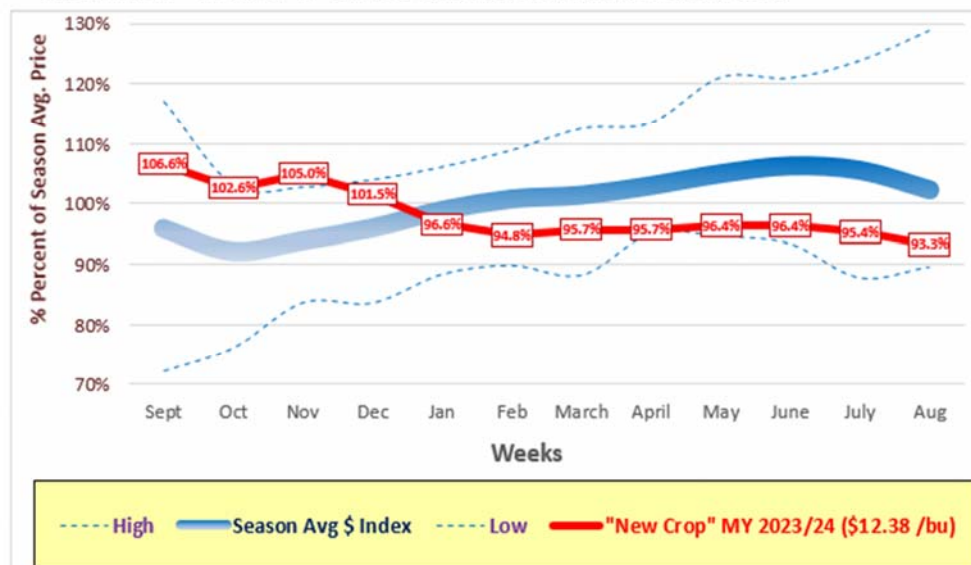
49



U.S. & Kansas Soybean Seasonal Prices

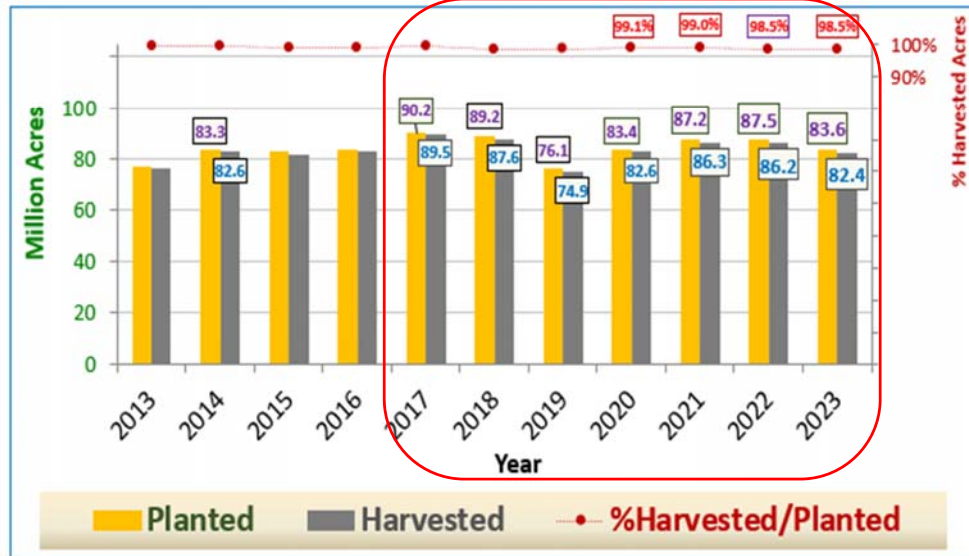
MY 1999/00 – 2022/23 & "Current" MY 2023/24, on January 16, 2024

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U.S. Soybean Acreage for 2013-2023

