

Grain Market Update – 2022/2023

KSU Agricultural Lenders Meetings

Garden City & Manhattan, Kansas

September 27-28, 2022

DANIEL O'BRIEN

EXTENSION AGRICULTURAL ECONOMIST

KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



2

I. Grain Futures Closes, Changes & Market Carry on Tuesday, September 27, 2022

Corn Futures				Soybean Futures				Kansas HRW Wheat Futures			
Month	Close	Change	Carry /mo.	Month	Close	Change	Carry /mo.	Month	Close	Change	Carry /mo.
Dec ^H 22	\$6.64 ¼	↓ \$0.02 ¼	---	Nov ^{L-H} 22	\$14.05 ¼	↓ \$0.02 ¼	---	Dec ^L 22	\$9.44 ¼	↑ \$0.01	---
Mar 23	\$6.70	↓ \$0.02 ¼	+\$0.01 ⁷⁵	Jan 23	\$14.10 ½	↓ \$0.03 ½	+\$0.02 ⁶²⁵	Mar 23	\$9.40 ½	No Change	-\$0.01 ³³³
May 23	\$6.70 ½	↓ \$0.03	-\$0.00 ²⁵	Mar 23	\$14.13 ¾	↓ \$0.03 ¼	+\$0.01 ⁶²⁵	May 23	\$9.38 ½	No Change	-\$0.01
July 23	\$6.64 ¾	↓ \$0.03	-\$0.02 ⁸⁷⁵	May 23	\$14.18 ½	↓ \$0.02	+\$0.02 ³⁷⁵	July ^H 23	\$9.26	↑ \$0.04	-\$0.06 ²⁵
Sept 23	\$6.18 ½	↓ \$0.02 ¼	-\$0.23 ¹²⁵	July 23	\$14.16 ¼	↓ \$0.03 ¼	-\$0.01 ¹²⁵	Sept 23	\$9.15	↑ \$0.09 ¼	-\$0.05 ⁵⁰
Dec ^H 23	\$6.07 ½	↓ \$0.02 ½	-\$0.03 ⁵⁰	Aug 23	\$14.01 ½	↓ \$0.01 ¼	-\$0.14 ⁷⁵	Dec 23	\$9.20	↑ \$0.03 ½	+\$0.01 ⁶⁶⁷
Mar 24	\$6.14 ½	↓ \$0.02 ½	+\$0.03 ⁶⁷	Sep 23	\$13.66 ½	↑ \$0.01 ¼	-\$0.35	Mar 24	\$9.12	↑ \$0.07 ¼	-\$0.02 ⁶⁶⁷
May 24	\$6.18 ½	↓ \$0.00 ¼	+\$0.02	Nov ^H 23	\$13.45 ¼	↓ \$0.04 ¼	-\$0.10 ³⁷⁵	May 24	\$8.97 ½	↑ \$0.07 ¼	-\$0.07 ²⁵

ELEC. CORN (@C2022Z)

Print

3



ELEC. HRW WHEAT (@KW2022Z)

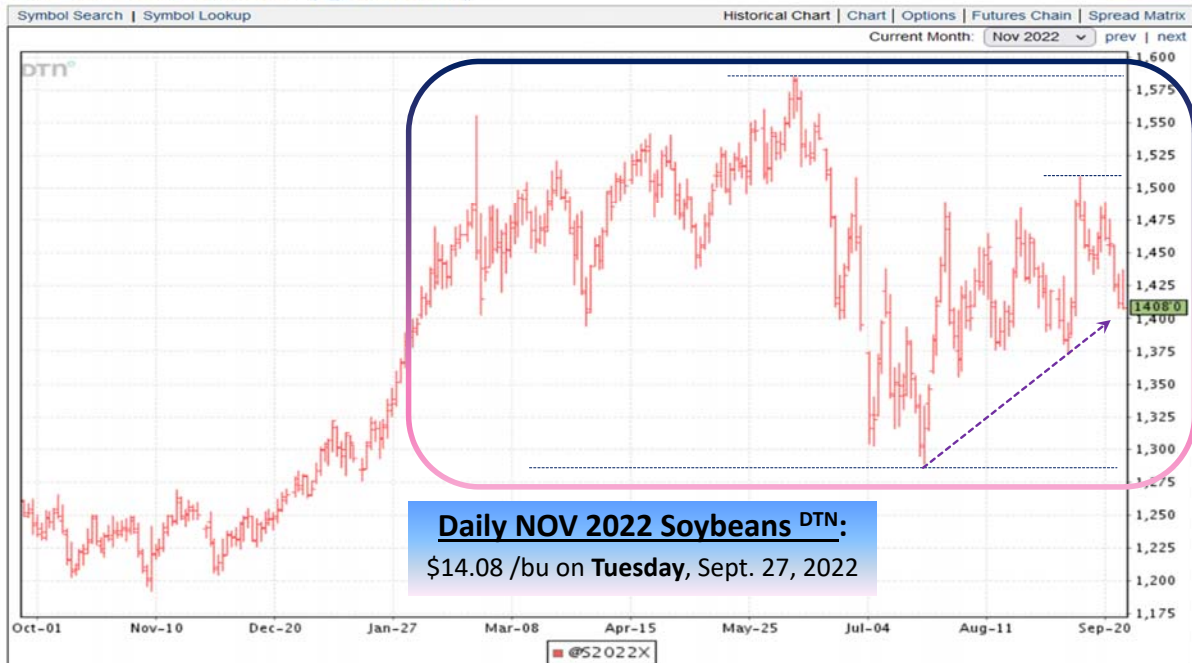
Print

4



ELEC. SOYBEANS (@S2022X)

5



Market Perspective

6



KANSAS STATE
UNIVERSITY

Department of Agricultural Economics

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

7

1) 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.???

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

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

What to anticipate: Fall 2022 – Year 2023

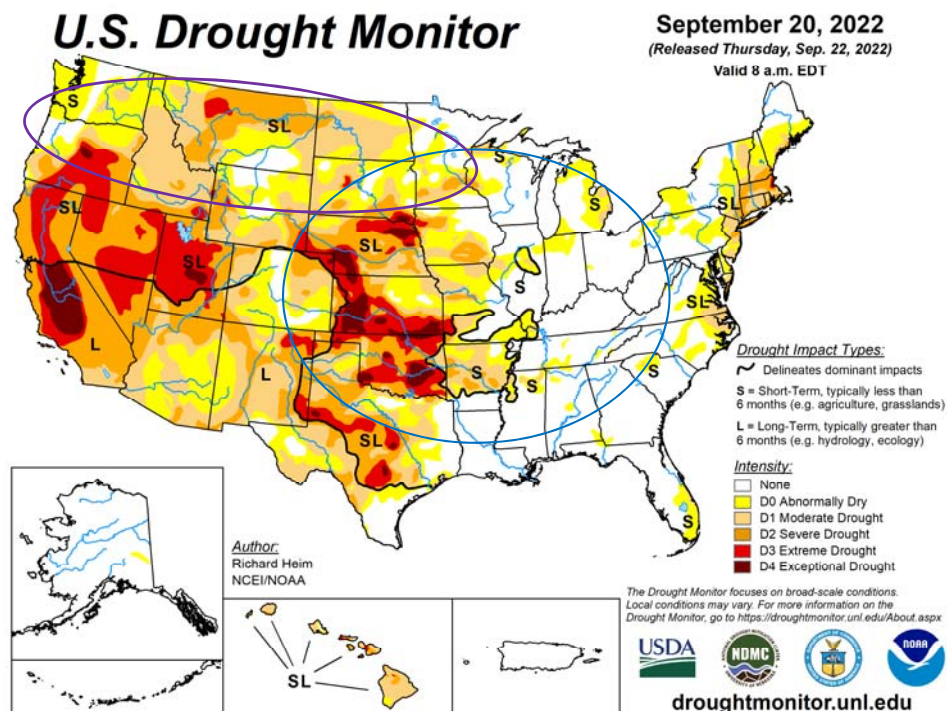
8

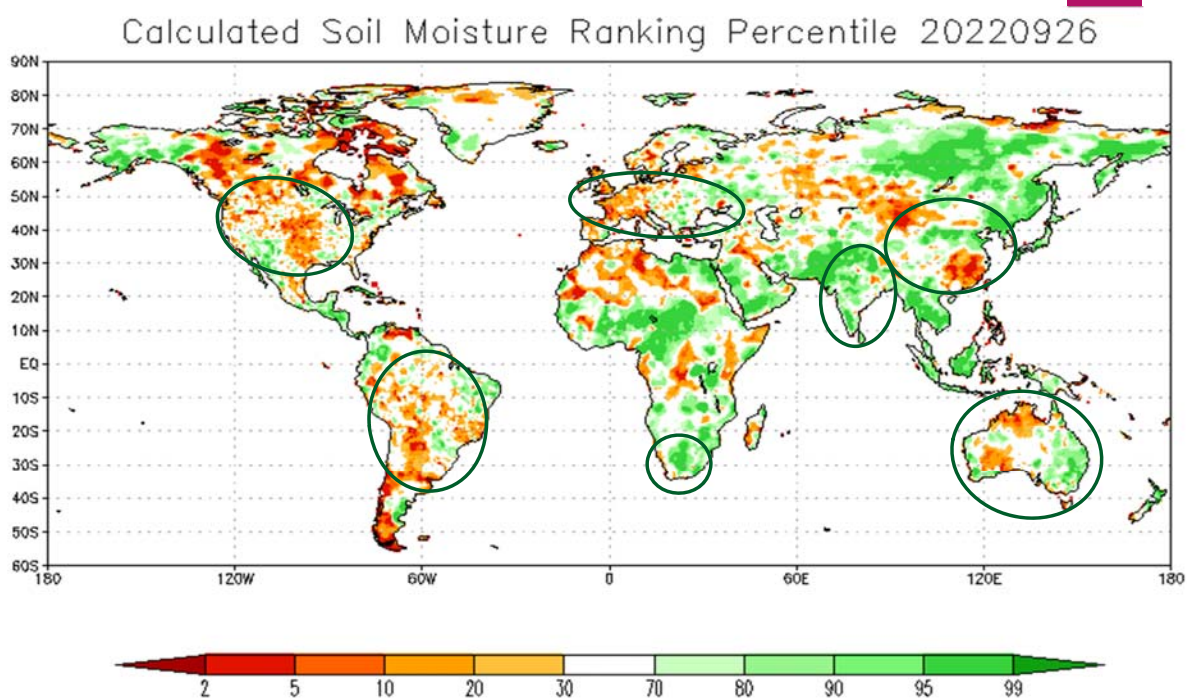
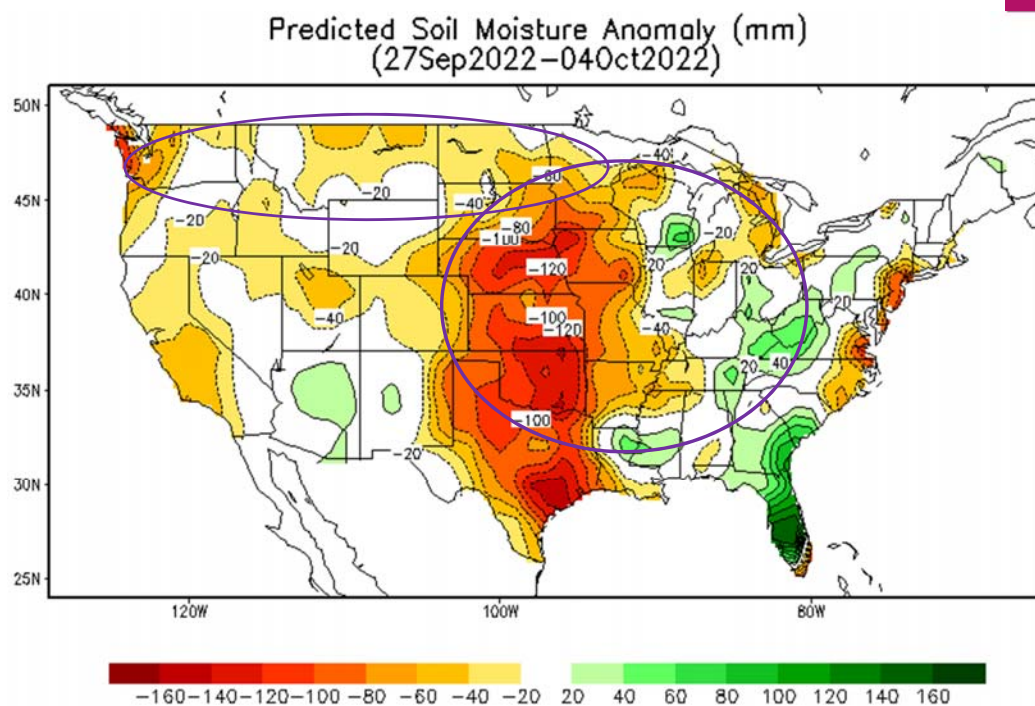
□ 2023 Spring Planting of Feedgrains & Oilseeds

