

Grain Market Update for 2022-2023

KSU Agricultural Economics Webinar

September 21, 2022

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Market Perspective

2



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Grain Market Outlook ²⁰²²⁻²⁰²³ in Kansas, the U.S. & Globally

3

1) “Tight!!!!” Global Grain & Oilseed Stocks in 2022-2023

- *The importance of South America’s 2023 soybean & corn crops*
- “*Little – No*” margin for 2023 shortfalls among global wheat producers

2) Corn Production damage in the Western-Central Plains in 2022

- *Western Kansas / OK / TX / NE – Corn Basis strength* ^{Historic++}
- Damaged **2022 U.S. Corn Production** – *less than* 13.944 billion bu.???

Grain Market Outlook ²⁰²²⁻²⁰²³

4

3) Continuance of dry La Nina Weather Pattern in 2022-2023???

- “*Chances for La Nina are expected to gradually decrease from 86% to 60% during Dec-Feb 2022-2023*” *Reuters August 11, 2022*
- “A rare 3-peat La Nina is expected this winter.” *Weather Science 8/12/2022*

4) Continued high 2023 Fertilizer & other Crop Input Costs?

- *High natural gas & logistics costs, w. supply-chain challenges*
- May limit **2023 U.S. Corn Acres** – $\approx 89 - 90$ million???

5) U.S. HRW Winter Wheat Seedings ^{Fall 2022} for Harvest ²⁰²³

- **Key:** Soil Moisture prospects in the Central-Southern Plains ^{Sept-Oct 2022}
- **Factors:** Strong Crop Insurance Planning Prices, moisture & other issues

6) Impact of Ongoing & Possible Geopolitical Conflicts 2022-2023

- *Ukraine-Russia War???: Prospects for de-escalation & grain trade?*
- **China-Taiwan???** - If happens, would impact global economy & U.S. grain trade (*U.S. soybeans, grain sorghum, likely all ag commodities*)

7) U.S./Foreign Ag response in 2023 to current grain prices?

- **Crop Acres?** Normally, ↑ prices → ↑ crop acres, BUT ALL \$'s are ↑
- **Crop Costs?** IF *high* fertilizer & other crop costs, limits Corn Acres^{Global}
- **Rationing of Grain Use:** Evidence of this in the September WASDE #s

8) Reflecting reasons for High Grain Prices in Spring 2022?

- *#1: Ukraine-Russia War;*
- *#2: Delayed plantings in the Northern Plains* ^{U.S. domestic issue}

7) Overall Prospects for 2023 Grain Markets???

- Grain Prices supported @ High Levels – *until* grain markets are confident of larger crops & likely rebuilding of stocks
 - Both “2022/23 Old Crop Cash \$’s” & “2023/24 New Crop Forward Bids” vulnerable to declines in late Spring – Summer²⁰²³ into 2023 Fall harvest
- Ukraine-Russia War: Continued impact on World grain markets ?????
- Impact of South America Crop Development: Brazil & Argentina crop prospects to drive U.S. price volatility during Jan-August 2023

What to anticipate: Fall 2022 – Year 2023

□ South America Planting Influences ⇒ “*Bid for Acres*”

• Brazil & Argentina Corn & Soybean Crop Calendar

○ Brazil

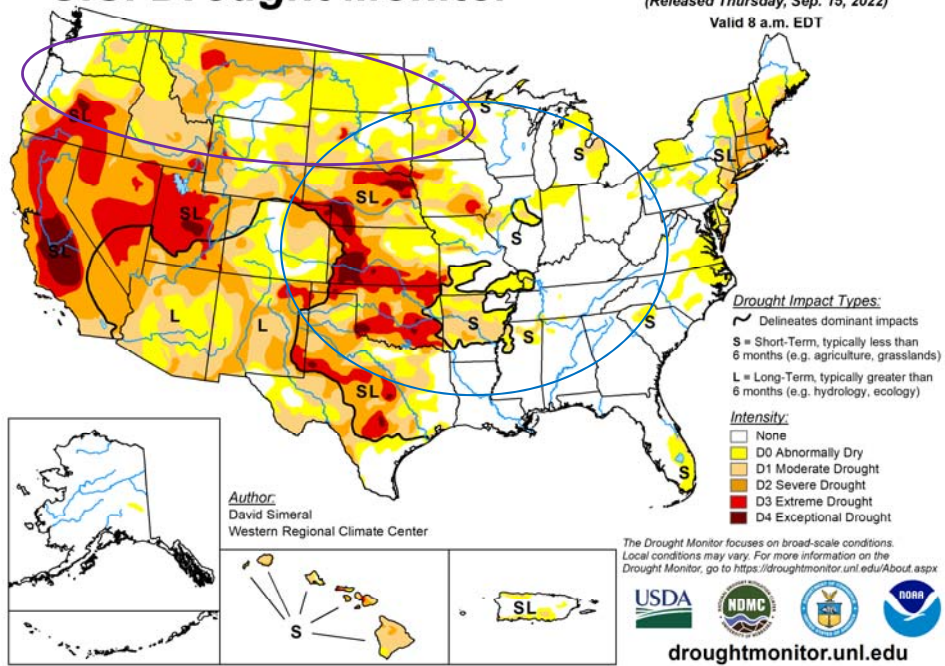
- | | |
|---|----------------------------------|
| ▪ <u>Corn</u> : 1 st crop <i>Planting</i> – October-December | ⇒ <u>Harvest</u> : February-June |
| ▪ <u>Soybeans</u> : <i>Planting</i> – October-December | ⇒ <u>Harvest</u> : March-June |
| ▪ <u>Corn</u> : 2 nd crop <i>Planting</i> – January-February | ⇒ <u>Harvest</u> : March-June |

○ Argentina

- | | |
|--|---|
| ▪ <u>Corn</u> : <i>Planting</i> – ** <u>mid-September</u> ** -December | ⇒ <u>Harvest</u> : mid March-early June |
| ▪ <u>Soybeans</u> : 1 st crop <i>Planting</i> – November-December | ⇒ <u>Harvest</u> : Late March-early May |
| ▪ <u>Soybeans</u> : 2 nd crop <i>Planting</i> – December-early Jan. | ⇒ <u>Harvest</u> : mid April – mid June |

U.S. Drought Monitor

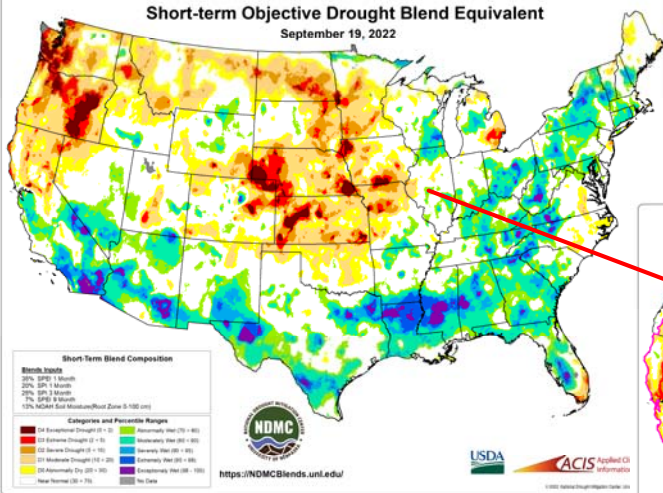
September 13, 2022
(Released Thursday, Sep. 15, 2022)
Valid 8 a.m. EDT



9

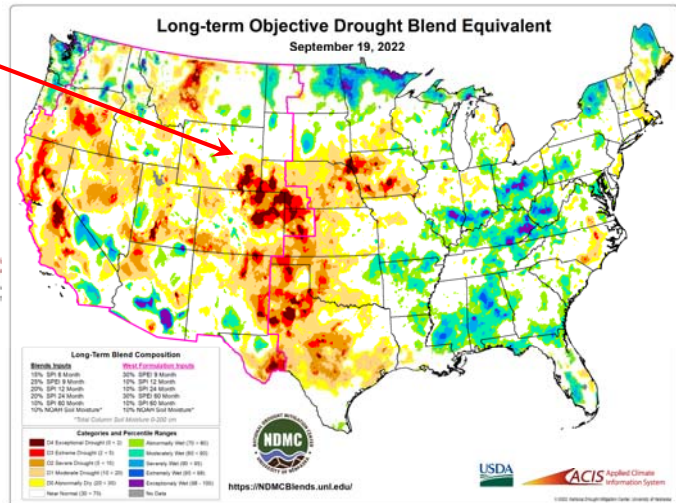
Short-term Objective Drought Blend Equivalent

September 19, 2022

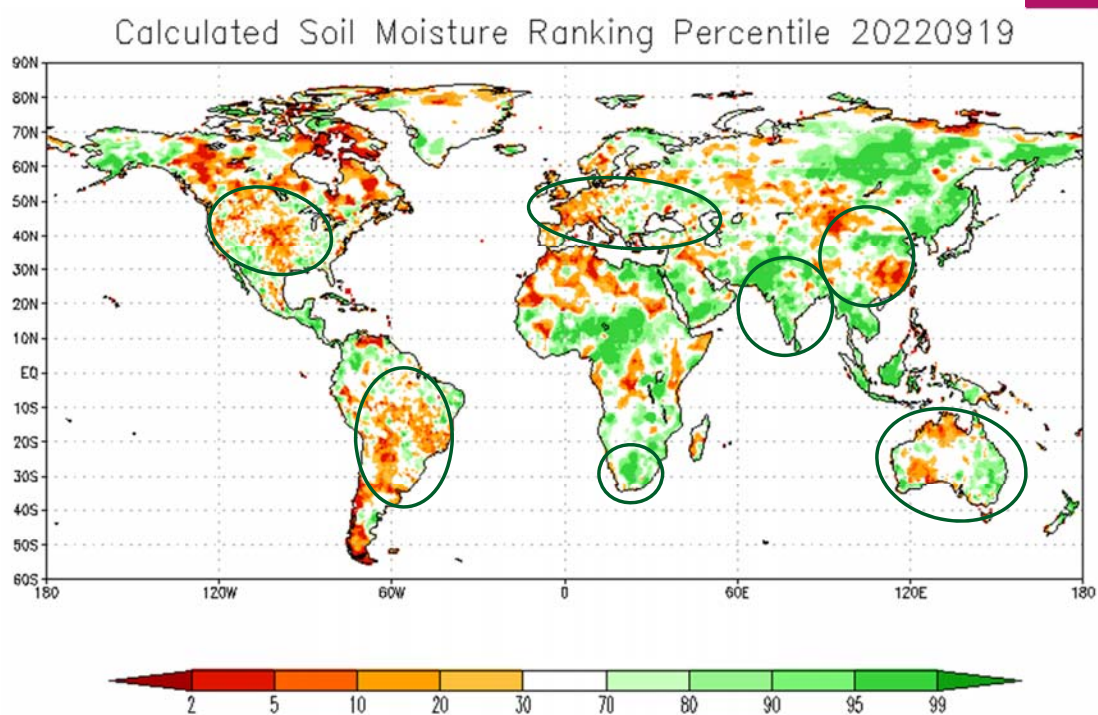
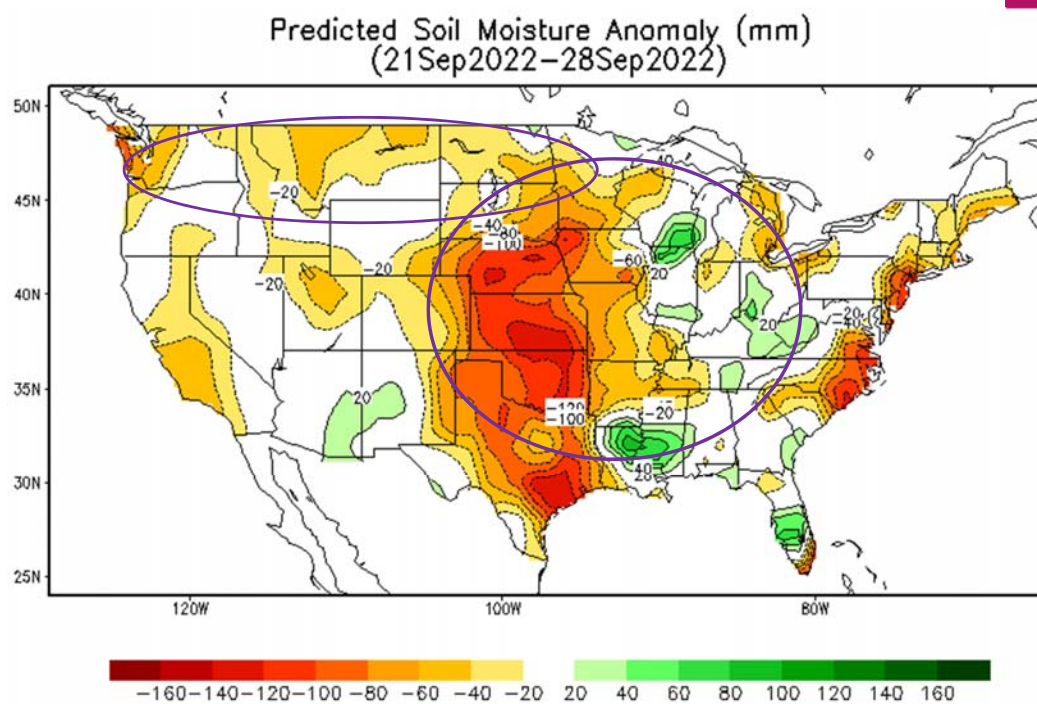