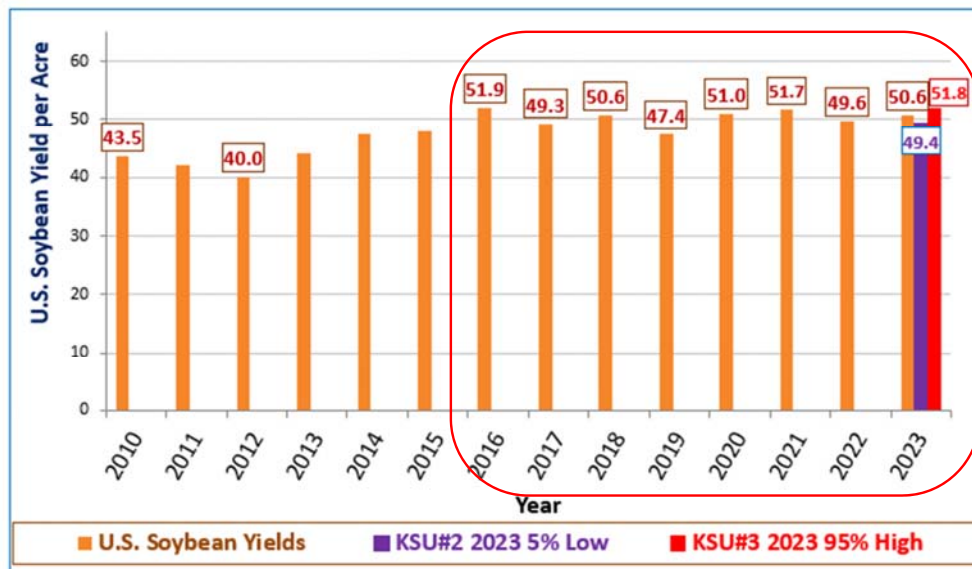
Years 2013-2023 as of the January 12, 2024 USDA Reports



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U.S. Soybean Yields: 2010-2023

As of the January 12, 2024 USDA WASDE & ERS Reports + KSU Estimates



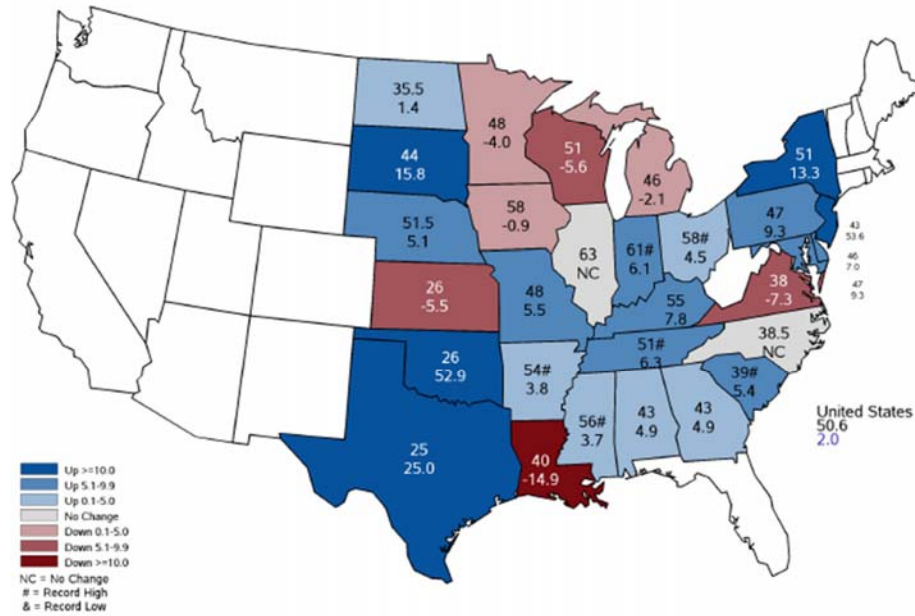
52



2023 Soybean Yield

Bushels and Percent Change from Previous Year

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January 12, 2024

U.S. Soybean Production & Supply

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



U.S. Soybean Use & Ending Stocks

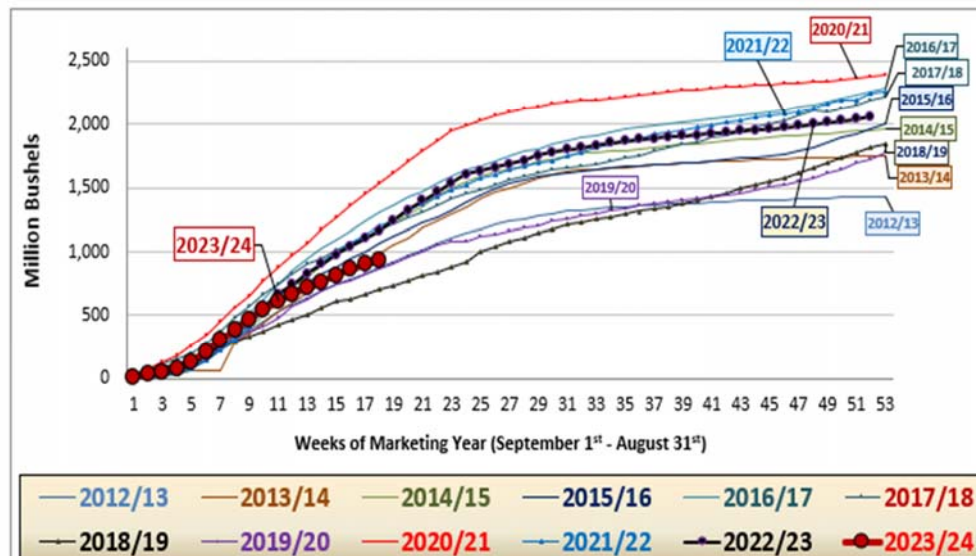
MY 2012/13 - Projected "Current" MY 2023/24 as of the 1/12/2024 USDA Reports