- With tight stocks for all crops – any threats to planting 2023 U.S. corn or soybeans could cause **STRONG** market price volatility
 - NOV²⁰²³ Soybean futures @ \$13.47 /bu ^{9/27/2022}
 - DEC²⁰²³ Corn futures @ \$6.10 /bu ^{9/27/2022}
 - Fall ²⁰²³ Soy/Corn \$ Ratio = $\$13.47 \div \$6.10 = 2.21$ *Advantage Soybeans*
- ✓ Strong “*New Crop*” competition for 2023 planted acres between Feedgrains & Oilseeds ⇒ *starting SOON* after 2022 fall harvest

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

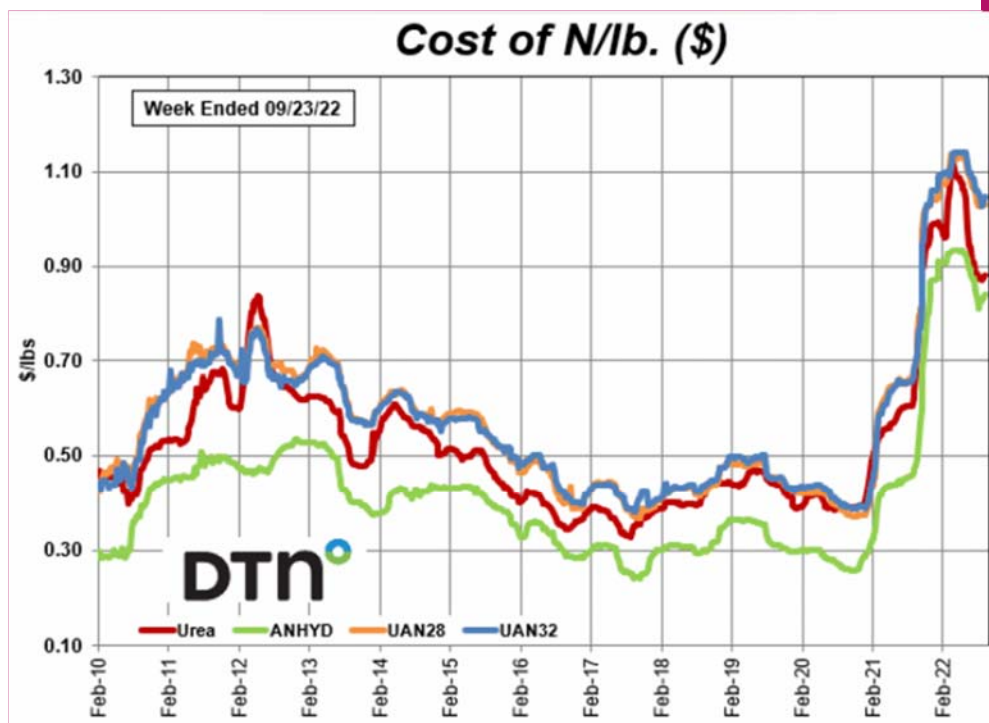
- “Chances for La Nina are expected to gradually decrease from 86% to 60% during Dec-Feb 2022-2023” *Reuters 8/11/2022*
- “A rare 3-peat La Nina is expected this winter.” *Weather Science 8/12/2022*
- “La Nina Conditions to Go On, Chances Drop Into Early 2023 - U.S. Forecaster” *Reuters 9/8/2022*
- “The majority of models predict an easing of the La Niña in early 2023, suggesting a relatively short-lived event....” *Australia Bureau of Meteorology, 9/13/2022*

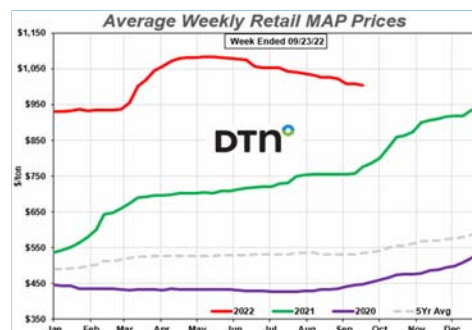
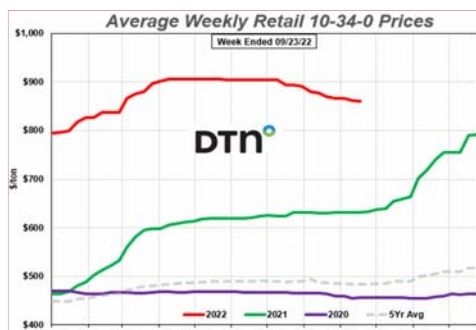
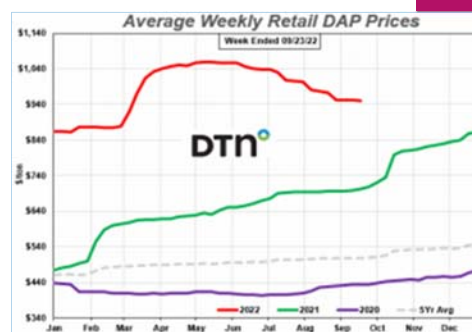
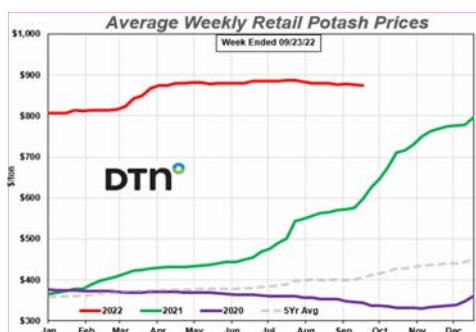




3) Continued high 2023 Fertilizer & other Crop Input Costs....

- *High natural gas & logistics costs, w. supply-chain challenges*





Grain Market Outlook 2022-2023

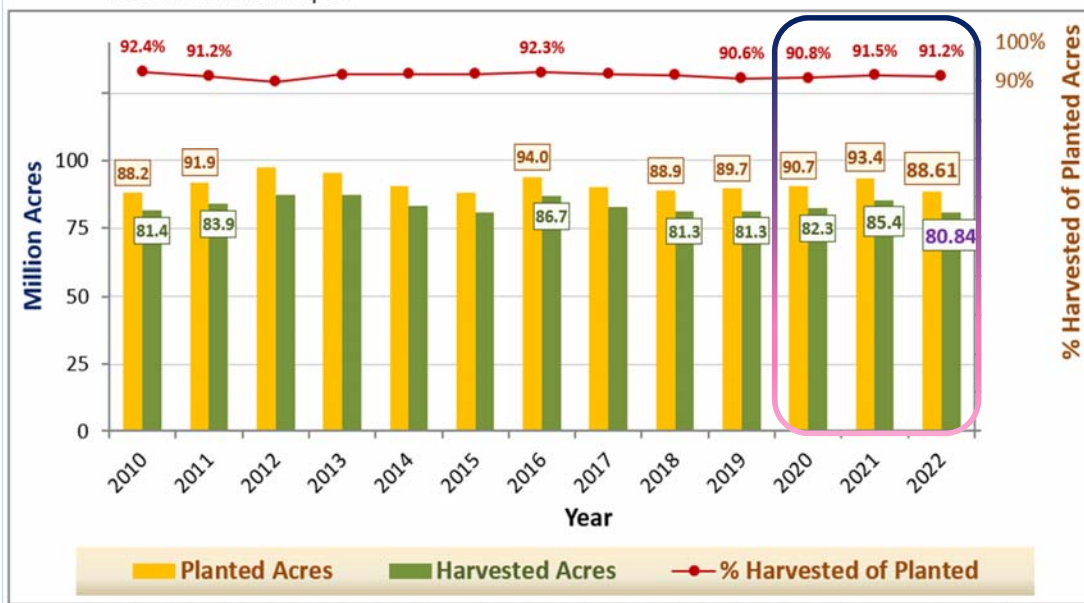
16

3) Continued high 2023 Fertilizer & other Crop Input Costs....