Long-term Objective Drought Blend Equivalent

September 19, 2022



10



Corn Markets

13



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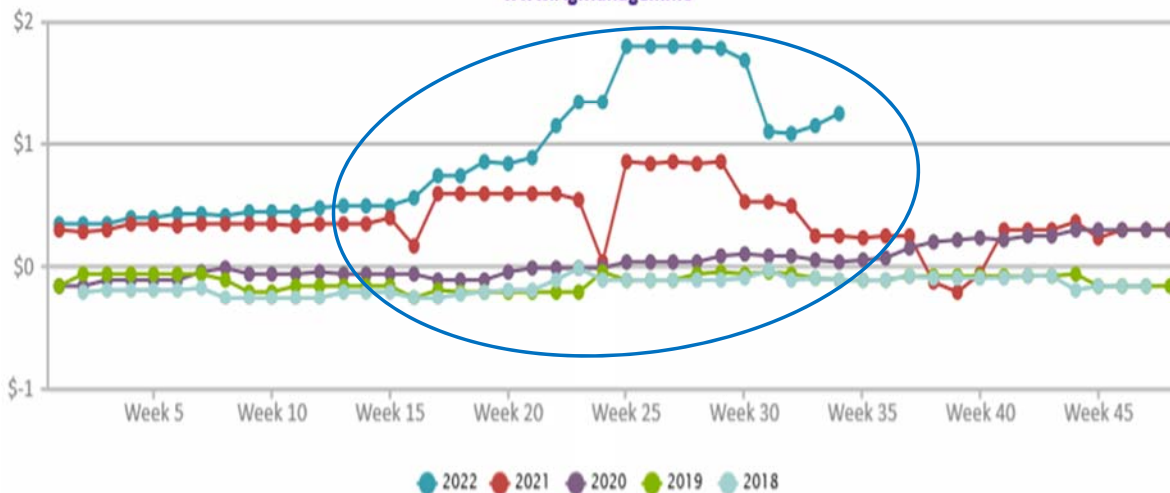


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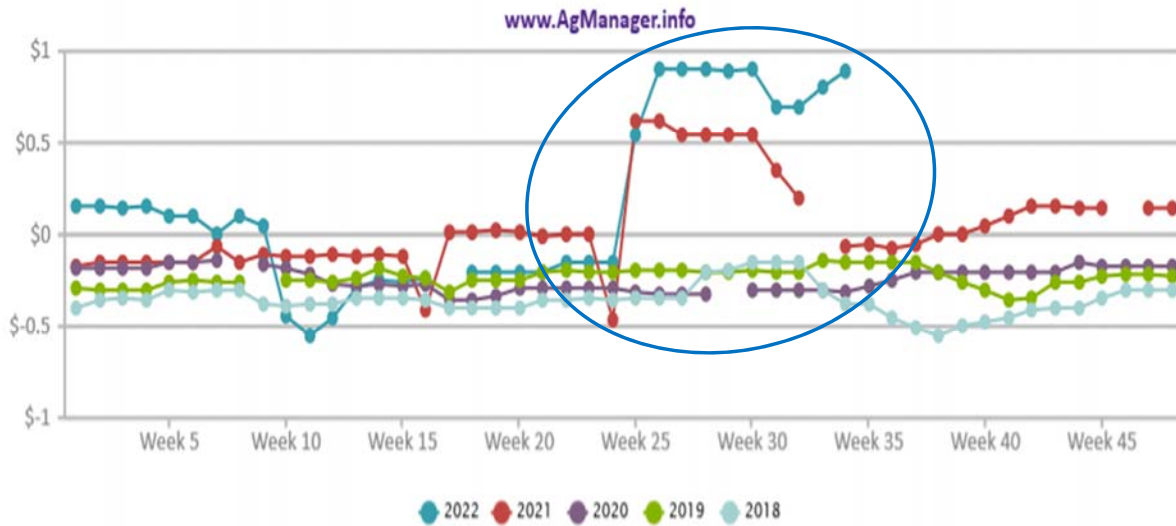
Kansas Cash & Futures Prices						
Date						
9/21/2022 (Morning Mkts)						
Grain Futures Contracts	Closing \$					
DEC 2022 Corn (2022 Harvest contract)	\$6.9200					
DEC 2023 Corn (2023 Harvest Contract)	\$6.3050					
9/21/2022 (Morning Mkts)	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	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\$	\$7.87	\$7.84	\$7.34	\$8.22	\$7.89	\$7.75
Corn Spot Cash Basis	\$0.95	\$0.92	\$0.42	\$1.30	\$0.97	\$0.83
Corn Harvest FC\$: Fall 2023	\$6.06		\$6.00	\$6.04		\$5.95
Corn Harvest FC\$ Basis	(\$0.25)		(\$0.31)	(\$0.27)		(\$0.36)
Grain Sorghum Spot Cash\$	\$7.37	\$7.19	\$7.09	\$7.37	\$7.24	\$7.06
Sorghum Spot Cash Basis	\$0.45	\$0.27	\$0.17	\$0.45	\$0.32	\$0.14
Grain Sorghum Harvest FC\$: Fall 2022	\$5.91		\$5.85	\$5.89		
Sorghum Harvest FC\$ Basis	(\$0.40)		(\$0.46)	(\$0.42)		

GARDEN CITY, KS: Corn Basis - GARDEN CITY COOP

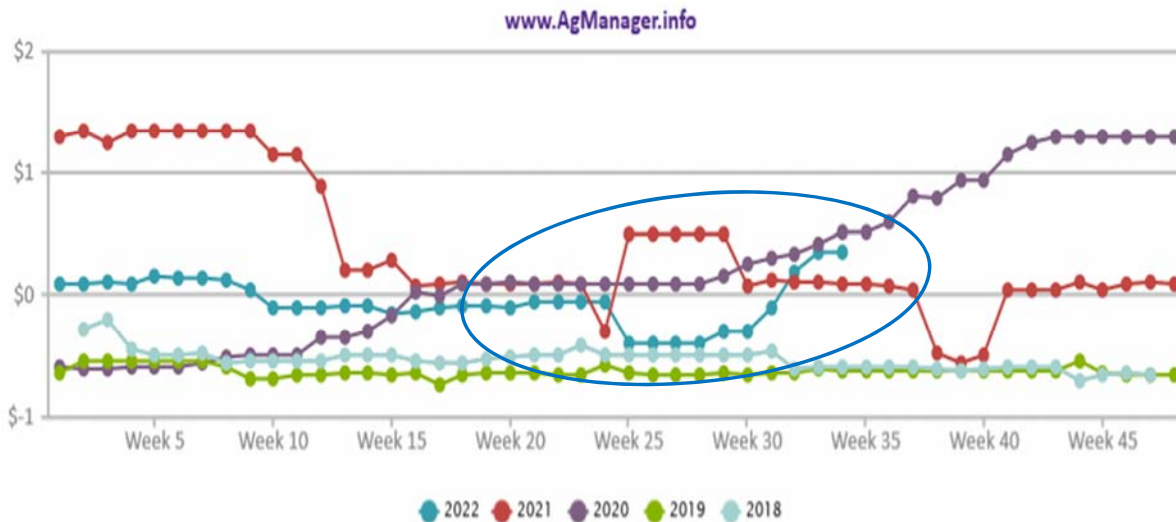
www.AgManager.info



SALINA, KS: Corn Basis - CARGILL

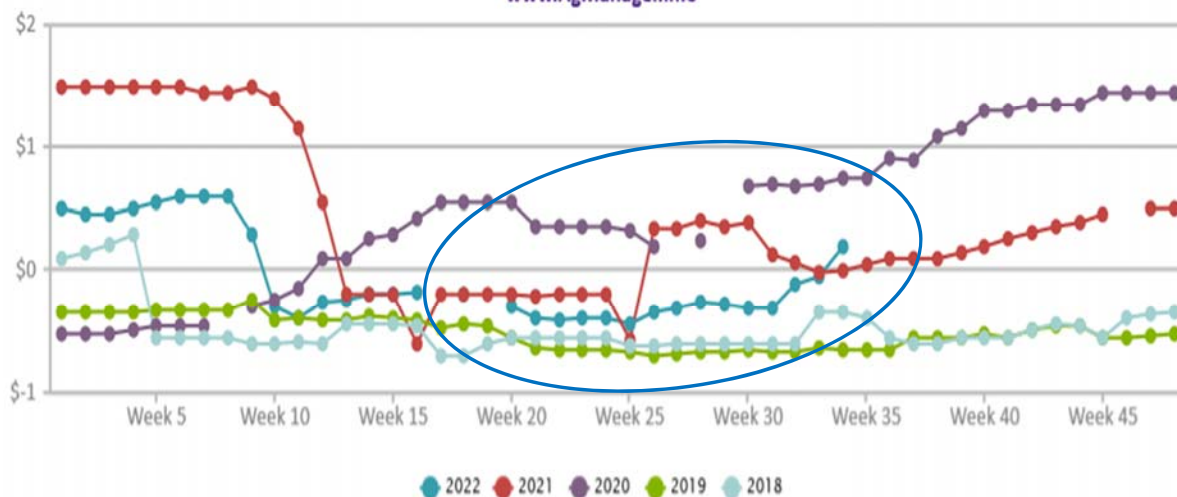


GARDEN CITY, KS: Grain Sorghum Basis - GARDEN CITY COOP



SALINA, KS: Grain Sorghum Basis - CARGILL

www.AgManager.info



U.S. Corn Supply and Demand

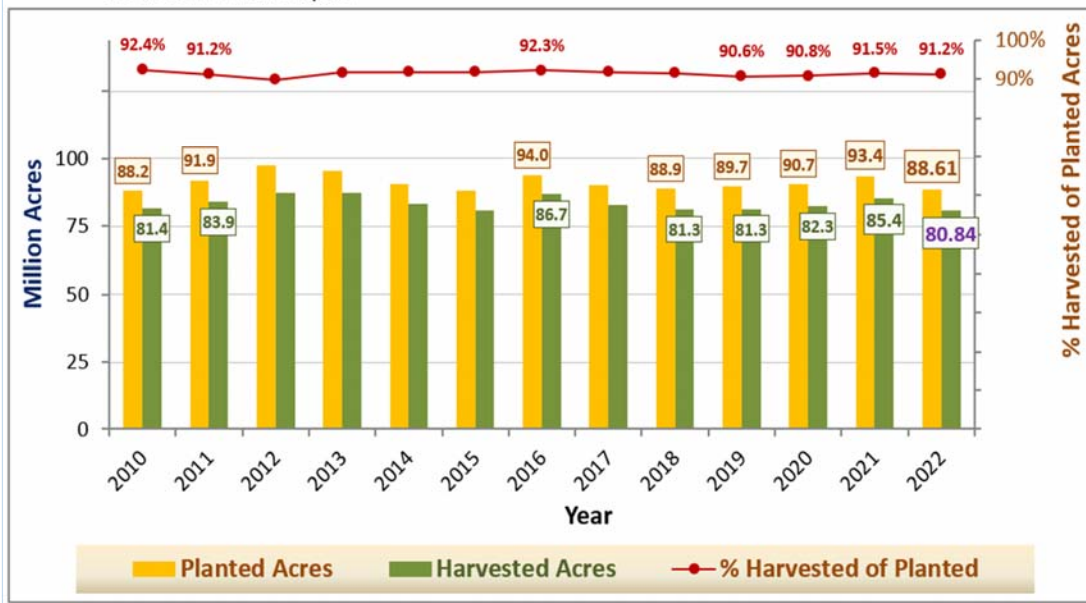
Item	2021/2022		2022/2023		
	Estimate	Change from August 12	Forecast	Change from August 12	Change from 2021/2022
Planted area (million acres)	93.4	--	88.6	-1.2	-4.7
Harvested area (million acres)	85.4	--	80.8	-1.0	-4.5
Yield (bushels per acre)	177.0	--	172.5	-3.0	-4.5
----- Million bushels -----					
Beginning stocks	1,235	--	1,525	-5	290
Production	15,115	--	13,944	-415	-1,171
Imports	25	--	25	--	--
Total supply	16,375	--	15,494	-420	-881
Feed and residual	5,600	--	5,225	-100	-375
Food, seed, and industrial	6,775	-20	6,775	-50	--
Ethanol	5,330	-20	5,325	-50	-5
Domestic use	12,375	-20	12,000	-150	-375
Exports	2,475	25	2,275	-100	-200
Total use	14,850	5	14,275	-250	-575
Ending stocks	1,525	-5	1,219	-170	-306
----- Percent -----					
Stocks to use ratio	10.3	**	8.5	-1.0	-1.7
----- Dollars per bushel -----					
Average market price	5.95	--	6.75	0.10	0.80

-- No change. ** Rounds to zero.