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U.S. Soybean Exports

MY 2012/13 thru "Current" MY 2023/24, USDA FAS Weekly Export reports thru 1/4/2024

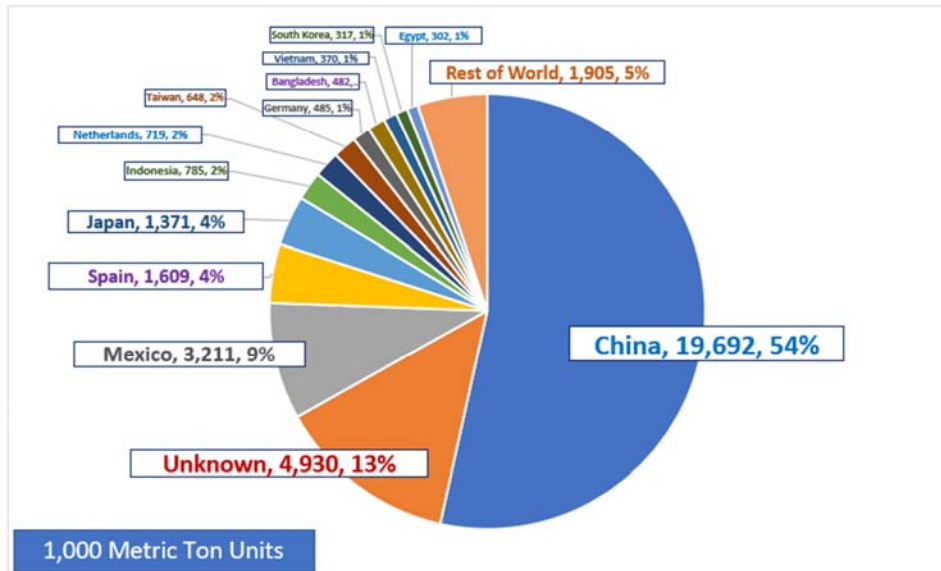


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U.S. Soybean Export Outstanding Sales + Shipments

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"Current" MY 2023/24 as of the 1/4/2024 USDA U.S. Export Forward Purchases (1,000 mt)