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

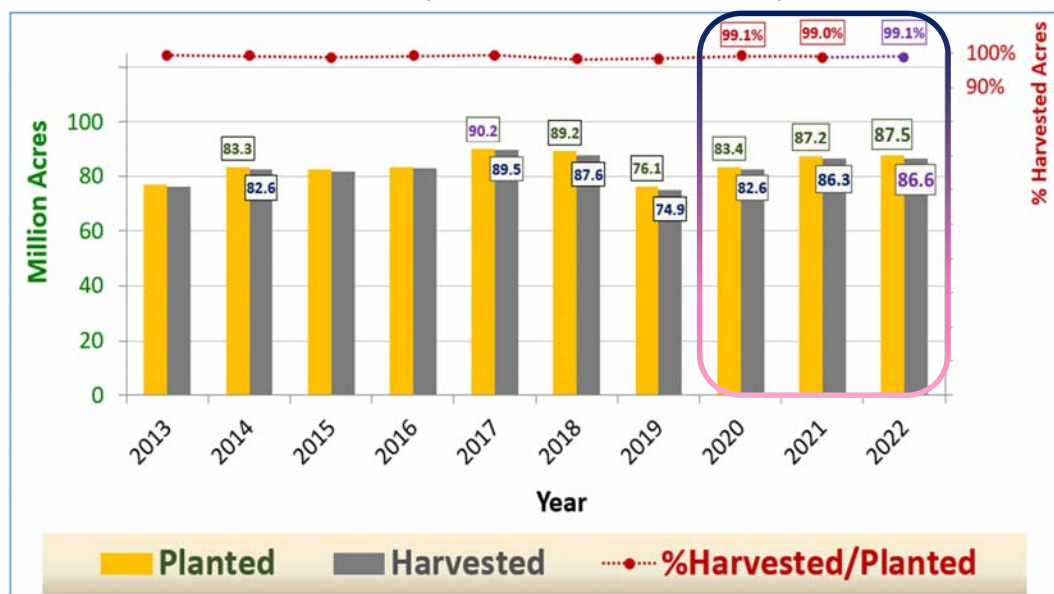
U.S. Corn Acreage for Years 2010-2022

as of the September 12, 2022 USDA WASDE Report



U.S. Soybean Planted & Harvested Acreage:

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

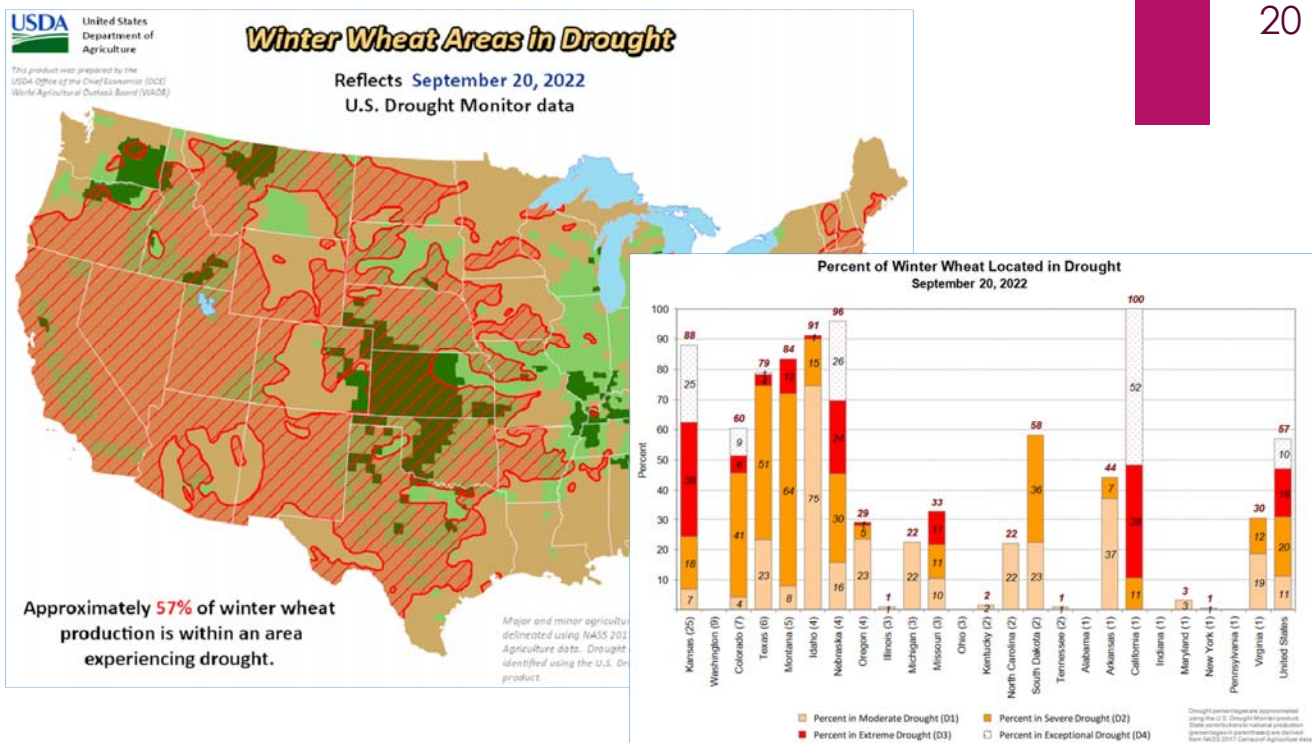


4) U.S. HRW Winter Wheat Seedings *Fall 2022* for Harvest *2023*

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

□ Support from strong “*New Crop*” HRW Wheat futures & a historically strong 2023 Crop Revenue Insurance Planning Price

- RMA Planning \$ JULY23 KC HRW Wheat = **\$8.79 /bu** @75% APH (*\$6.59 /bu @100% APH**)
- **KSU Costs:** ≈ \$7.25 /bu *West (W-SC-F)* & \$5.58-\$6.27 /bu *Central (Rotation)*



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

- *Ukraine-Russia War???: Prospects for de-escalation & grain trade?*
- **China-Taiwan???** - If this happens, would likely impact the global economy & U.S. grain trade
 - *U.S. Soybeans, Grain Sorghum, & likely ALL ag commodity markets impacted either directly or indirectly *****

6) U.S. / Foreign Ag response in 2023 to **HIGH** grain prices?

- **Crop Acres?** Normally, \uparrow prices \rightarrow \uparrow crop acres, BUT ALL \$'s are \uparrow
 - *Brazil soybean & corn acres and production to \uparrow in 2023*
- **Crop Costs?** IF *high* fertilizer & other crop costs occur, likely will limit Corn Acres _{Foreign + U.S.}
- **Rationing Grain Use:** Evidence of this in the September WASDE #s

What to anticipate: Fall 2022 – Year 2023

7) "Active" Domestic & Foreign grain buying @ Harvest 2022

- User's anxious to secure available **"New Crop"** supplies *WCB Rail Bids*
- *"Level-to-Inverted"* Corn & Soybean futures & *Strong Basis likely* during September-November 2022

What to anticipate: Fall 2022 – Year 2023

8) USDA Reports ⇒ *Bringing grain market volatility!!!*

- USDA Report release dates coming up:
 - Crop Production & WASDE: Oct. 12th, Nov. 9th, Dec. 9th, Jan. 2023
 - Possibly more 2022 crop declines in the **Western & Central Corn Belt & Northern Plains** – either *lower yields* OR *reduced acres*
 - Grain Stocks & Small Grain Summary: September 30th & January 2023

9) Overall Prospects for 2023 Grain Markets???

- Grain Prices supported @ High Levels 2022-2023 – *until* grain markets are confident of larger crops & likely rebuilding of stocks
 - Both 'Old Crop' Cash & 'New Crop' Forward Bids likely to be vulnerable to declines during *late Spring – Summer²⁰²³ into 2023 Fall harvest*
- Geopolitical Conflicts: Continued impact on World grain markets *Unknown*
- Impact of South America Crop Development: Brazil & Argentina crop prospects likely to drive U.S. price volatility during Jan-August 2023

What to anticipate: Fall 2022 – Year 2023

26

10) South America Market Influences ⇒ “Bid for Acres”

- Brazil & Argentina Corn & Soybean Crop Calendars
 - Brazil
 - Corn: 1st crop *Planting* – ****October****-December ⇒ Harvest: February-June
 - Soybeans: *Planting* – October-December ⇒ Harvest: March-June
 - Corn: 2nd crop *Planting* – January-February ⇒ Harvest: March-June
 - Argentina
 - Corn: *Planting* – ****mid-September****-December ⇒ Harvest: mid March-early June
 - Soybeans: 1st crop *Planting* – November-December ⇒ Harvest: Late March-early May
 - Soybeans: 2nd crop *Planting* – December-early Jan. ⇒ Harvest: mid April – mid June

Corn Markets

27



KANSAS STATE
UNIVERSITY

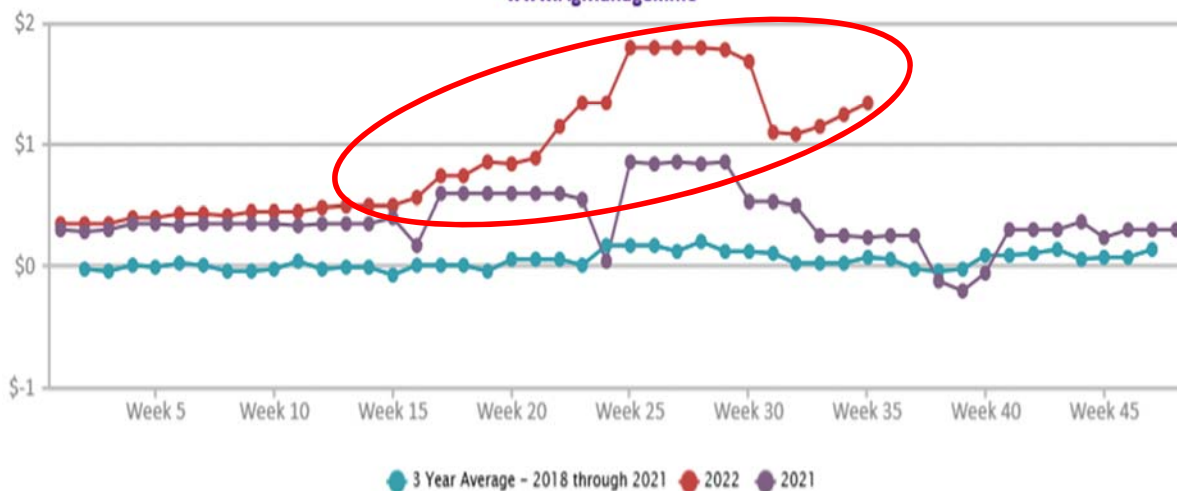
Department of Agricultural Economics

28

Kansas Cash & Futures Prices						
Date						
9/27/2022 (Closing Mkts)						
Grain Futures Contracts	Closing \$					
DEC 2022 Corn <small>(2022 Harvest contract)</small>	\$6.6475					
DEC 2023 Corn <small>(2023 Harvest Contract)</small>	\$6.0750					
9/27/2022 (Closing Mkts)	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\$	\$7.65	\$7.64	\$7.15	\$8.00	\$7.70	\$7.65
Corn Spot Cash Basis	\$1.00	\$0.99	\$0.50	\$1.35	\$1.05	\$1.00
Corn Harvest FC\$: Fall ²⁰²³	\$5.85	\$6.00	\$5.80	\$5.85	\$6.00	\$5.80
Corn Harvest FC\$ Basis	(\$0.23)	(\$0.08)	(\$0.28)	(\$0.23)	(\$0.08)	(\$0.28)