September 12, 2022

U.S. Corn Acreage for Years 2010-2022 as of the September 12,

2022 USDA WASDE Report



U.S. Corn Yields for 2007-2022 as of the September 12, 2022 USDA World

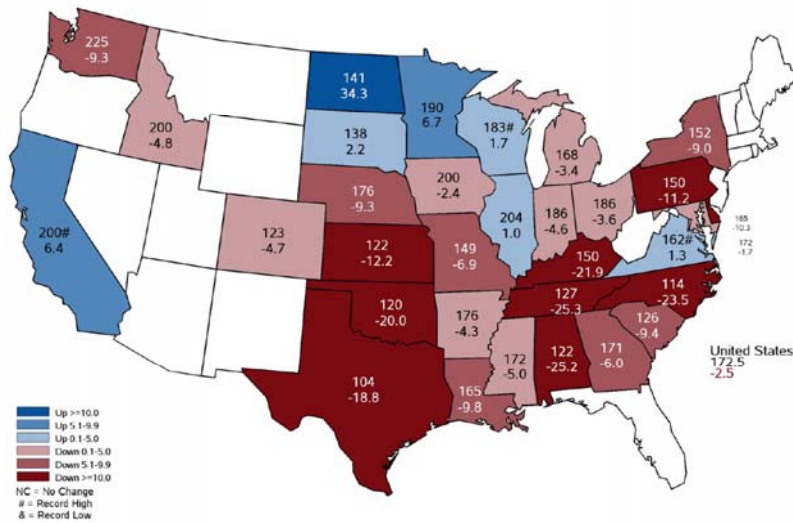
Agricultural Supply and Demand Estimates Report





23

September 2022 Corn Yield Bushels and Percent Change from Previous Year



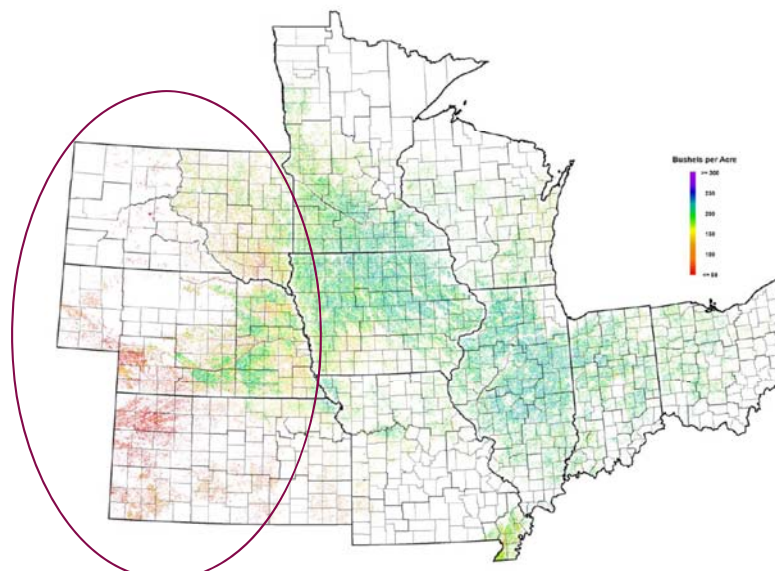
United States Department of Agriculture
National Agricultural Statistics Service

September 12, 2022



24

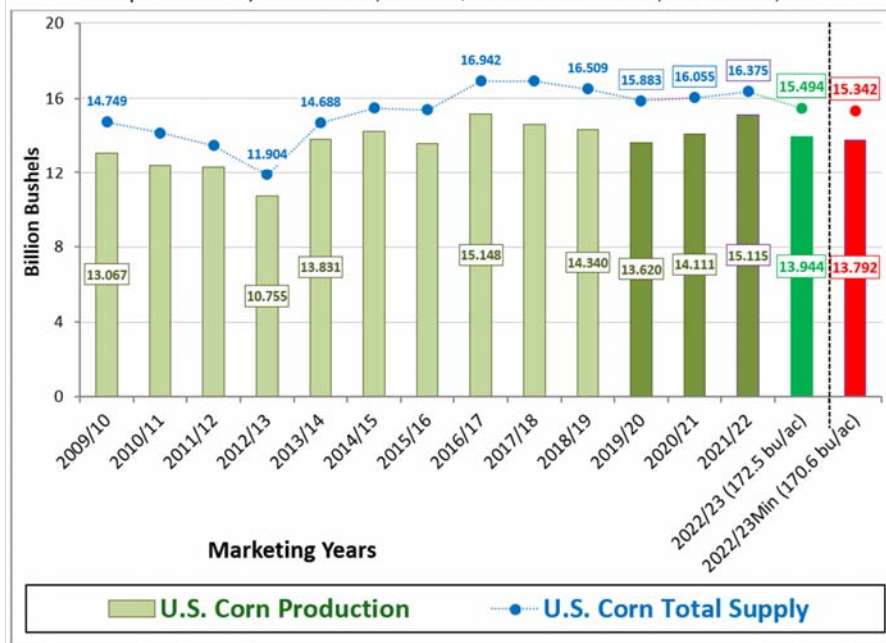
September 2022 Corn NASA Terra MODIS Modeled Yield



United States Department of Agriculture
National Agricultural Statistics Service

September 12, 2022

U.S. Corn Production & Total Supplies: MY 2009/10 - "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE & Crop Production Reports



25

U.S. Corn Use & Ending Stocks: MY 2012/13 through Projected "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report

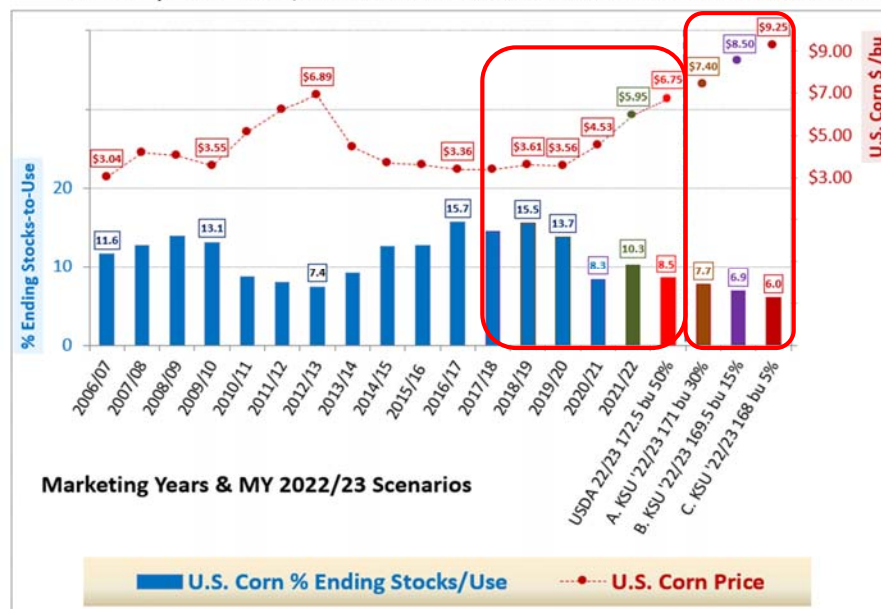


26

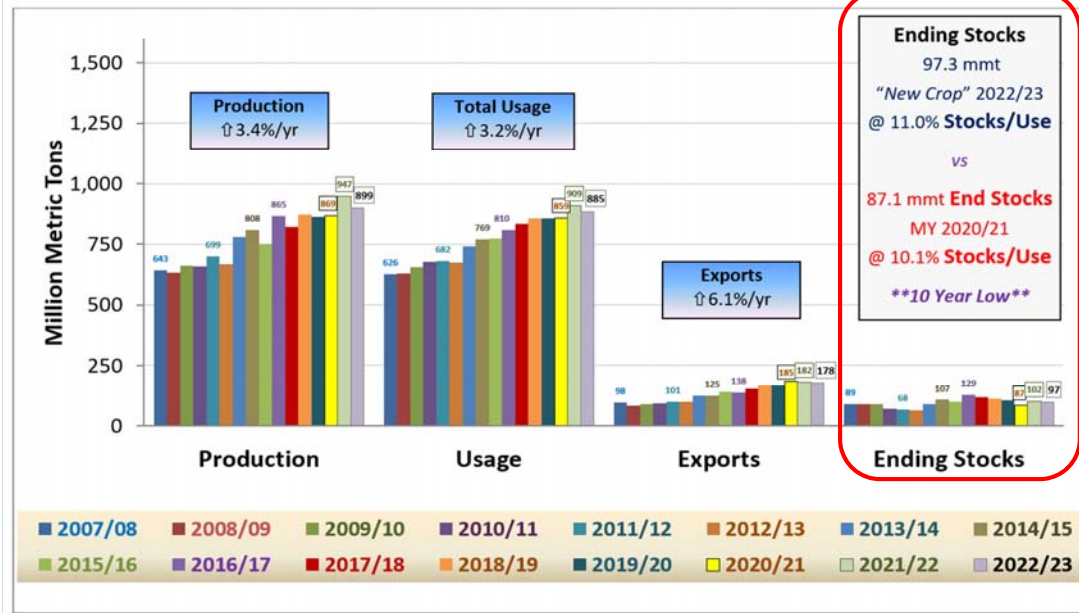
U.S. Corn Supply-Demand Balance Sheet: Projected "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report, with Alternative KSU "New Crop" 2022/23 Marketing Year Scenarios

Item	USDA 2022/23 9/12/2022 WASDE 172.5 bu/ac 13.994 bb crop	A. KSU "New Crop" MY 2022/23 Scenario #1 "Lower Yields" = 171.0 bu/ac 13.824 bb crop	B. KSU "New Crop" MY 2022/23 Scenario #2 "Much Lower Yields" = 169.5 bu/ac 13.703 bb crop	C. KSU "New Crop" MY 2022/23 Scenario #3 "Major Drought Yields" = 168.0 bu/ac 13.582 bb crop
% Probability of Occurring (KSU)	50% ^{KSUbest}	30% ^{KSUbest}	15% ^{KSUbest}	5% ^{KSUbest}
Planted Area (million acres)	88.608	88.608	88.608	88.608
Harvested Area (million acres)	80.844	80.844	80.844	80.844
% Harvested/Planted Area	91.24%	91.24%	91.24%	91.24%
Yield / harvested acre (bu/ac)	172.5	171.0	169.5	168.0
Million Bushels				
Beginning Stocks (million bushels)	1,525	1,525	1,525	1,525
Production (million bu.)	13,944	13,824	13,703	13,582
Imports (million bu.)	25.0	25	25	25
Total Supply (million bu.)	15,494	15,374	15,253	15,135
Ethanol for fuel Use (million bu.)	5,325	5,325	5,375	5,375
Food & Industrial Use (million bu.)	1,419.4	1,419.4	1,419.4	1,419.4
Seed Use (million bu.)	30.6	30.6	30.6	30.6
Exports (million bu.)	2,275	2,275	2,275	2,275
Feed & Residual Use (million bu.)	5,225	5,225	5,225	5,225
Total Use (million bu.)	14,275	14,275	14,275	14,275
Ending Stocks (million bu.)	1,219	1,099	978	860
% Ending Stocks-to-Use	8.54%	7.70%	6.85%	6.02%
Days of Supply (% S/U x 365 days)	31.2 days	28.1 days	25.0 days	22.0 days
U.S. Corn Average Farm Price (\$/bushel)	\$6.75 ^{USDA}	\$7.40 ^{/bu}	\$8.50 ^{/bu}	\$9.25 ^{/bu}
	vs \$7.12 ^{9/12/2022}	vs \$7.12 ^{9/12/2022}	vs \$7.12 ^{9/12/2022}	vs \$7.12 ^{9/12/2022}

U.S. Corn % End Stocks vs U.S. Corn \$'s: MY 2006/07 – "New Crop" MY 2022/23 as of the Sept. 12, 2022 USDA WASDE report + KSU MY 2022/23 scenarios



“World Less-China” Corn Supply-Demand: MY 2007/08 – “New Crop” MY 2022/23
as of the September 12, 2022 USDA WASDE Report



“World Less-China” Corn Supply-Demand: MY 2007/08 – “New Crop”
MY 2022/23 as of the September 12, 2022 USDA WASDE report



Ukraine Corn Supply-Demand: MY 2006/07 – “New Crop” MY

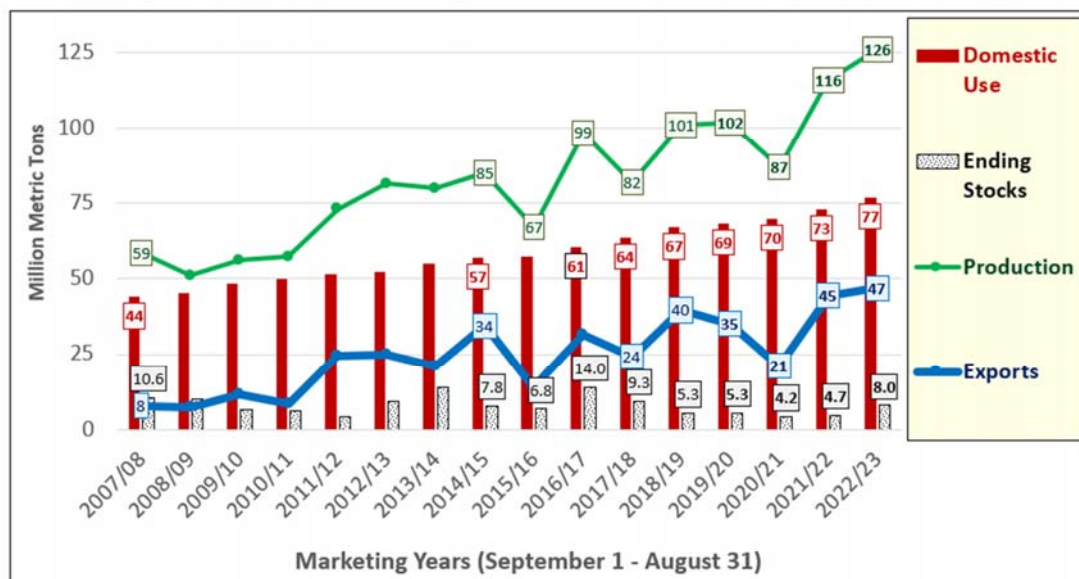
2022/23, as of the September 12, 2022 USDA WASDE report



31

Brazil Corn Supply-Demand: MY 2007/08 – “New Crop” MY 2022/23 as of

the September 12, 2022 USDA WASDE report



32

Argentina Corn Supply-Demand: MY 2007/08 – “New Crop” MY 2022/23

as of the September 12, 2022 USDA WASDE report



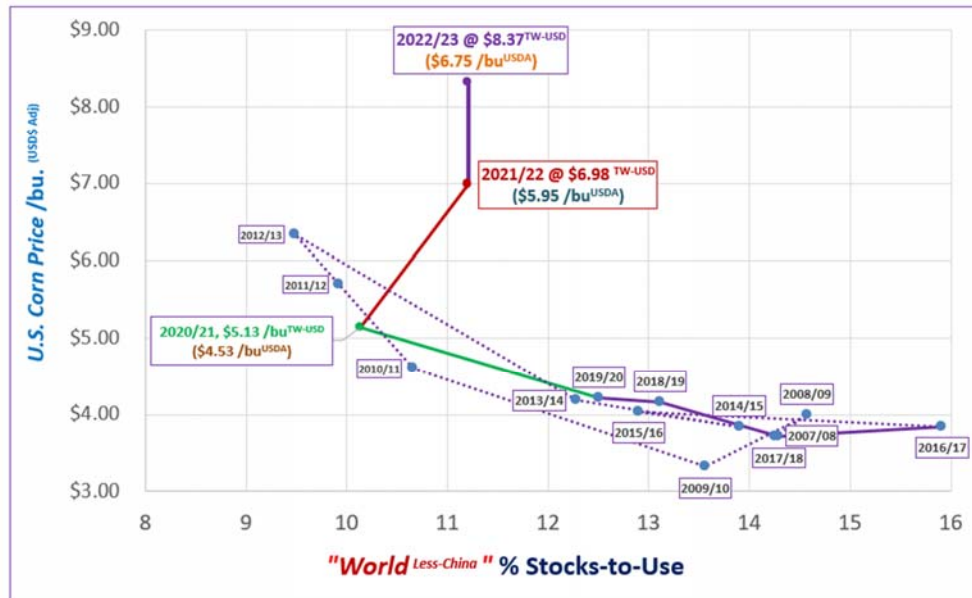
World vs “World-Less-China” % Corn Stocks-to-Use:

MY 2007/08 through “New” MY 2022/23, as of the September 12, 2022 USDA WASDE report.