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

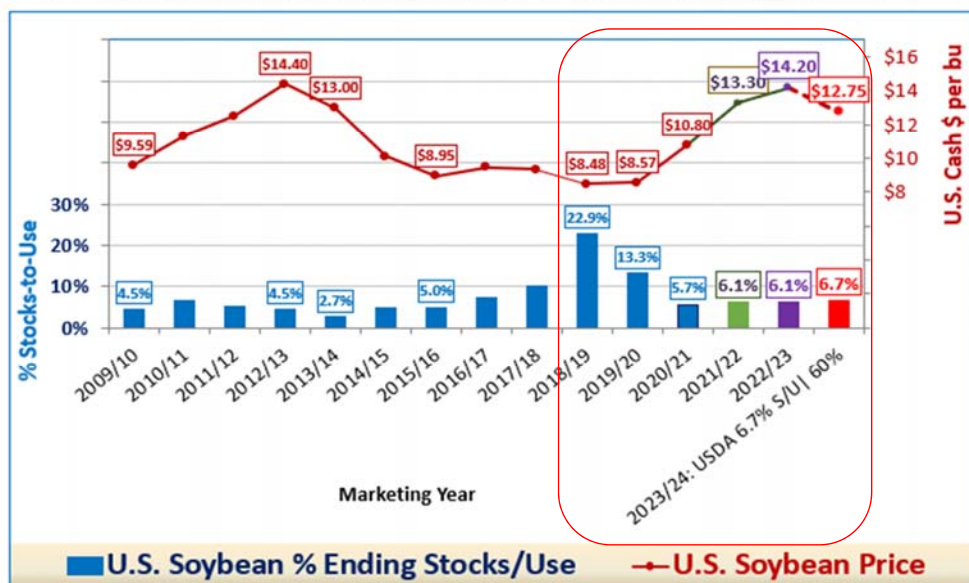
58

MY 2012/13 thru "Current" MY 2023/24 as of the 1/12/2024 USDA Reports



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

MY 2009/10 – "Current" 2023/24 as of January 12, 2024 USDA Reports



U.S. Soybean Projected S-D "Current" MY 2023/24

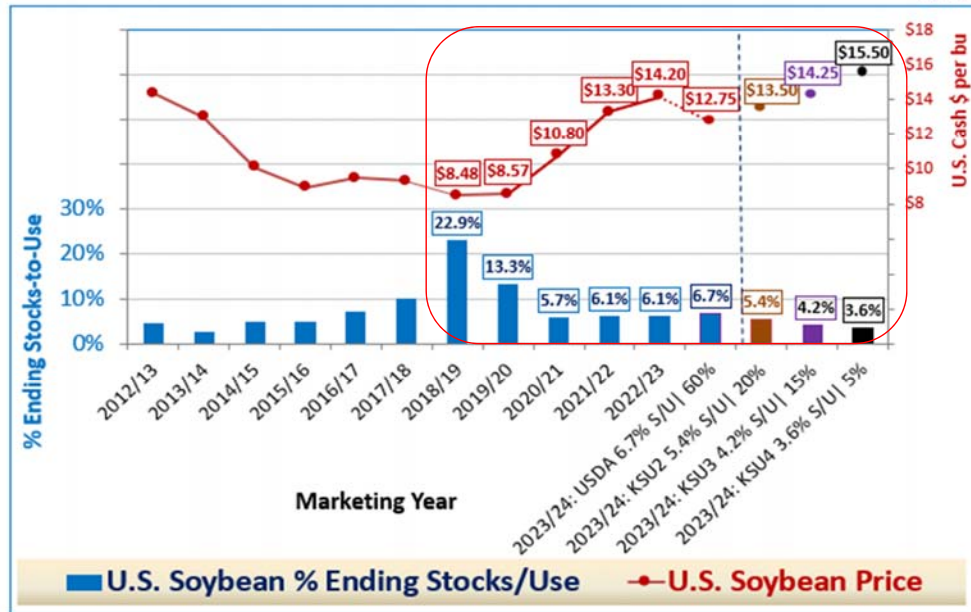
As of the January 12, 2024 USDA WASDE Report + KSU Scenarios As of 1/16/2024

Item	A. USDA WASDE Scenario #1 "Current" 2023/24 1/12/2024 USDA WASDE Info. 280 mb End Stocks, 6.70% S/U	B. KSU Scenario #2 "Current" 2023/24 Medium Brazil Crop Problems High Exports +50 mb	C. KSU Scenario #3 "Current" 2023/24 Serious Brazil Crop Problems ^A Higher Exports +100 mb	D. KSU Scenario #4 "Current" 2023/24 Serious Brazil Crop Problems ^B Crush: +50 mb Exports: +100 mb
% Probability of Occurring (KSU)	60%KSUest	20%KSUest	10%KSUest	5%KSUest
Planted Area (million acres)	83.600	83.600	83.600	83.600
Harvested Area (million acres)	82.356	82.356	82.356	82.356
Yield / harvested acre (bu/ac)	50.6	50.6	50.6	50.6
Production (million bu.)	4,165	4,165	4,165	4,165
Total Supply (million bu.)	4,459	4,459	4,459	4,459
Domestic Crushings	2,300	2,300	2,300	(+25 mb) 2,325
Exports	1,755	(+50 mb) 1,805	(+100 mb) 1,855	(+100 mb) 1,855
Total Use	4,179	(+50 mb) 4,229	(+100 mb) 4,279	(+125 mb) 4,304
Ending Stocks	280	(-50 mb) 230	(-100 mb) 180	(-125 mb) 155
% Ending Stocks-to-Use	6.70%	5.44%	4.21%	3.60%
U.S. Avg. Farm Price (\$/bu)	\$12.75 USDA \$12.38 KSU 1/16/2024	\$13.50 KSU \$12.38 KSU 1/16/2024	\$14.75 KSU \$12.38 KSU 1/16/2024	\$15.50 KSU \$12.38 KSU 1/16/2024

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

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MY 2009/10 – “Current” MY 2023/24 as of the 1/12/2024 USDA WASDE + KSU Ets.