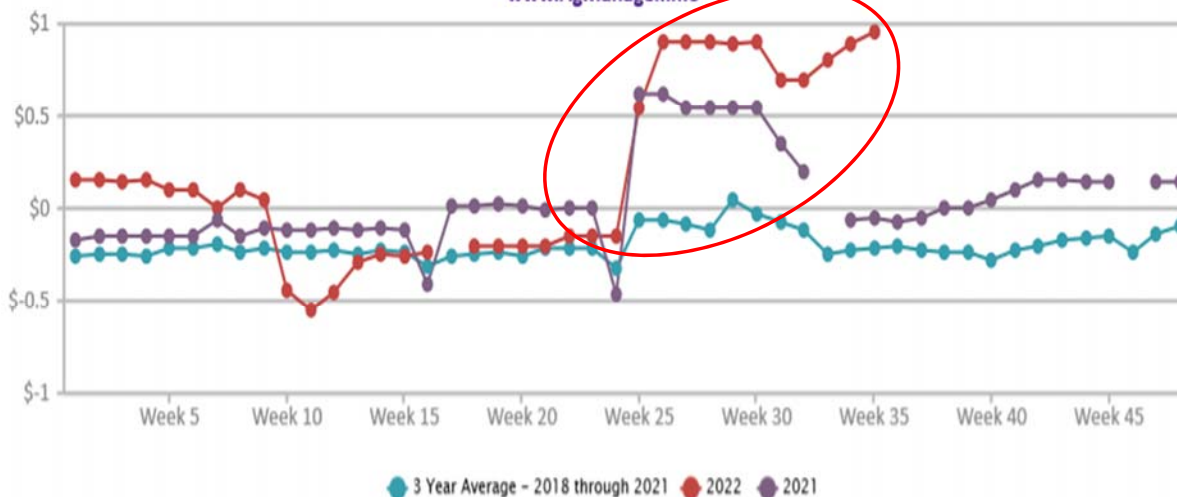
GARDEN CITY, KS: Corn Basis - GARDEN CITY COOP

www.AgManager.info



SALINA, KS: Corn Basis - CARGILL

www.AgManager.info



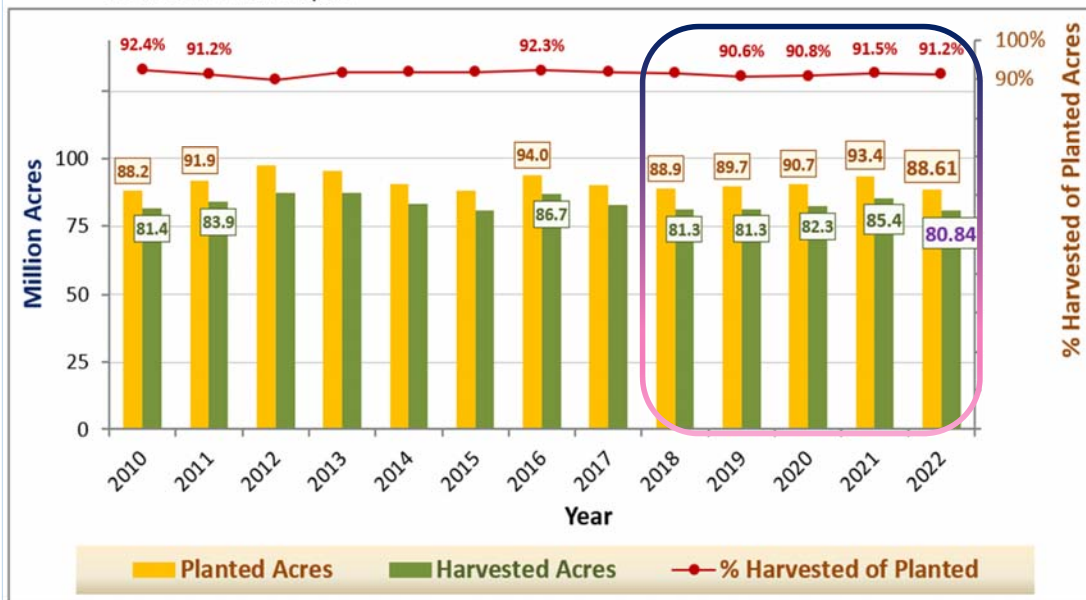
U.S. Corn Supply and Demand

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.