U.S. Corn \$^{USD}\$ Adj. vs "World Less-China" % Corn S/U:

MY 2007/08 – "New Crop" MY 2022/23 as of the September 12, 2022 WASDE



35

Sorghum Markets

36

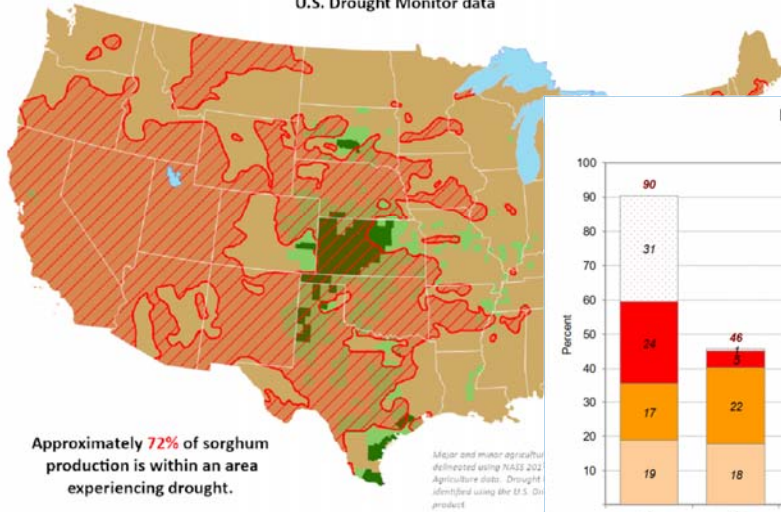


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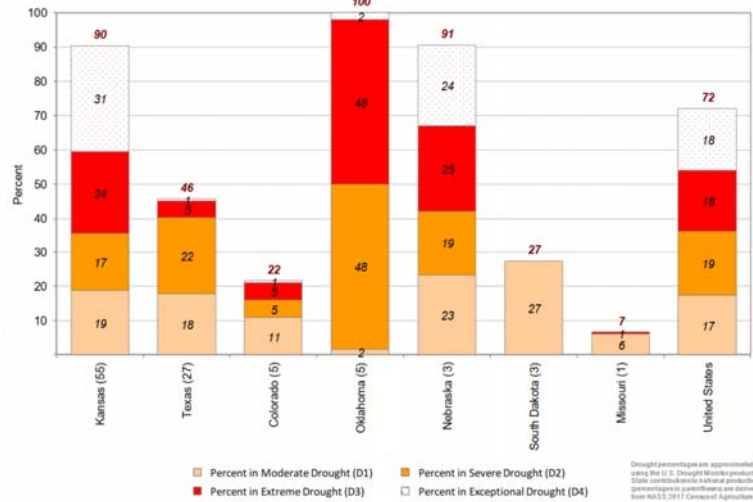
Department of Agricultural Economics

Sorghum Areas in Drought

Reflects September 6, 2022
U.S. Drought Monitor data



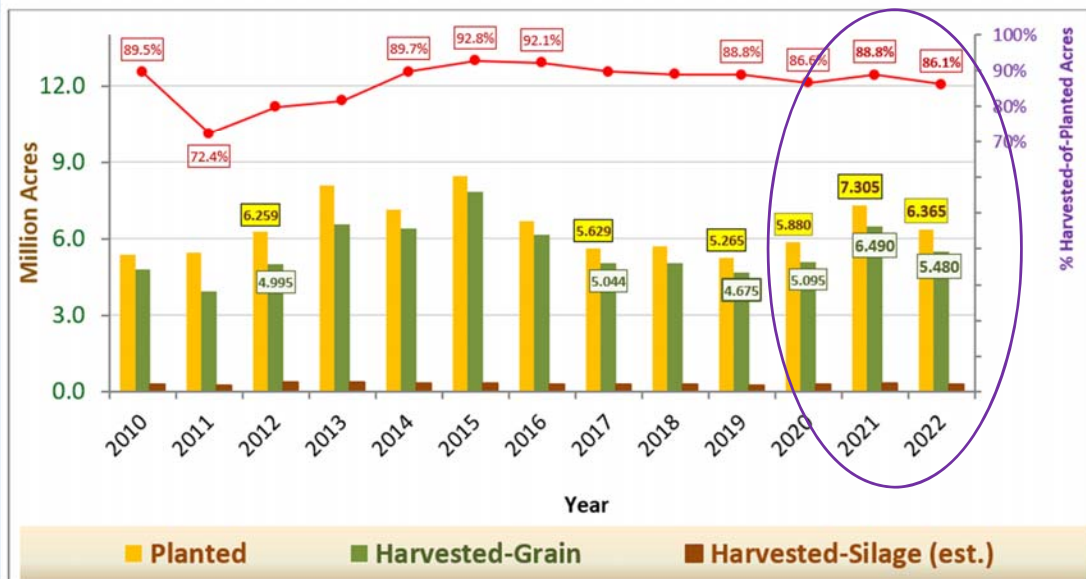
Percent of Sorghum Located in Drought
September 6, 2022



37

U.S. Grain Sorghum Planted & Harvested Acreage

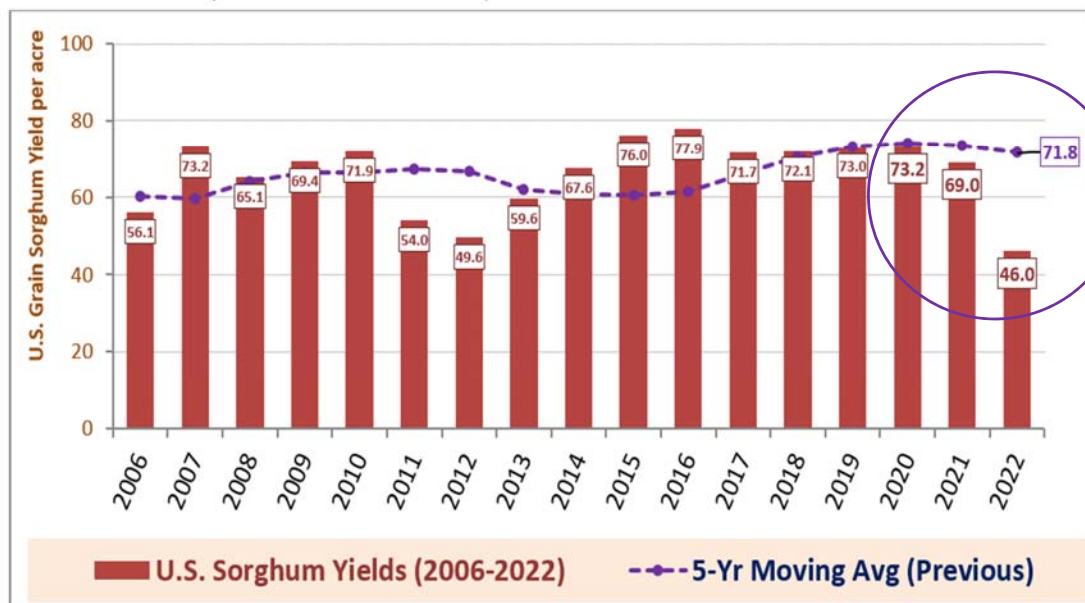
(2010 – 2022) as of the September 12, 2022 USDA WASDE report



38

U.S. Grain Sorghum Yields for 2006-2022 as of the September 12, 2022

USDA Crop Production & WASDE reports



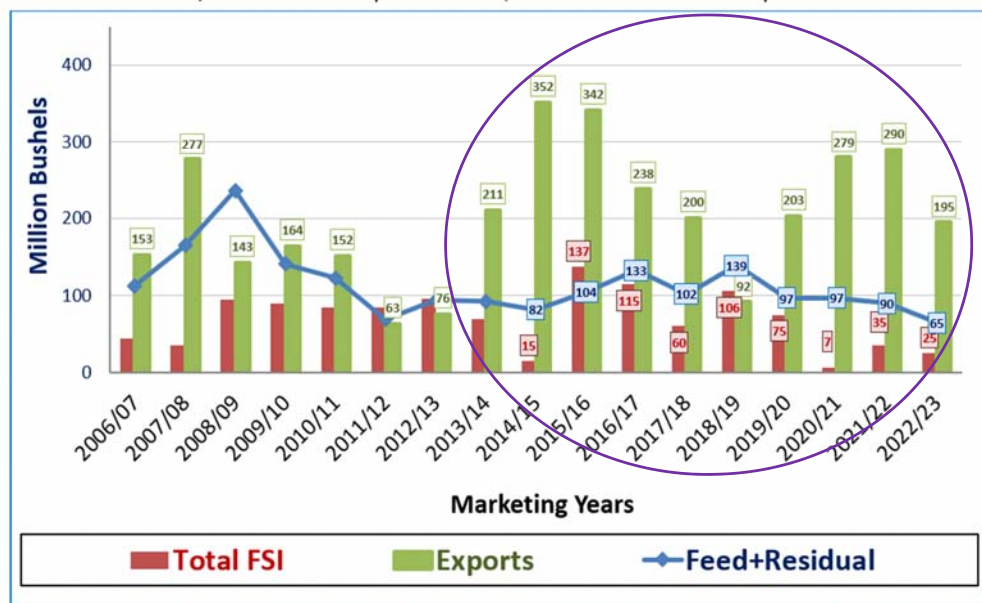
U.S. Grain Sorghum Total Supplies: MY 2006/07 - "New Crop"

MY 2021/22 as of the September 12, 2022 USDA WASDE report



Trends in U.S. Grain Sorghum Use: MY 2006/07 - "New Crop"

MY 2022/23 as of the September 12, 2022 USDA WASDE report



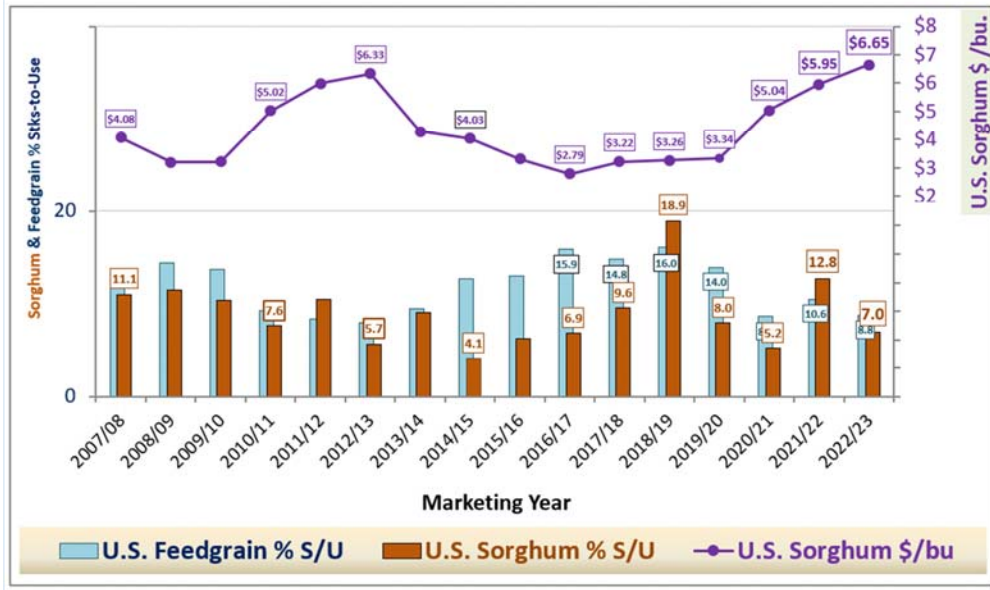
Projected U.S. Grain Sorghum Supply-Demand for MY 2022/23

"New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report, with Alternative KSU "New Crop" 2021/22 Marketing Year Scenarios

Item	A. USDA "New Crop" MY 2022/23 August 12, 2022 WASDE	B. KSU Adjusted USDA "New Crop" MY 2022/23 + 20 mb Exports to 215 mb
% Probability of Occurring (KSU)	65% ^{KSUest}	35% ^{KSUest}
Planted Area (million acres)	6.365	6.365
Harvested Area (million acres)	5.480	5.480
% Harvested/Planted Area	86.1%	86.1%
Yield / harvested acre (bu/ac)	46.0	46.0
Million Bushels		
Beginning Stocks (million bushels)	53	53
Production (million bu.)	252	252
Imports (million bu.)	0.05	0.05
Total Supply (million bu.)	305	305
Food & Industrial Use (mln bu.)	24.14	24.14
Seed Use (million bu.)	0.86	0.86
Exports (million bu.)	195	215
Feed & Residual Use (million bu.)	65	55
Total Use (million bu.)	285	295
Ending Stocks	20	10
% Ending Stocks-to-Use	7.02%	3.39%
Days of Supply (% S/U x 365 days)	25.6 days	12.4 days
U.S. Grain Sorghum Avg. Farm Price (\$ / bushel)	\$6.65 USDA	\$7.50 KSU

U.S. Sorghum % End Stocks/Use vs U.S. Avg. Cash \$s:

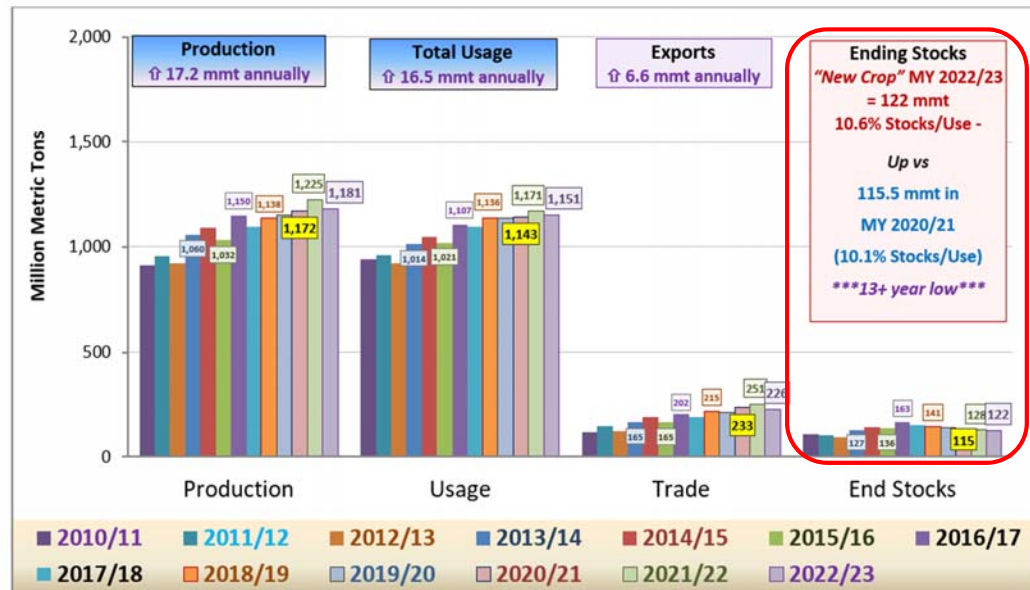
MY 2004/05 - "New Crop" MY 2021/22 as of the August 12, 2022 USDA WASDE



43

"World Less-China" Coarse Grain Supply-Demand:

MY 2007/08 thru "New Crop" 2022/23 as of the September 12, 2022 USDA WASDE



44

Wheat Markets

45



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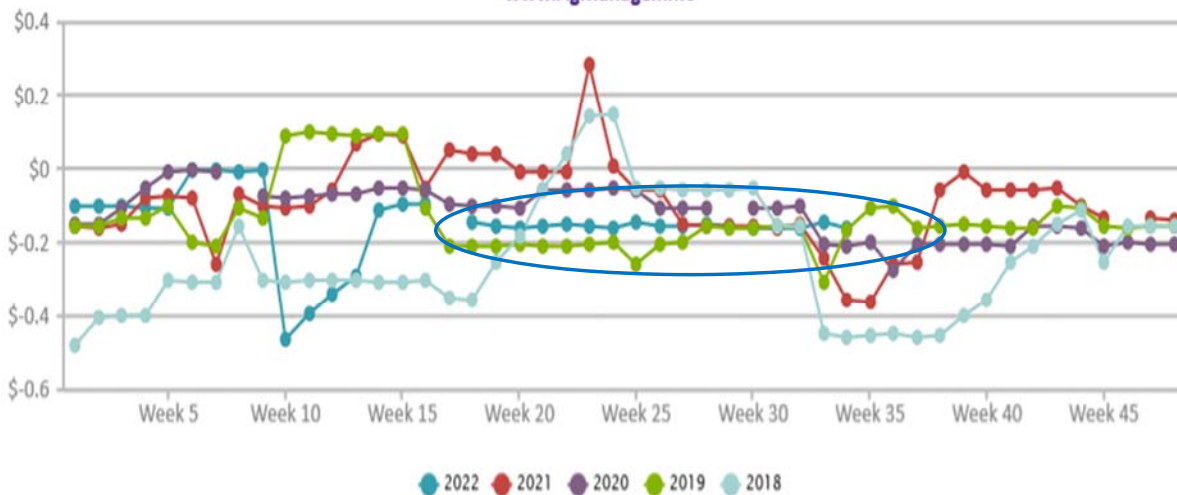
46



Kansas Cash & Futures Prices							
Date							
9/21/2022 (Morning Mkts)							
Grain Futures Contracts		Closing \$					
DEC 2022 KC HRW Wheat (Lead Contract)		\$9.6100					
JULY 2023 KC HRW Wheat (2023 Harvest Contract)		\$9.3925					
9/21/2022 (Morning Mkts)		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\$		\$9.11	\$9.39	\$9.23	\$9.13	\$9.35	\$9.18
HRW Wheat Harvest Spot Cash Basis		(\$0.50)	(\$0.22)	(\$0.38)	(\$0.48)	(\$0.26)	(\$0.43)
KC HRW Wheat FC\$ - Harvest ²⁰²³		\$8.74	\$8.84	\$8.93	\$8.97	\$8.85	\$8.60
HRW Wheat Harvest FC\$ Basis		(\$0.65)	(\$0.55)	(\$0.46)	(\$0.42)	(\$0.54)	(\$0.79)

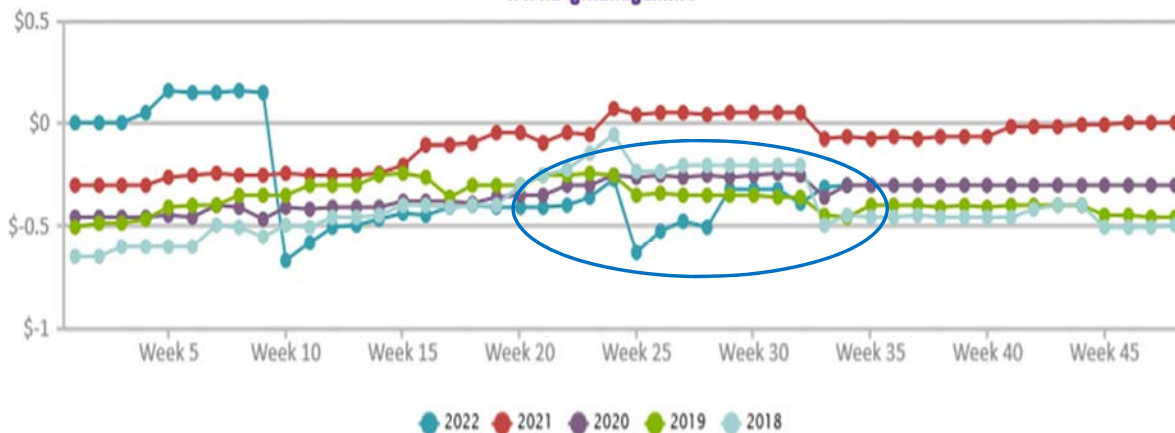
SALINA, KS: Hard Red Winter Wheat Basis - CARGILL

www.AgManager.info



HUGOTON, KS: Hard Red Winter Wheat Basis - PERRYTON EQUITY EXCHANGE - PRAIRIEOLA

www.AgManager.info



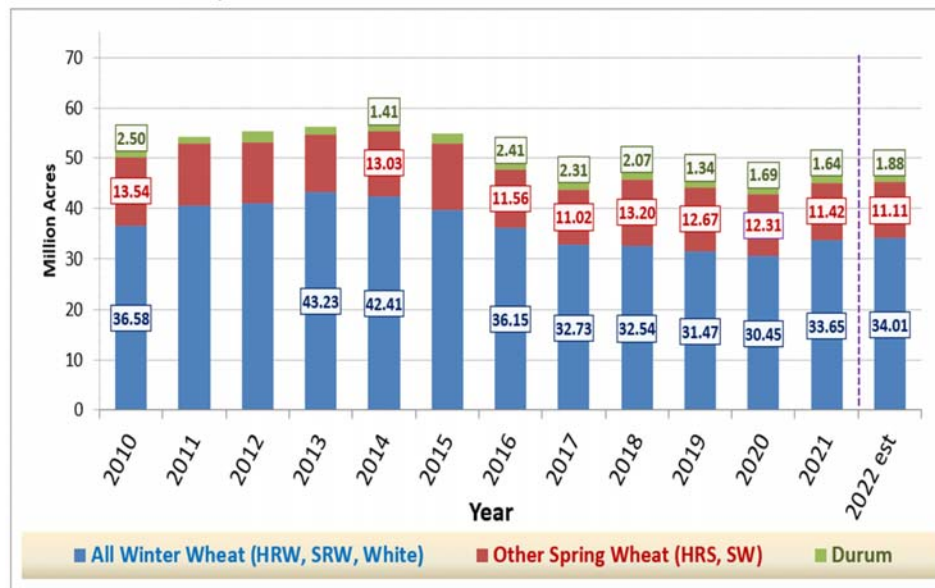
U.S. Wheat Supply and Demand

Item	2021/2022 estimate	2022/2023 forecast	Change from August 12	Change from 2021/2022
Planted area (million acres)	46.7	47.0	--	0.3
Harvested area (million acres)	37.2	37.5	--	0.4
Yield (bushels per acre)	44.3	47.5	--	3.2
<i>----- Million bushels -----</i>				
Beginning stocks	845	660	--	-185
Production	1,646	1,783	--	137
Imports	95	110	--	15
Total supply	2,586	2,553	--	-33
Food use	972	970	--	-2
Seed	60	68	--	8
Feed and residual	94	80	--	-14
Domestic use	1,126	1,118	--	-8
Exports	800	825	--	25
Total use	1,926	1,943	--	17
Ending stocks	660	610	--	-50
<i>----- Percent -----</i>				
Stocks to use ratio	34.3	31.4	--	-2.9
<i>----- Dollars per bushel -----</i>				
Average market price	7.63	9.00	-0.25	1.37
-- No change.				

September 12, 2022

U.S. Wheat Planted Acreage – All Winter, Other Spring & Durum Classes (since MY 2010/11) as of the September 12, 2022 USDA NASS Crop Production Report

51



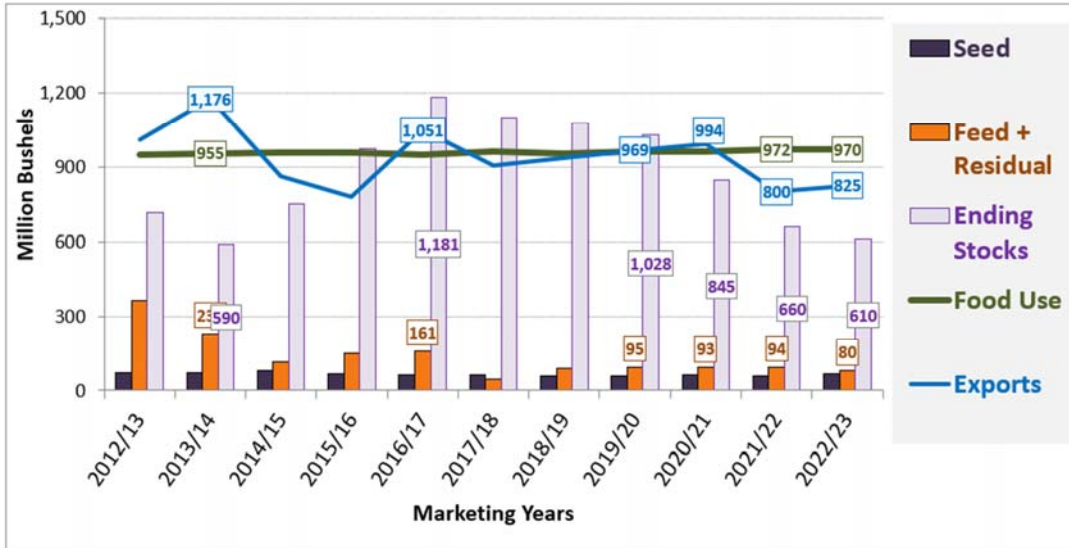
U.S. Wheat Total Supplies: MY 2012/13 – Projected MY 2022/23 as of the September 12, 2022 USDA WASDE Report

52



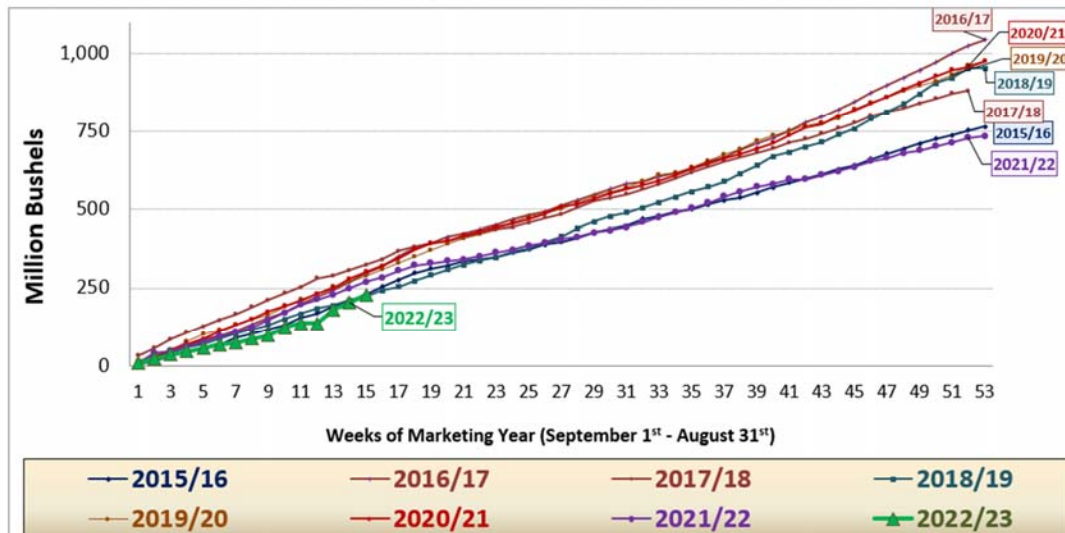
U.S. Wheat Use & Ending Stocks: MY 2012/13 – “New Crop”