Brazil Soybean Supply-Demand

MY 2007/08 – “Current” MY 2023/24 as of the January 12, 2024 USDA WASDE Report



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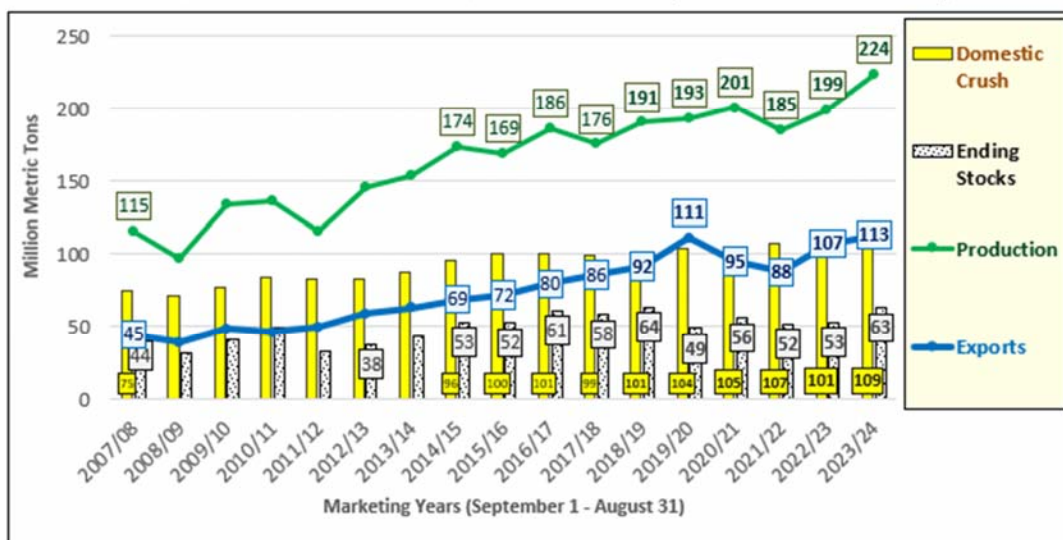
Argentina Soybean Supply-Demand

MY 2007/08 – “Current” MY 2023/24 as of the January 12, 2024 USDA WASDE Report



South America Soybean Supply-Demand

MY 2007/08 – “Current” MY 2023/24 as of the January 12, 2024 USDA WASDE Report



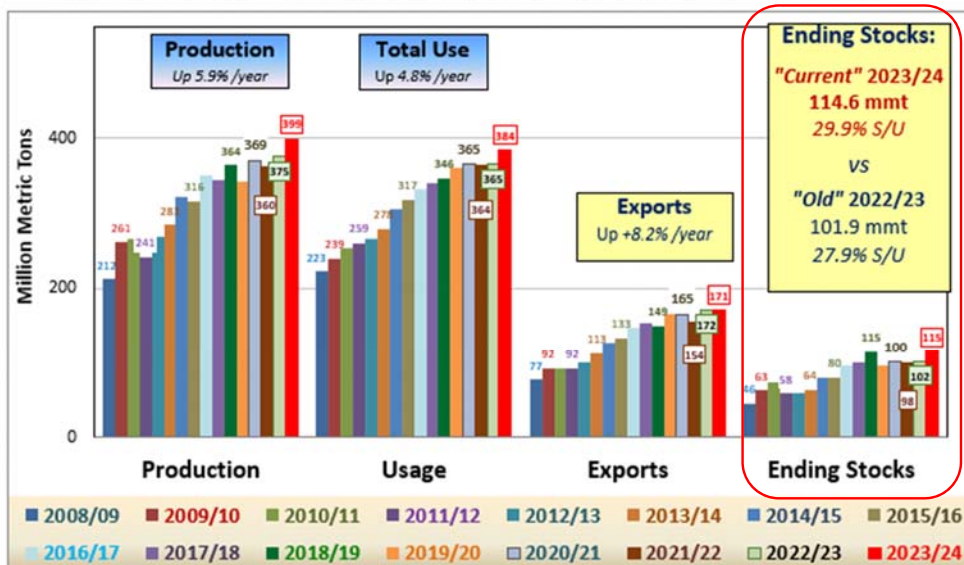
China Soybean Supply-Demand

MY 2007/08 – “Current” MY 2023/24 as of the January 12, 2024 USDA WASDE Report



World Soybean Usage & End Stocks

MY 2008/09 thru "Current" MY 2023/24 as of the 1/12/2024 WASDE



World vs "World Less-China" Soybean % Stocks/Use

MY 2007/08 through "New Crop" MY 2023/24, as of the December 8, 2023 USDA WASDE report



Closing Perspectives

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Questions?

Daniel O'Brien – Extension Ag Economist

Blog: www.ksugrains.wordpress.com

KSUGrains on Twitter

www.AgManager.info



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