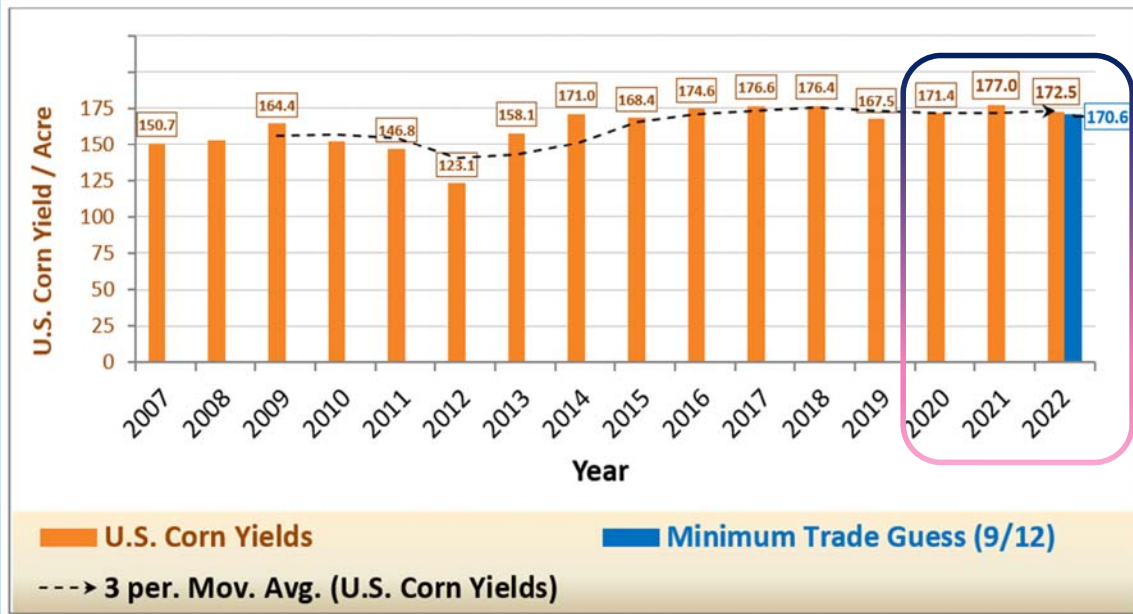
September 12, 2022

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

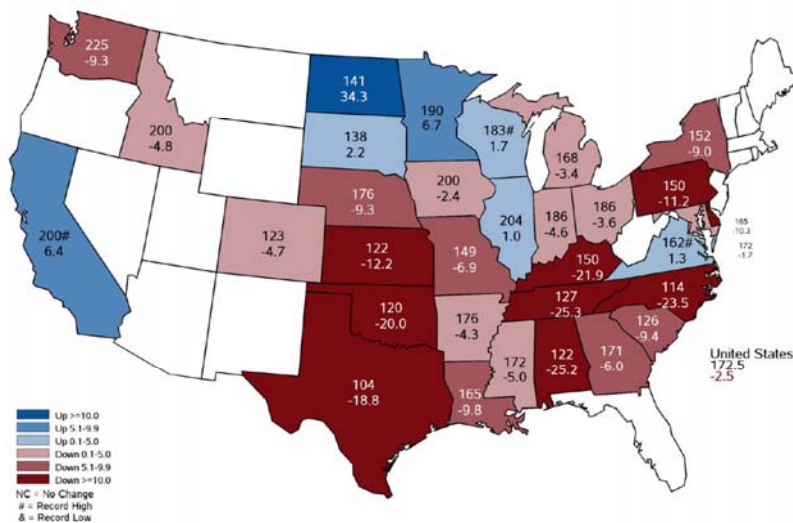
33



September 2022 Corn Yield Bushels and Percent Change from Previous Year



34



United States Department of Agriculture
National Agricultural Statistics Service

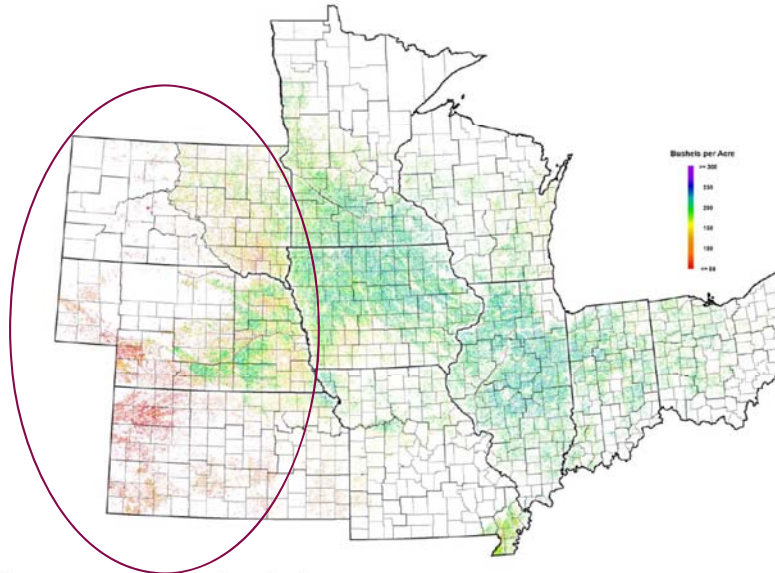
September 12, 2022



September 2022 Corn NASA Terra MODIS Modeled Yield



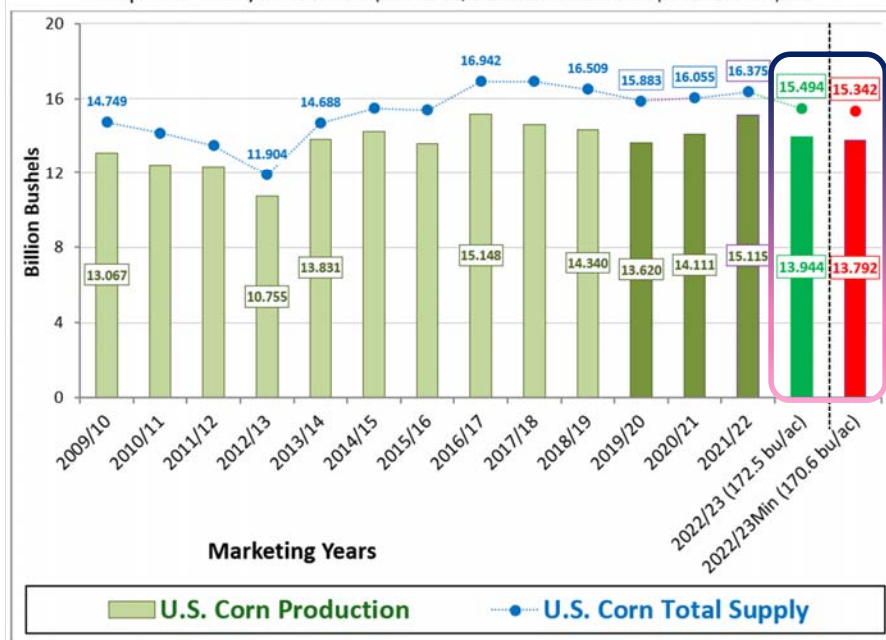
35



United States Department of Agriculture
National Agricultural Statistics Service

September 12, 2022

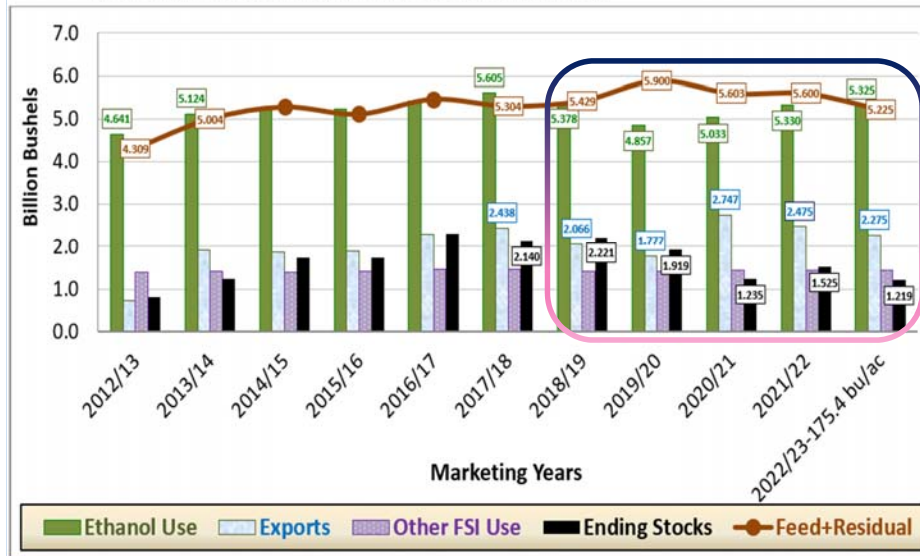
U.S. Corn Production & Total Supplies: MY 2009/10 - "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE & Crop Production Reports



36

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

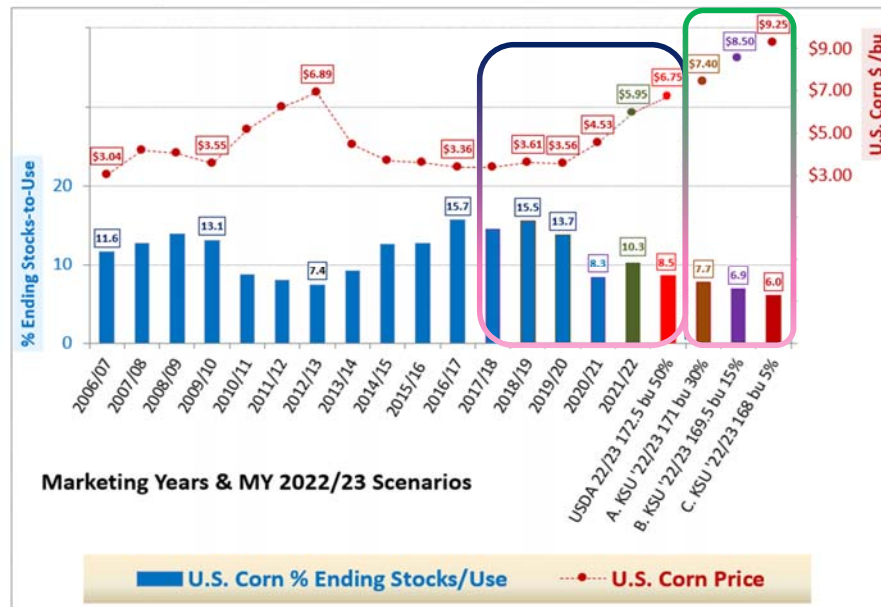


U.S. Corn Supply-Demand Balance Sheet: Projected "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report, with Alternative KSU "New Crop" 2022/23 Marketing Year Scenarios

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}
	<small>vs \$7.12 KSU Futures</small>	<small>vs \$7.12 KSU Futures</small>	<small>vs \$7.12 KSU Futures</small>	<small>vs \$7.12 KSU Futures</small>

U.S. Corn % End Stocks vs U.S. Corn \$'s: MY 2006/07 –

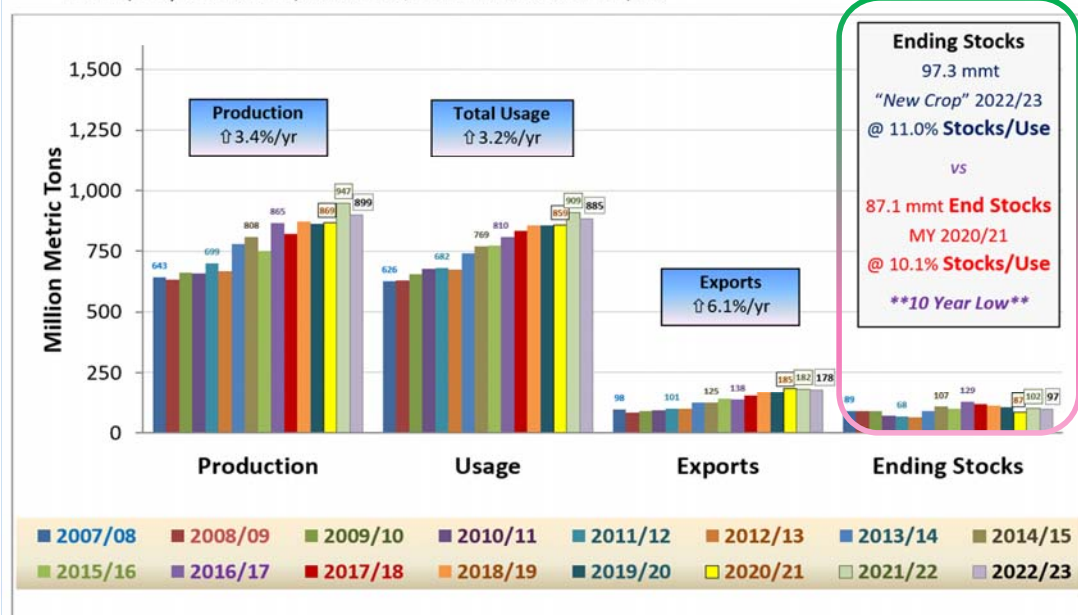
"New Crop" MY 2022/23 as of the Sept. 12, 2022 USDA WASDE report + KSU MY 2022/23 scenarios



39

"World Less-China" Corn Supply-Demand: MY 2007/08 – "New Crop" MY

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



40

“World Less-China” Corn Supply-Demand: MY 2007/078 – “New Crop”

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

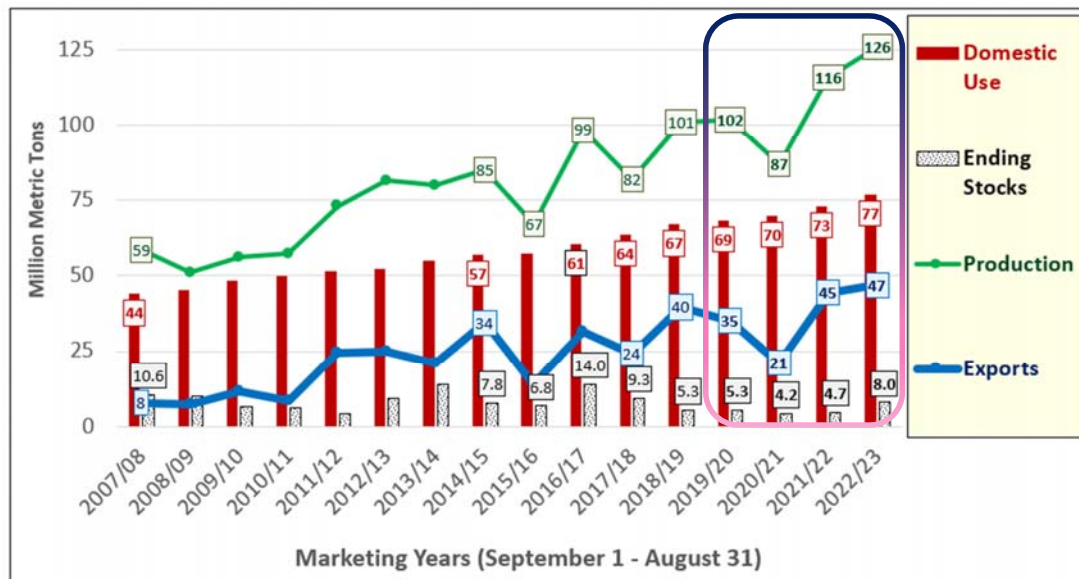


Ukraine Corn Supply-Demand: MY 2006/07 – “New Crop” MY

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



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



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



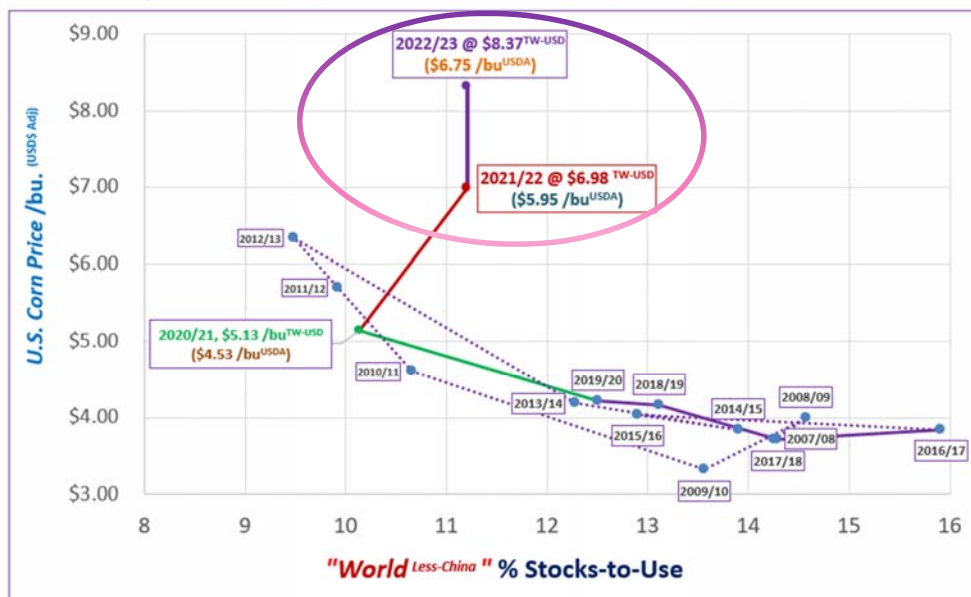
World vs "World-Less-China" % Corn Stocks-to-Use:

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



Sorghum Markets

47



KANSAS STATE
UNIVERSITY

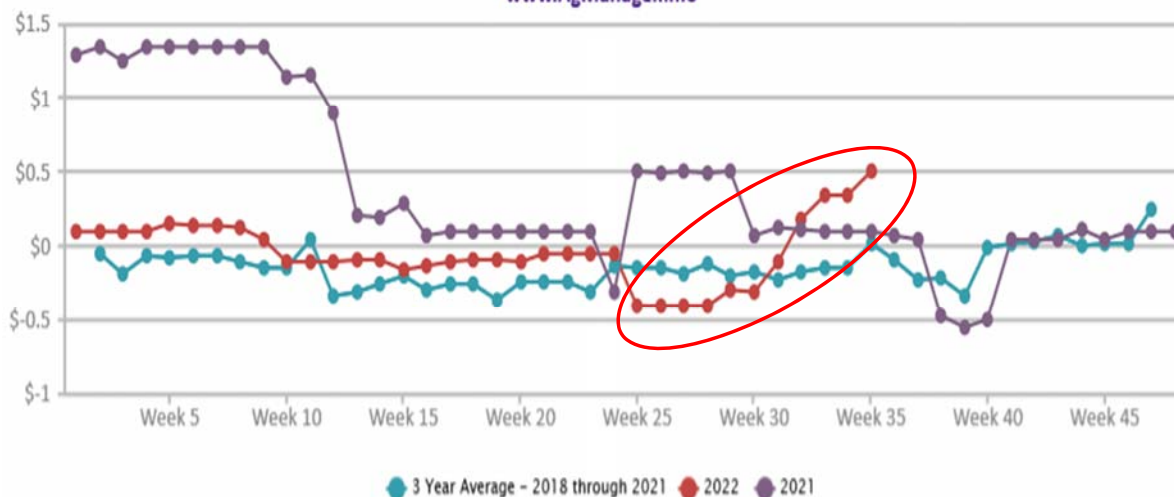
Department of Agricultural Economics

48

Kansas Cash & Futures Prices						
Date						
9/27/2022 (Closing Mkts)						
Grain Futures Contracts	Closing \$					
DEC 2022 Corn <small>(2022 Harvest contract)</small>	\$6.6475					
DEC 2023 Corn <small>(2023 Harvest Contract)</small>	\$6.0750					
9/27/2022 (Closing Mkts)	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
Grain Sorghum Spot Cash\$	\$7.20	\$7.00	\$6.85	\$7.15	\$7.05	\$6.88
Sorghum Spot Cash Basis	\$0.55	\$0.35	\$0.20	\$0.50	\$0.40	\$0.23
Grain Sorghum Harvest FC\$: Fall ²⁰²²	\$5.70	\$5.50	\$5.65	\$5.70	\$5.50	
Sorghum Harvest FC\$ Basis	(\$0.38)	(\$0.58)	(\$0.43)	(\$0.38)	(\$0.58)	

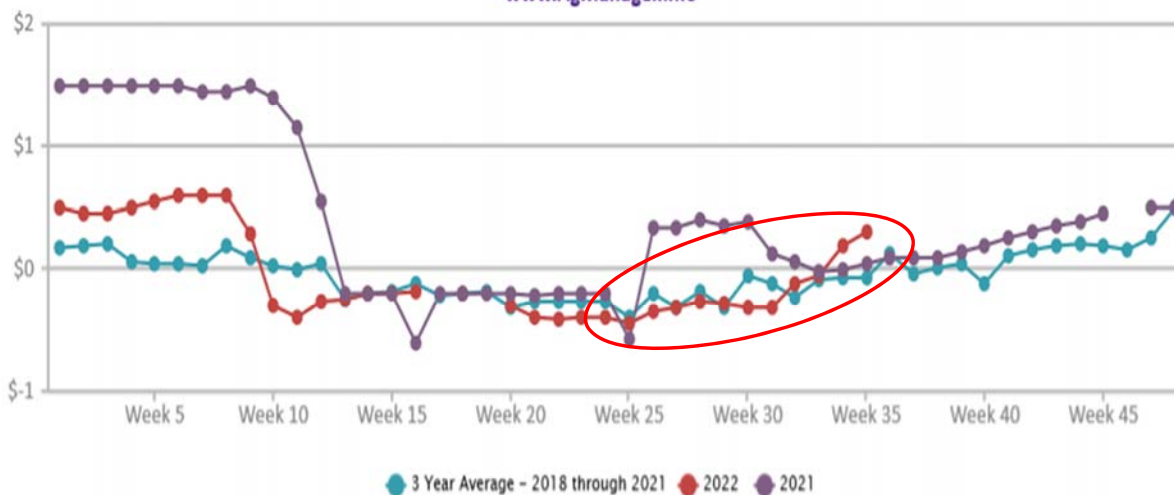
GARDEN CITY, KS: Grain Sorghum Basis - GARDEN CITY COOP

www.AgManager.info



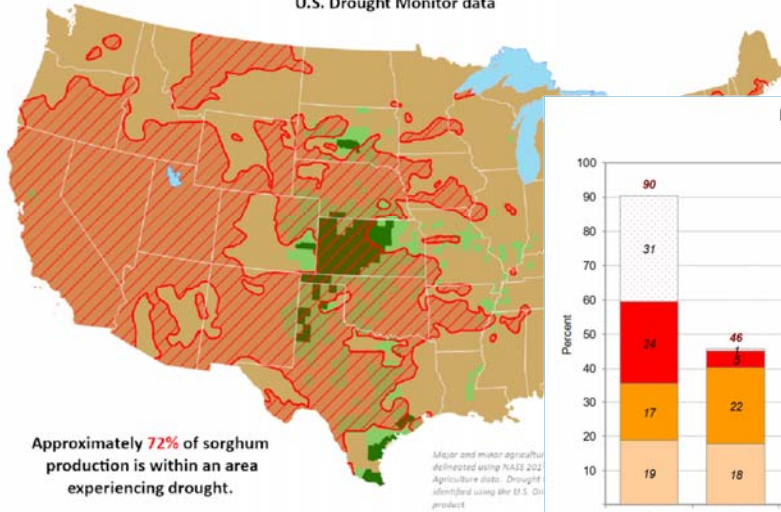
SALINA, KS: Grain Sorghum Basis - CARGILL

www.AgManager.info

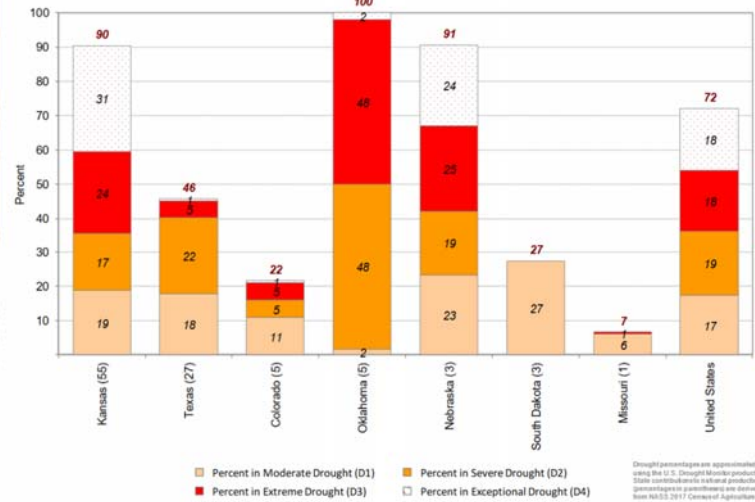


Sorghum Areas in Drought

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



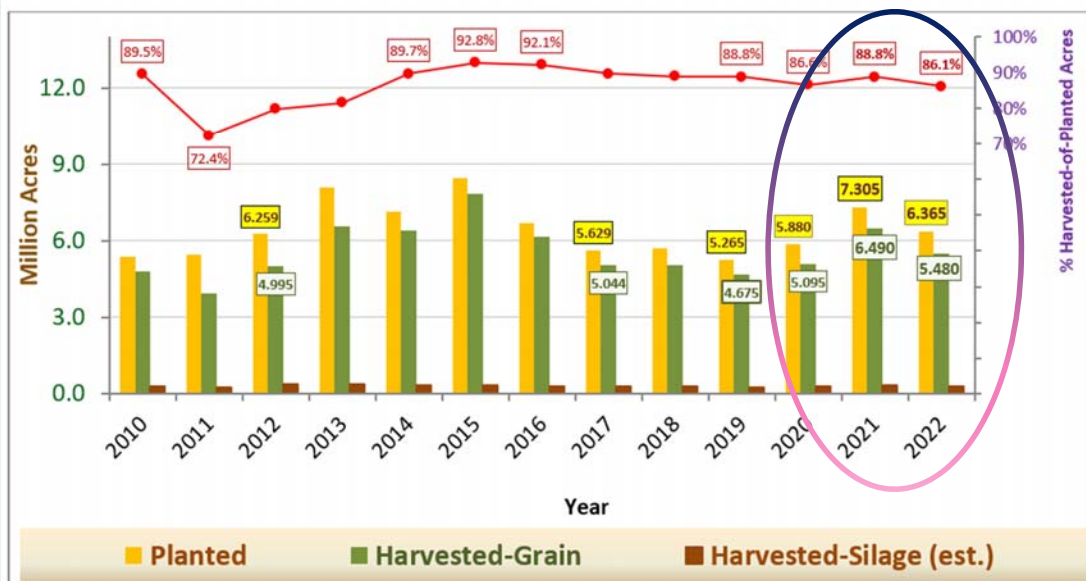
Percent of Sorghum Located in Drought
September 6, 2022