MY 2022/23 as of the September 12, 2022 USDA WASDE Report



U.S. All Wheat Exports: MY 2015/16 thru "New Crop" MY

2021/22 as of USDA FAS Weekly Export reports through September 8, 2022



U.S. Wheat Market Outcomes for MY 2022/23^{KSU}

USDA & KSU Projections based on the September 12, 2022 USDA WASDE Report + KSU Scenarios

Item	USDA "New Crop" MY 2022/23 9/12/2022 USDA WASDE	KSU Scenario #1 "New Crop" 2022/23 -25 mb U.S. Exports: 800 mb	KSU Scenario #2 "New Crop" 2022/23 -50 mb U.S. Exports: 775 mb	KSU Scenario #3 "New Crop" 2022/23 -75 mb U.S. Exports: 750 mb
% Probability of Happening ^{KSU est.}	65% prob	20% prob.	10% prob	5% prob.
Planted Area (million acres)	46,992	46,992	46,992	46,992
Harvested Area (million acres)	37,527	37,527	37,527	37,527
% Harvested/Planted Area	79.89%	79.89%	79.89%	79.89%
Yield / harvested acre (bu/ac)	47.5	47.5	47.5	47.5
Million				
Beginning Stocks	660	660	660	660
Production	1,783	1,783	1,783	1,783
Imports	110	110	110	110
Total Supply (million bushels)	2,553	2,553	2,553	2,553
Food Use	970	970	970	970
Seed Use	68	68	68	68
Exports	825	800	775	750
Feed & Residual Use	80	80	80	80
Total Use (million bushels)	1,943	1,918	1,893	1,868
Ending Stocks (million bushels)	610	635	660	685
% Ending Stocks-to-Use	31.39%	33.11%	34.87%	36.67%
Days of Supply (% S/U x 365 days)	115 days	121 days	127 days	134 days
U.S. Wheat Avg. Farm Price (\$/bushel)	\$9.00 Vs \$9.24 /bu. KSU-MRW Futures ^{Est.}	\$8.20 Vs \$9.24 /bu. KSU-MRW Futures ^{Est.}	\$7.35 Vs \$9.24 /bu. KSU-MRW Futures ^{Est.}	\$6.60 Vs \$9.24 /bu. KSU-MRW Futures ^{Est.}

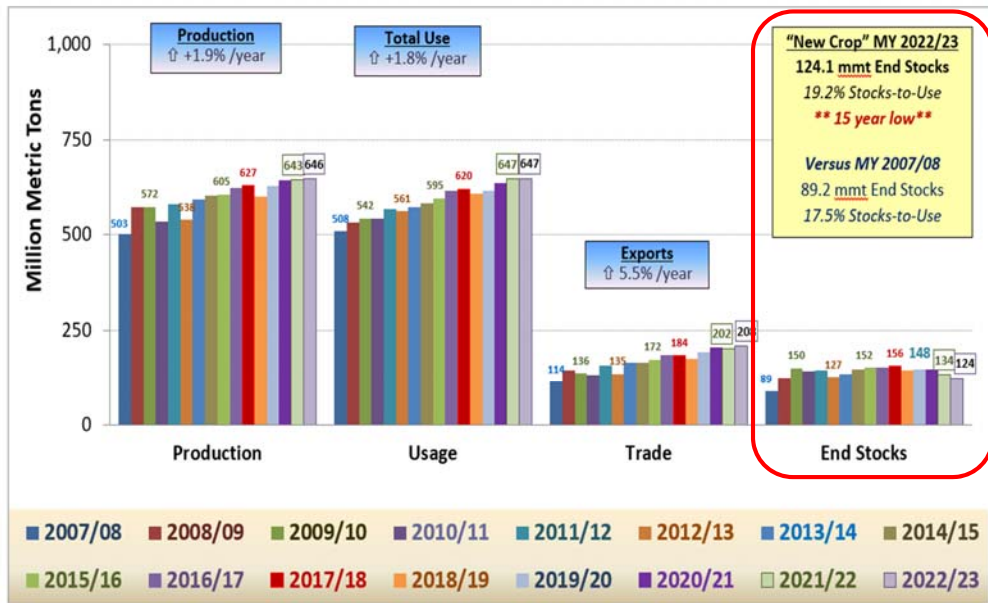
U.S. Wheat Ending Stocks vs U.S. Cash \$'s: MY 2009/10 thru

"New Crop" MY 2022/23 – September 12, 2022 USDA WASDE with KSU Projections



"World Less-China" Wheat Usage & Ending Stocks:

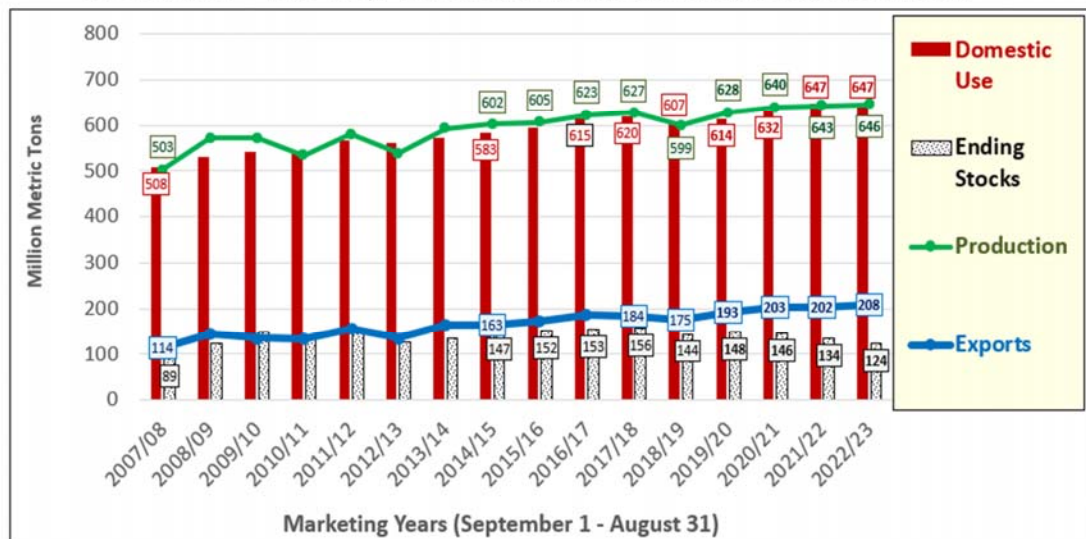
MY 2007/08 - "New" MY 2022/23, as of the September 12, 2022 USDA WASDE Report



57

World Less-China Wheat Supply-Demand Trends

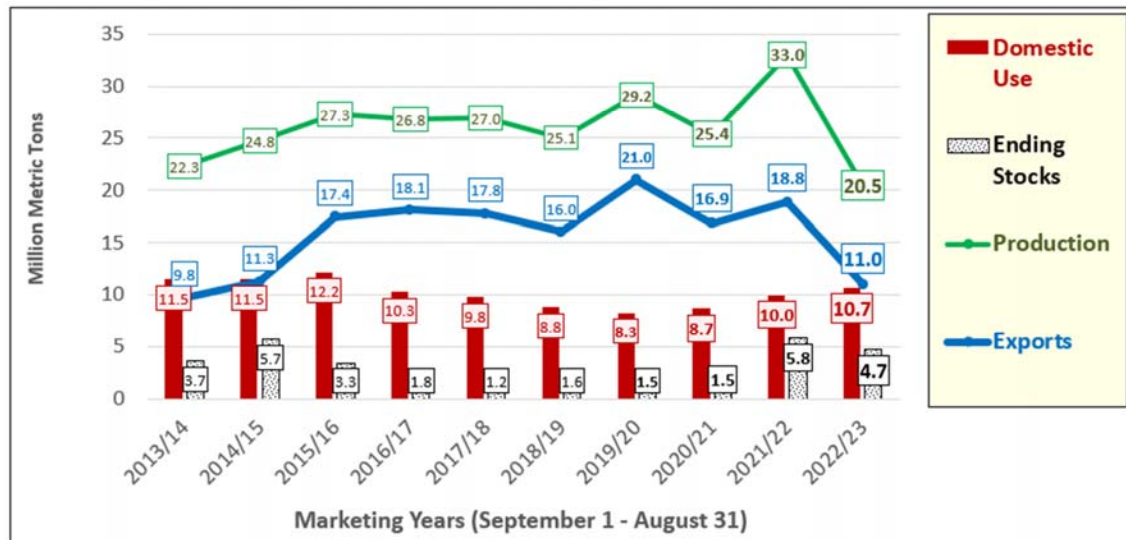
MY 2007/08 – "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report



58

Ukraine Wheat S-D Trends: MY 2013/14 – “New Crop” MY

2022/23 as of the September 12, 2022 USDA WASDE report

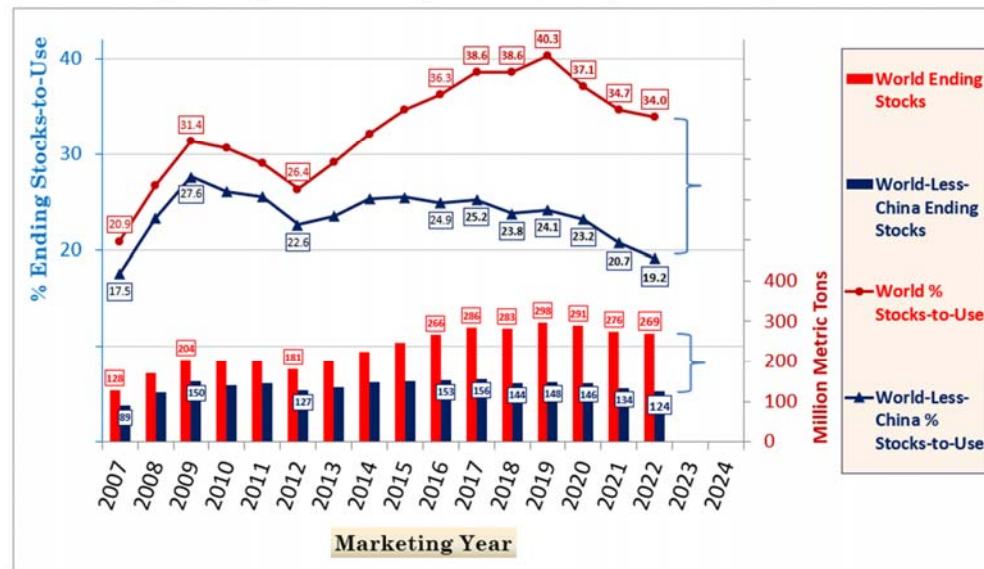


Russia Wheat Supply-Demand Trends: MY 2013/14 – “New Crop” MY 2022/23 as of the September 12, 2022 USDA WASDE report



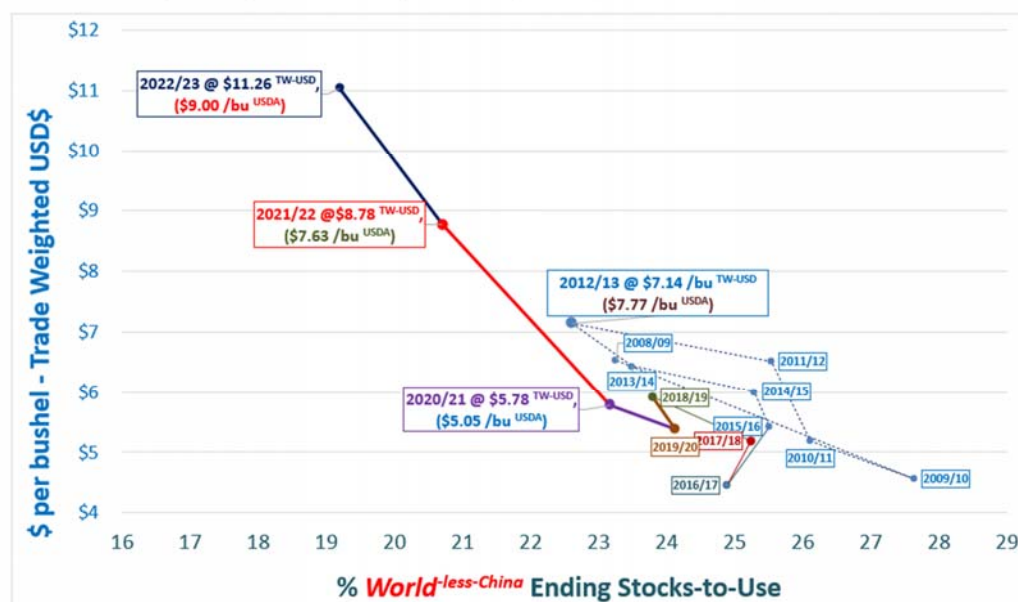
World vs "World Less-China" Ending Stocks & % Stocks-to-Use

MY 2007/08 through "New" MY 2022/23 as of the September 12, 2022 USDA WASDE report



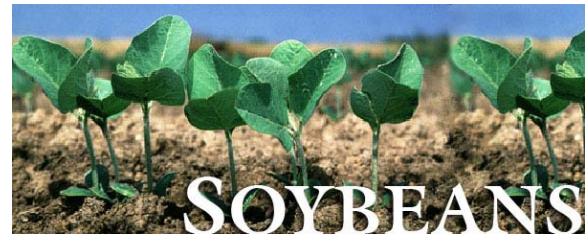
U.S. Wheat \$ Trade-Wtd. USD\$ Adj vs "World Less-China" % Stocks-to-Use:

MY 2008/09 through "New" MY 2022/23 as of the September 12, 2021 USDA WASDE report



Soybean Markets

63



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ELEC. SOYBEANS (@S2022X)