51

U.S. Grain Sorghum Planted & Harvested Acreage

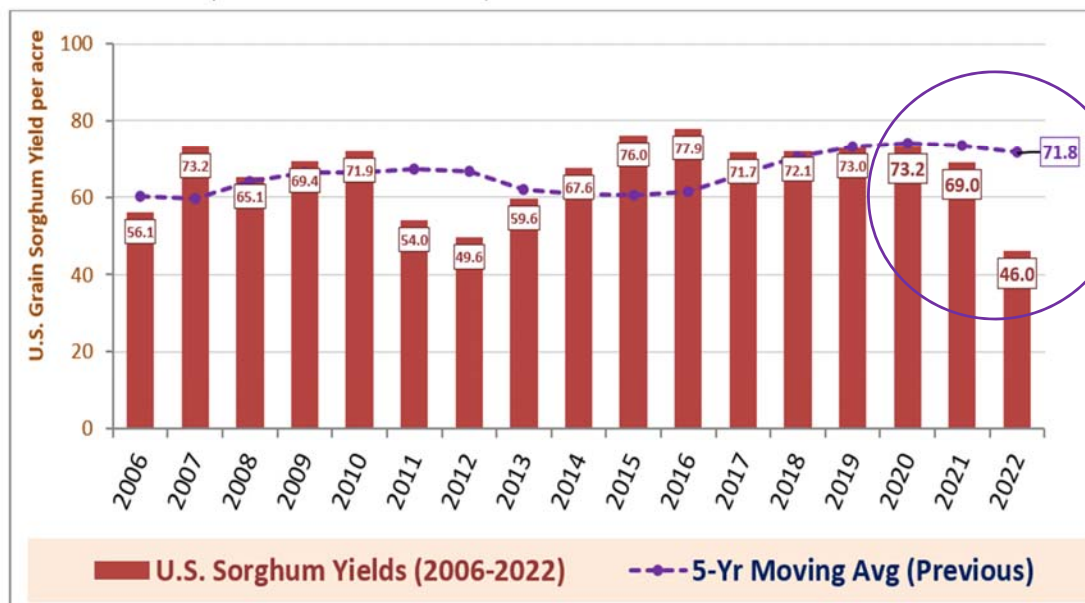
(2010 – 2022) as of the September 12, 2022 USDA WASDE report



52

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

USDA Crop Production & WASDE reports



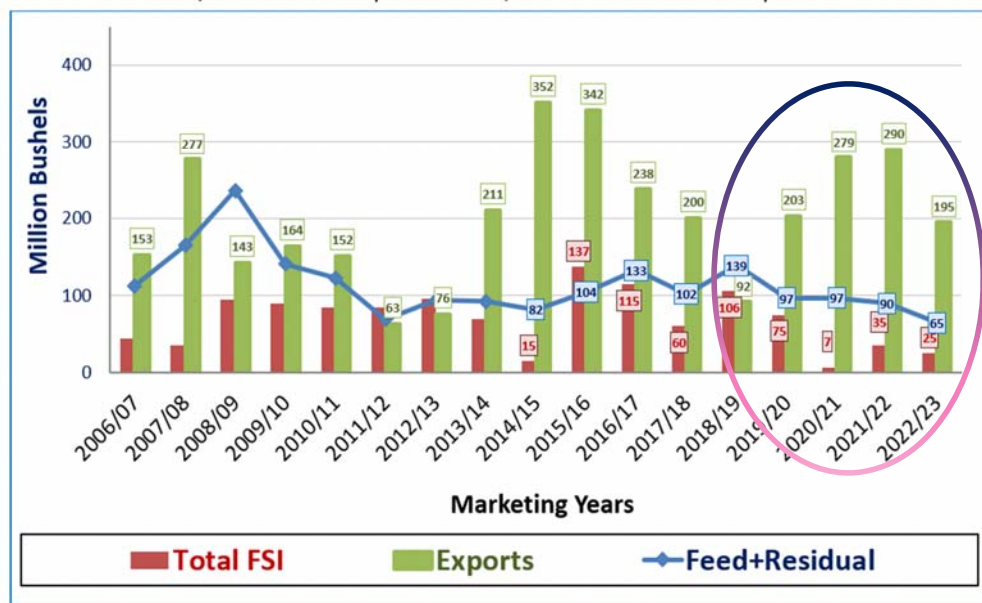
U.S. Grain Sorghum Total Supplies: MY 2006/07 - "New Crop"

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



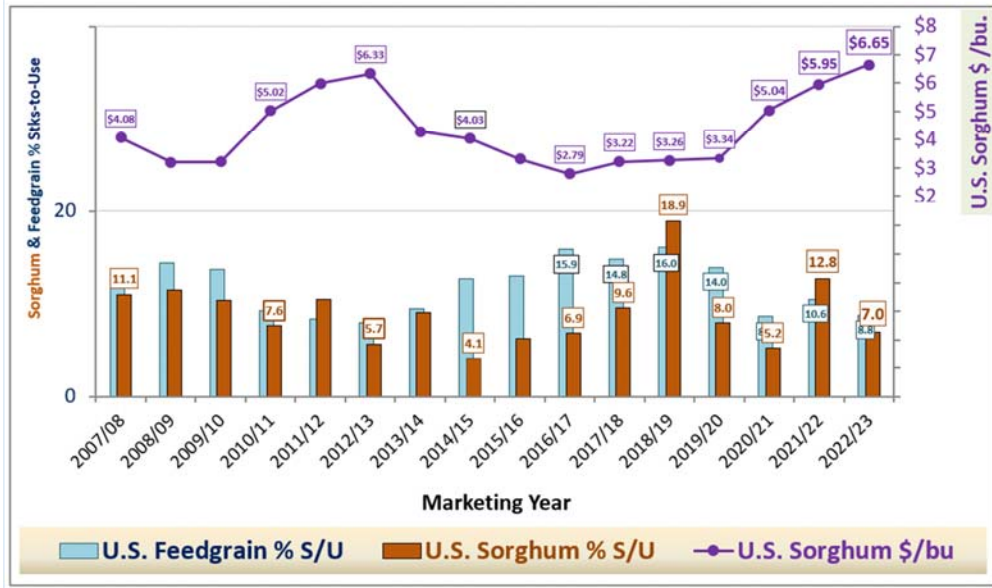
Projected U.S. Grain Sorghum Supply-Demand for MY 2022/23

"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:

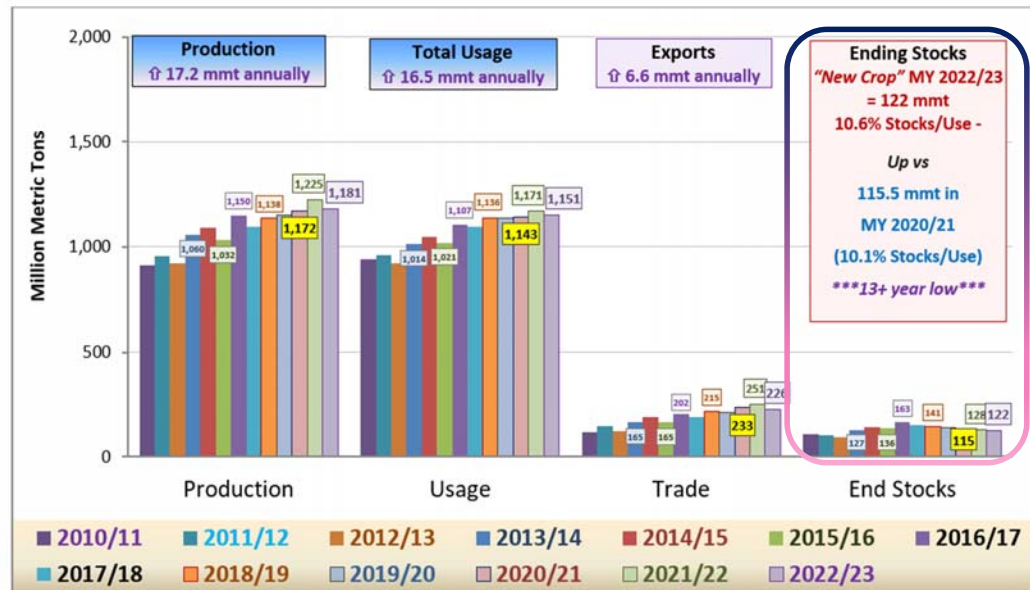
MY 2004/05 - "New Crop" MY 2021/22 as of the August 12, 2022 USDA WASDE



57

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

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



58

Wheat Markets

59



KANSAS STATE
UNIVERSITY

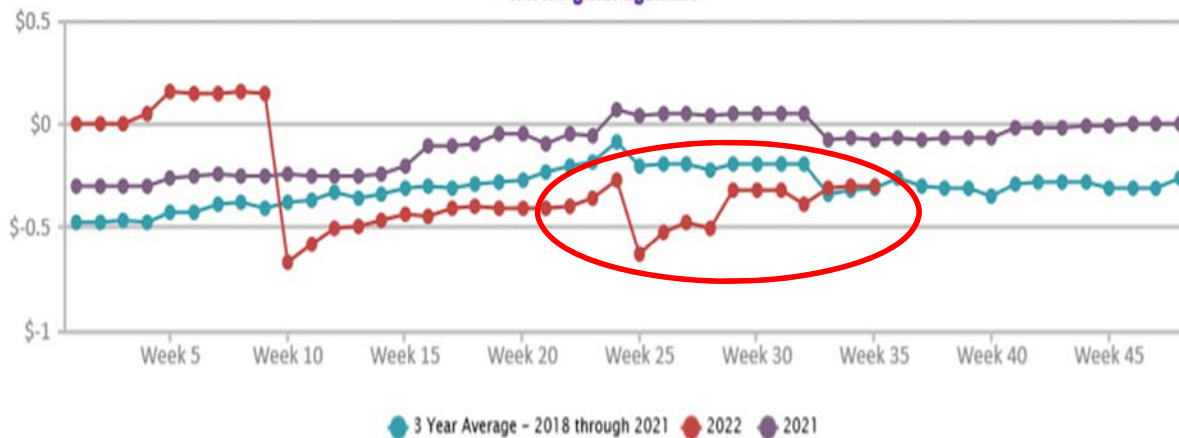
Department of Agricultural Economics

60

Kansas Cash & Futures Prices						
Date						
9/27/2022 (Closing Mkts)						
Grain Futures Contracts	Closing \$					
DEC 2022 KC HRW Wheat <small>(Lead Contract)</small>	\$9.4425					
JULY 2023 KC HRW Wheat <small>(2023 Harvest Contract)</small>	\$9.2600					
9/27/2022 (Closing Mkts)	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
KC HRW Wheat Harvest Spot Cash\$	\$8.98	\$9.28	\$9.18	\$9.13	\$9.29	\$9.13
HRW Wheat Harvest Spot Cash Basis	(\$0.46)	(\$0.16)	(\$0.26)	(\$0.31)	(\$0.15)	(\$0.31)
KC HRW Wheat FC\$ - Harvest ²⁰²³	\$8.58	\$8.68	\$8.78	\$8.88	\$8.78	\$8.53
HRW Wheat Harvest FC\$ Basis	(\$0.68)	(\$0.58)	(\$0.48)	(\$0.38)	(\$0.48)	(\$0.73)