Symbol Search | Symbol Lookup

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

Current Month: Nov 2022 prev | next

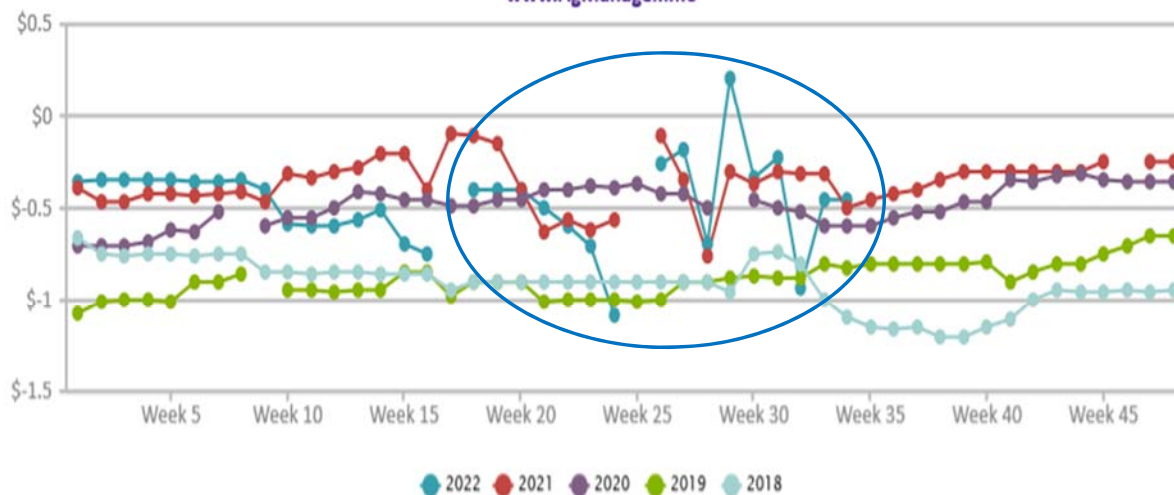


64

Kansas Cash & Futures Prices						
Date						
9/21/2022 (Morning Mkts)						
Grain Futures Contracts		Closing \$				
NOV 2022 Soybeans (Lead Contract)		\$14.7875				
NOV 2023 Soybeans (2023 Harvest Contract)		\$13.9475				
9/21/2022 (Morning Mkts)		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}
Soybean Spot Cash\$	\$13.99	\$14.61	\$15.30	\$13.81	\$14.80	\$15.69
Soybean Spot Cash Basis	(\$0.80)	(\$0.18)	\$0.51	(\$0.98)	\$0.01	\$0.90
Soybean Harvest FC\$: Fall ²⁰²²	\$12.90		\$13.23			\$13.35
Soybean Harvest FC\$ Basis	(\$1.05)		(\$0.72)			(\$0.60)

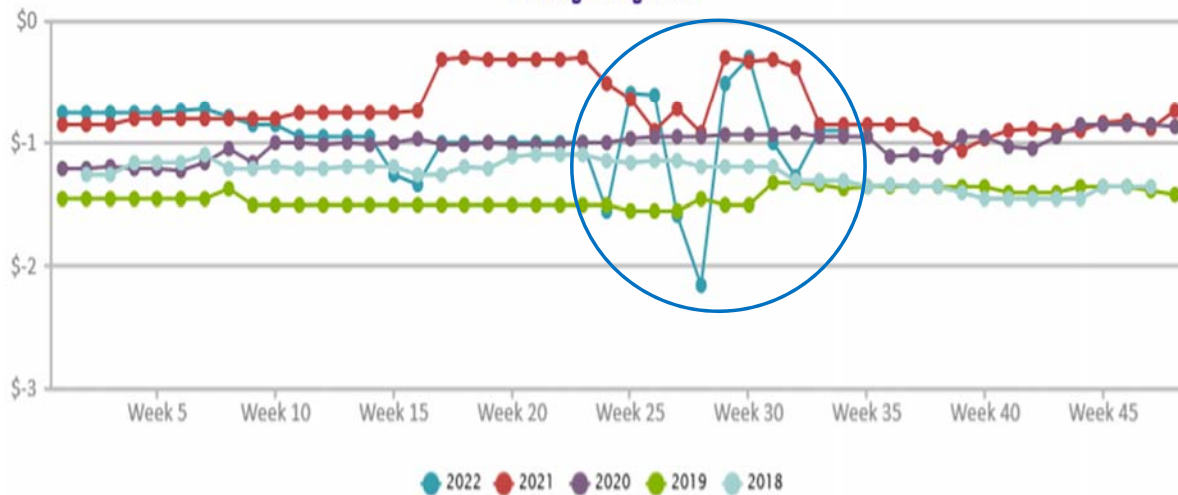
SALINA, KS: Soybeans Basis - CARGILL

www.AgManager.info



GARDEN CITY, KS: Soybeans Basis - GARDEN CITY COOP

www.AgManager.info



U.S. Soybeans Supply and Demand

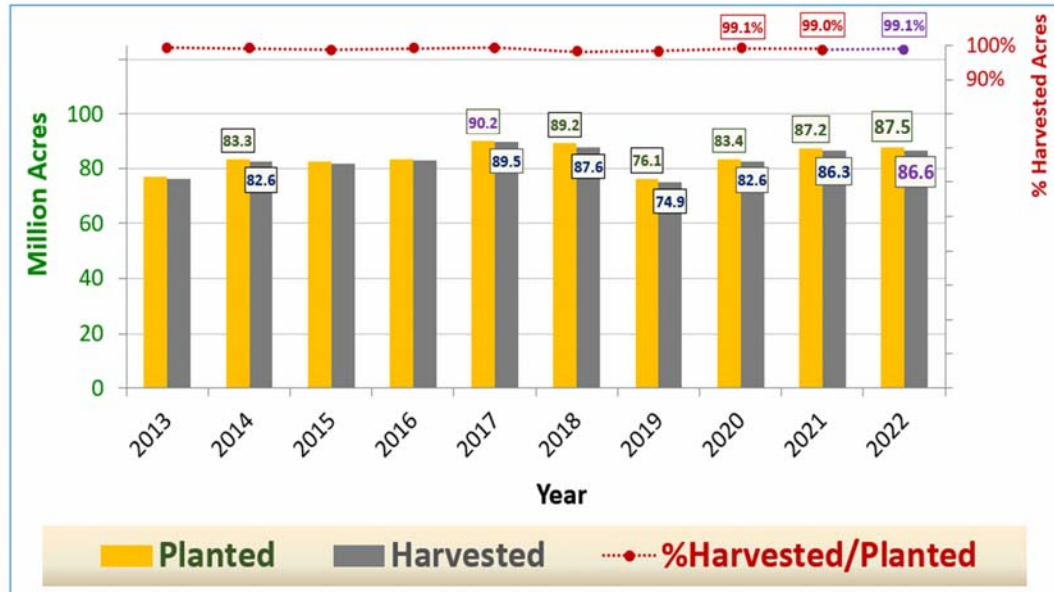
Item	2021/2022		2022/2023		
	Estimate	Change from August 12	Forecast	Change from August 12	Change from 2021/2022
Planted area (million acres)	87.2	--	87.5	-0.6	0.3
Harvested area (million acres)	86.3	--	86.6	-0.6	0.3
Yield (bushels per acre)	51.4	--	50.5	-1.4	-0.8
----- Million bushels -----					
Beginning stocks	257	--	240	15	-17
Production	4,435	--	4,378	-152	-57
Imports	15	--	15	--	0
Total supply	4,707	--	4,633	-138	-74
Crush	2,205	--	2,225	-20	20
Seed and Residual	117	**	123	-3	6
Domestic use	2,322	**	2,348	-23	26
Exports	2,145	-15	2,085	-70	-60
Total use	4,467	-15	4,433	-93	-34
Ending stocks	240	15	200	-45	-40
----- Percent -----					
Stocks to use ratio	5.4	0.3	4.5	-0.9	-0.9
----- Dollars per bushel -----					
Average market price	13.30	--	14.35	--	1.05

-- No change. ** Rounds to zero.

September 12, 2022

U.S. Soybean Planted & Harvested Acreage:

Years 2013-2022 as of the September 12, 2022 USDA WASDE Report



69

U.S. Soybean Production & Total Supplies: MY 2010/11

thru Projected "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE Report



70

U.S. Soybean Supply-Demand Balance Sheet: "New Crop" MY

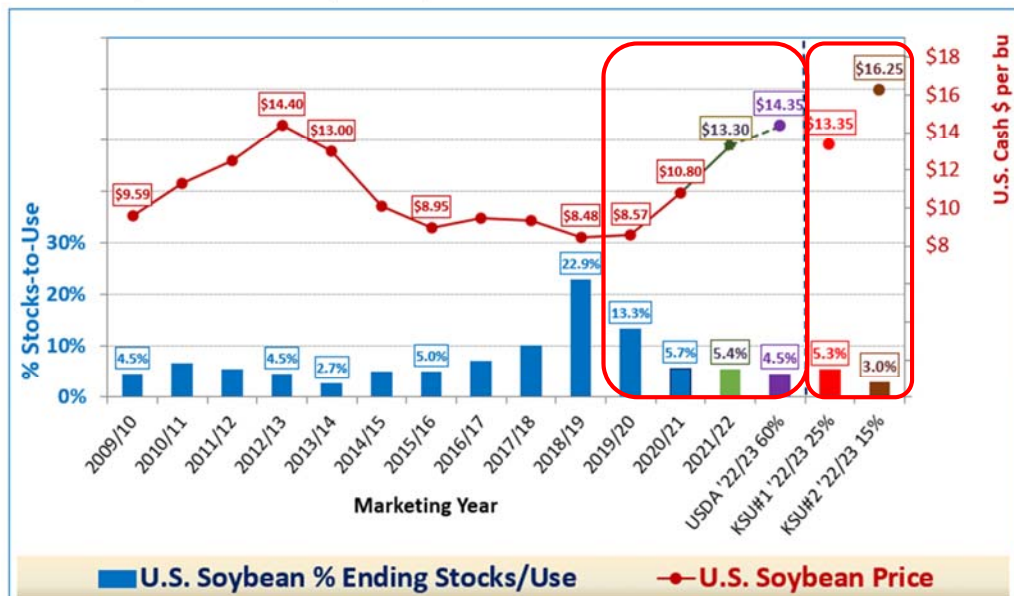
2022/23 as of the September 12, 2022 USDA WASDE report with KSU Scenarios for "New Crop" MY 2022/23

Item	A. USDA WASDE "New Crop" 2022/23 September 12, 2022	B. KSU Scenario #1 "New Crop" 2022/23 Lower Exports: 2.050 bb	C. KSU Scenario #2 "New Crop" 2022/23 Low Yields: 49.5 bu/ac Lower Exports: 2.050 bb
% Probability of Occurring (KSU)	60% ^{KSUest}	25% ^{KSUest}	15% ^{KSUest}
Planted Area (million acres)	87.455	87.455	87.455
Harvested Area (million acres)	86.631	86.631	86.631
% Harvested/Planted Area	99.06%	99.06%	99.06%
Yield / harvested acre (bu/ac)	50.5	50.5	49.5
Beginning Stocks (million bushels)	225	225	225
Production (million bu.)	4,378	4,378	4,288
Imports (million bu.)	15	15	15
Total Supply (million bu.)	4,633	4,633	4,528
Domestic <u>Crushings</u>	2,225	2,225	2,225
Exports	2,085	2,050	2,050
Seed	102	102	102
Residual	21	21	21
Total Use	4,433	4,398	4,398
Ending Stocks	200	235	130
% Ending Stocks-to-Use	4.51%	5.34%	2.96%
Days of Supply (% S/U x 365 days)	16.5 days	19.5 days	10.8 days
	\$14.35 ^{USDA}	\$13.35	\$16.25
U.S. Avg. Farm Price (\$/bu)	Vs \$14.81 /bu KSU Futures & Basis-based forecast #12/2022	Vs \$14.81 /bu KSU Futures & Basis-based forecast #12/2022	Vs \$14.81 /bu KSU Futures & Basis-based forecast #12/2022

71

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

2009/10 – "New Crop" 2022/23 as of the Sept. 12, 2022 USDA WASDE, with KSU scenarios

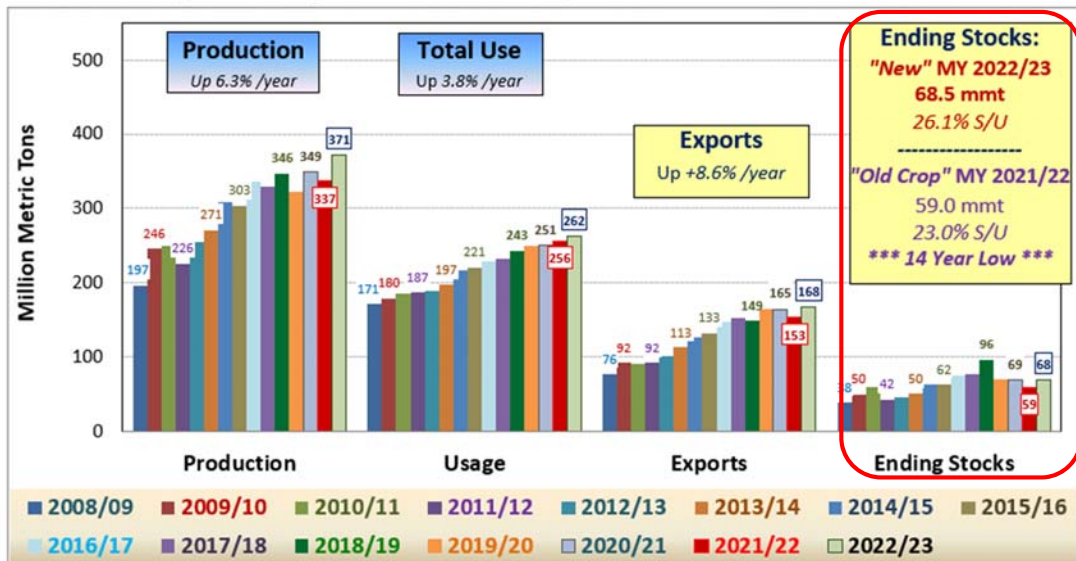


72

“World Less-China” Soybean Use & Ending Stocks

73

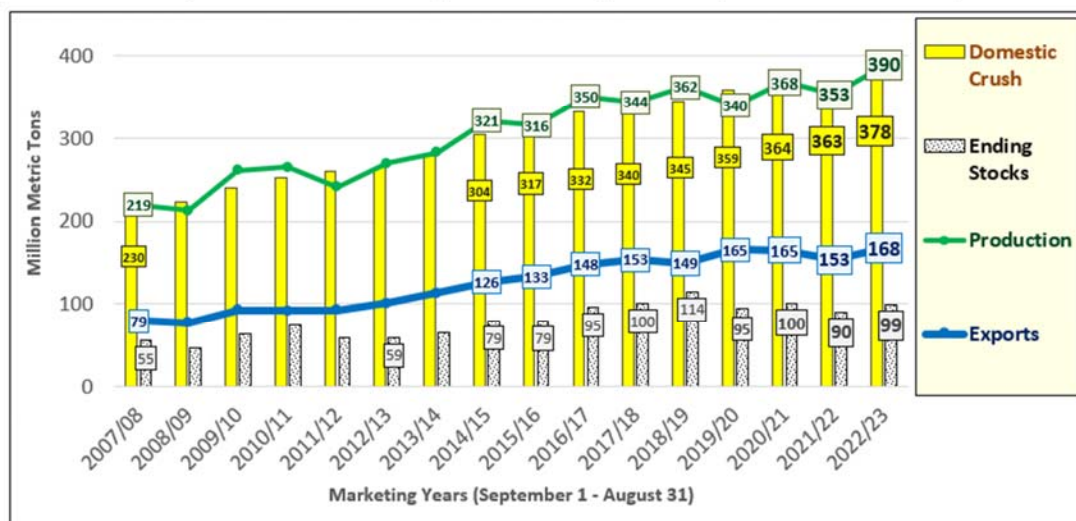
MY 2008/09 through “New” MY 2022/23 as of the September 12, 2022 WASDE Report



World Soybean Supply-Demand

74

MY 2007/08 – “New” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



Brazil Soybean Supply-Demand

MY 2007/08 – “New” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



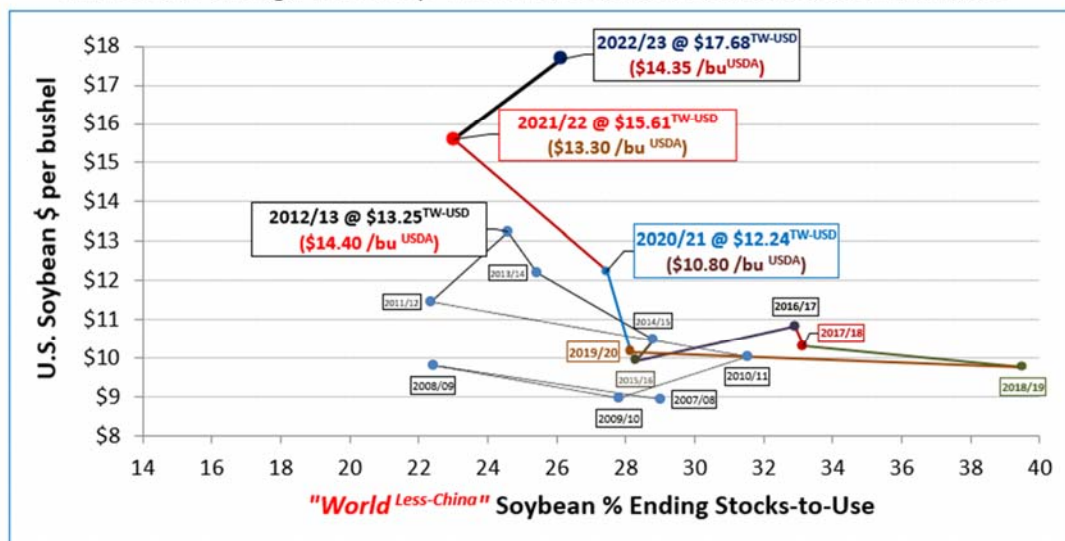
World vs % “World Less-China” Soybean Stocks-to-Use

MY 2007/08 through “New Crop” MY 2022/23, as of the September 12, 2022 USDA WASDE report.



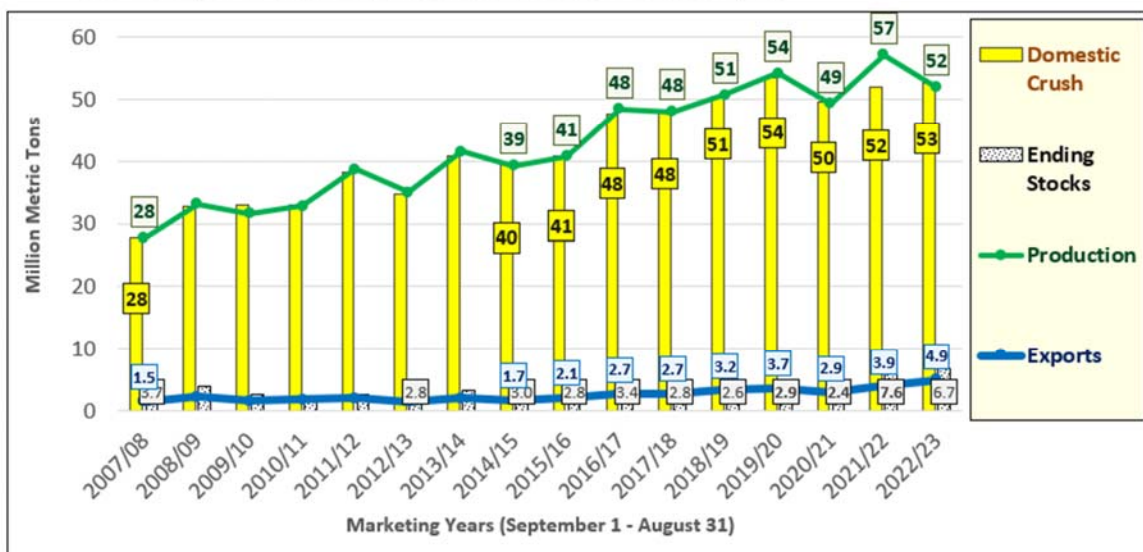
U.S. Soybean $\$^{USD\$ Adj}$ vs *"World Less-China"* % Stks/Use

MY 2007/08 through "New Crop" MY 2022/23 as of the September 12, 2022 WASDE Report

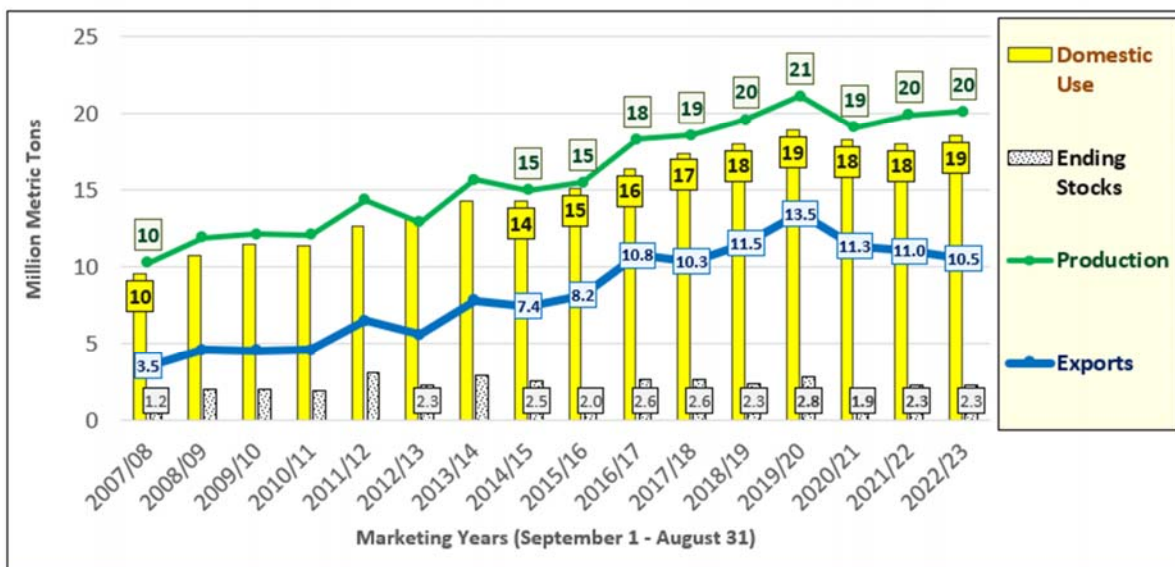


World Sunflower Supply-Demand Trends: MY 2007/08 – "New"

MY 2022/23 as of the September 12, 2022 USDA WASDE Report



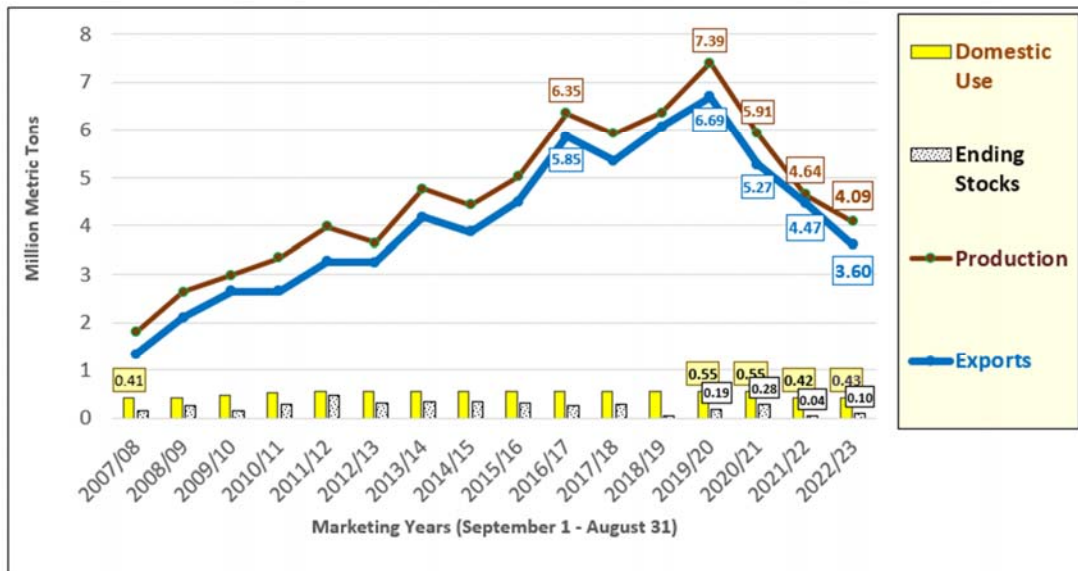
World Sunflower Oil Supply-Demand Trends: MY 2007/08 – “New” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



Ukraine Sunflower S-D Trends: MY 2013/14 – “New” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



Ukraine Sunflower Oil S-D Trends: MY 2013/14 – “New” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



Closing Perspective

82



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What to anticipate: Fall 2022 – Year 2023

□ USDA Reports ⇒ *Bringing grain market volatility*

- Release dates: Oct. 12th, Nov. 9th, Dec. 9th & January 2023
 - Risk of further 2022 crop production declines for U.S. corn, soybean & sorghum from the **Western & Central Corn Belt & Northern Plains states** – yields or reduced acres
 - Would be *supportive-to-bullish* to grains – depending on degree of crop declines

□ “Active” Domestic & Foreign grain purchases @ harvest

- User's securing available **“New Crop”** supplies *Raised Rail Bids for Corn in WCB*
- *“Inverted” futures* & strong basis likely during Sep-Nov²⁰²² Quarter

What to anticipate: Fall 2022 into Year 2023

□ Fall Seeding²⁰²² of Hard Red Winter Wheat in Kansas

- **Support from strong “New Crop” HRW Wheat futures**
& historically strong 2023 Crop Revenue Insurance Planning Price
 - JULY²⁰²³ KC HRW Wheat futures Projected \$ @ \$8.79 /bu ^{RMA}
 - **KSU Costs:** \$7.25 /bu ^{West (W-SC-F)} & \$5.58-\$6.27 /bu ^{SC-NC (Rotation)}
- **Strong price competition for acres** from other Kansas crops in 2023
- **Soil moisture prospects in Fall 2022** will likely be the key factor
 - **La Nina weather** pattern continuation could cause dry conditions in fall-winter 2022

What to anticipate: Fall 2022 – Year 2023

□ 2023 Spring Planting of Feedgrains & Oilseeds

- With tight stocks across crops – any threats to successfully planting 2023 U.S. corn or soybeans could cause **STRONG** market price volatility
 - NOV²⁰²³ Soybean futures @ \$13.89 /bu ^{9/20/2022}
 - DEC²⁰²³ Corn futures @ \$6.31 /bu ^{9/20/2022}
 - Fall 2023 “New Crop” Soy/Corn \$ Ratio = $\$13.89 \div \$6.31 = 2.20$ (Advantage - Corn)
- Strong “new crop” price competition likely for 2023 planted acres between Feedgrains & Oilseeds ⇒ beginning **SOON** after the 2022 fall harvest

What to anticipate: Fall 2022 – Year 2023

Q? Are Corn, Soybeans & Wheat futures *at risk* to fall sharply in the last ½ of year 2023?

- With “tight” beginning stocks across these crops – there is **LESS RISK** of declines until **AT LEAST** late spring – early summer
- THEN the **risk** to grain sellers is that crop markets will discount the risk of **“short crops”** in 2023
 - ⇒ IF in Summer ²⁰²³ U.S. & Foreign crop prospects become **“OK-to-Good”**, THEN grain prices will likely **“slide”** into Fall 2023 (by traders w. LESS motive to “buy the market”)



Questions?

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Blog: www.ksugrains.wordpress.com

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