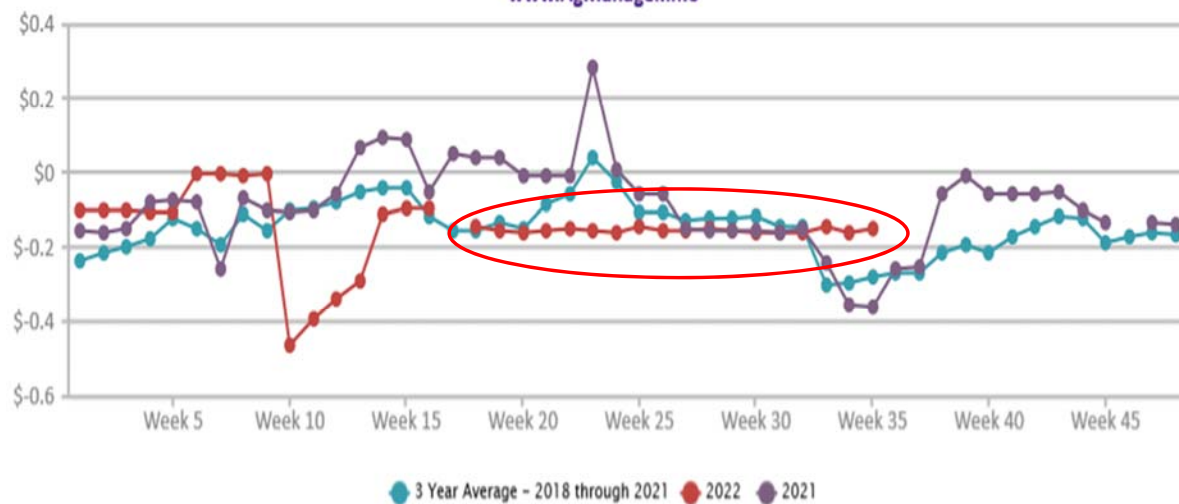
HUGOTON, KS: Hard Red Winter Wheat Basis - PERRYTON EQUITY EXCHANGE - PRAIRIEOLA

www.AgManager.info



SALINA, KS: Hard Red Winter Wheat Basis - CARGILL

www.AgManager.info



U.S. Wheat Supply and Demand

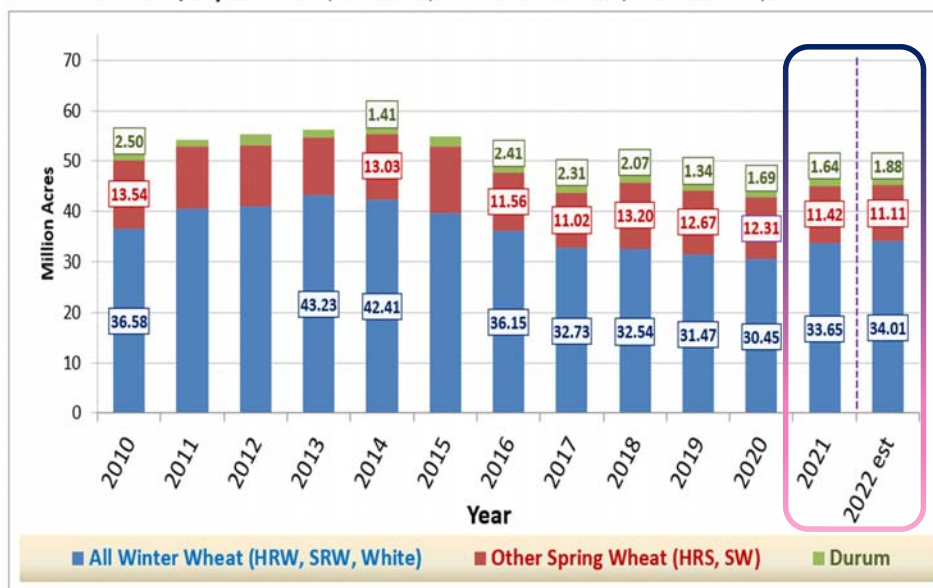
Item	2021/2022 estimate	2022/2023 forecast	Change from August 12	Change from 2021/2022
Planted area (million acres)	46.7	47.0	--	0.3
Harvested area (million acres)	37.2	37.5	--	0.4
Yield (bushels per acre)	44.3	47.5	--	3.2
----- Million bushels -----				
Beginning stocks	845	660	--	-185
Production	1,646	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
----- Percent -----				
Stocks to use ratio	34.3	31.4	--	-2.9
----- Dollars per bushel -----				
Average market price	7.63	9.00	-0.25	1.37

-- No change.

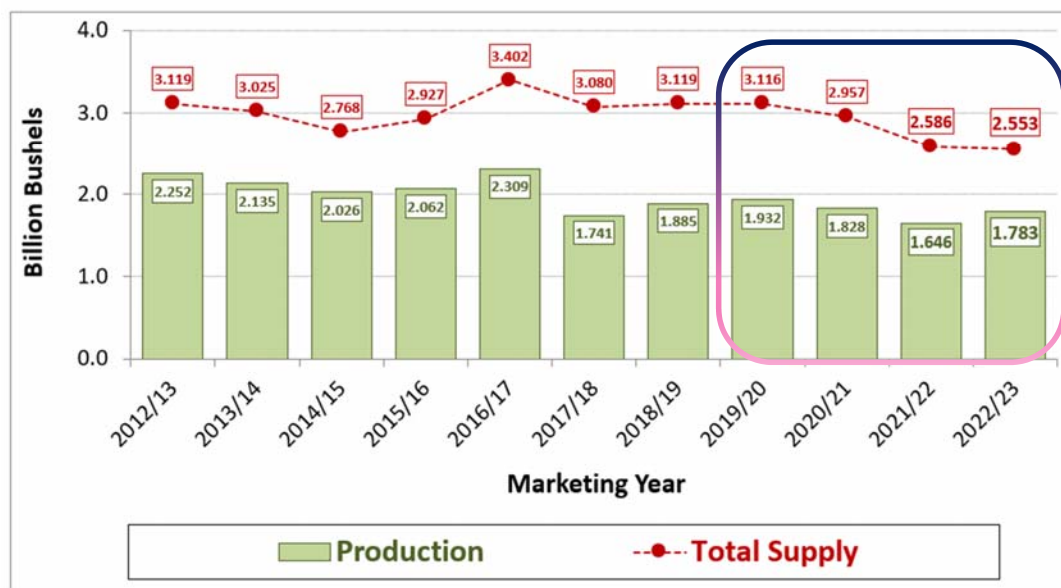
September 12, 2022

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

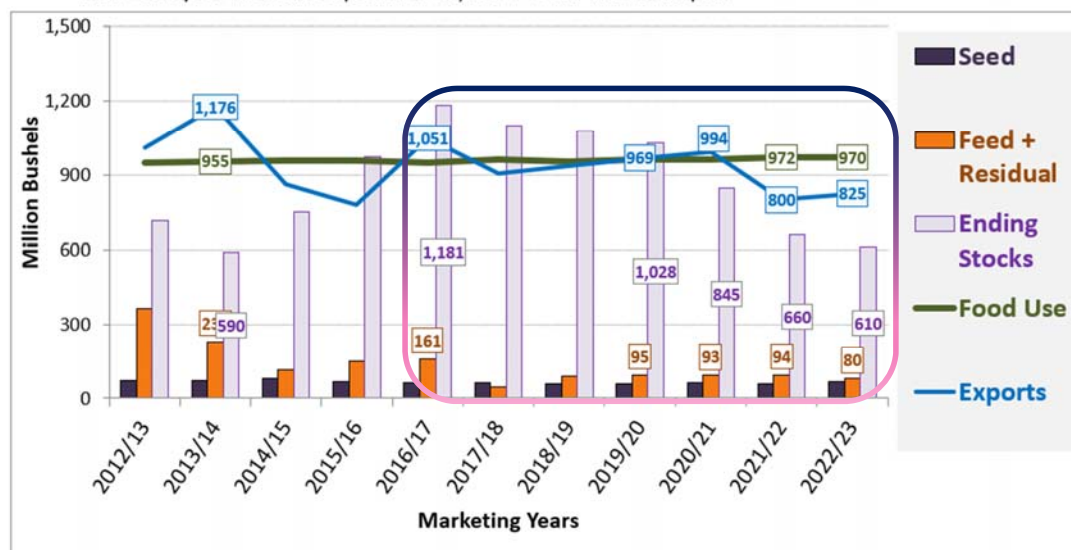
64



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

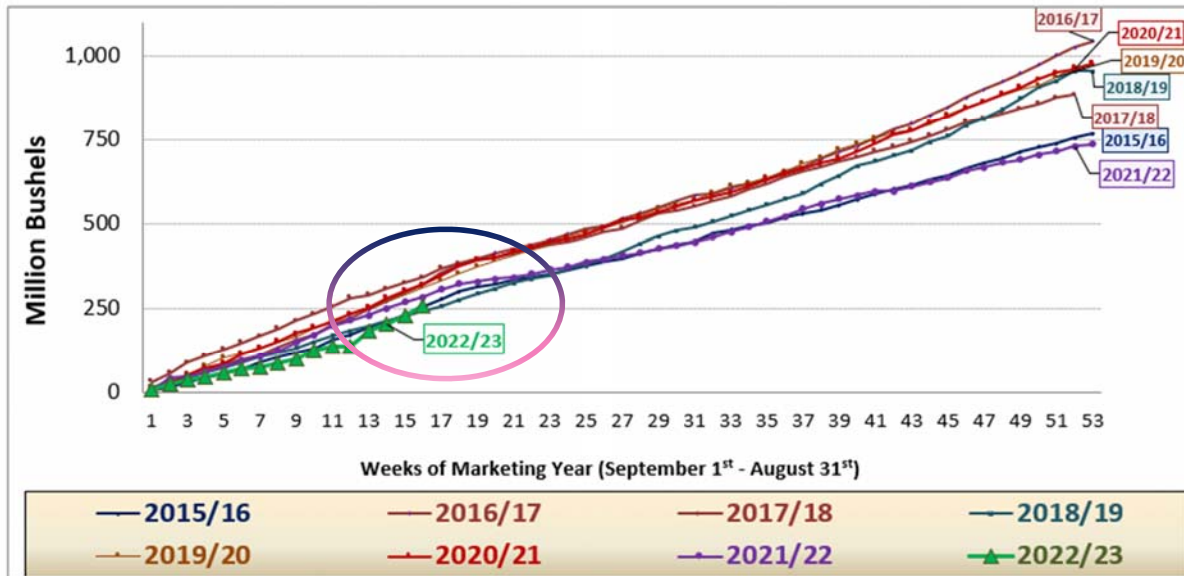


U.S. Wheat Use & Ending Stocks: MY 2012/13 – “New Crop” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



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

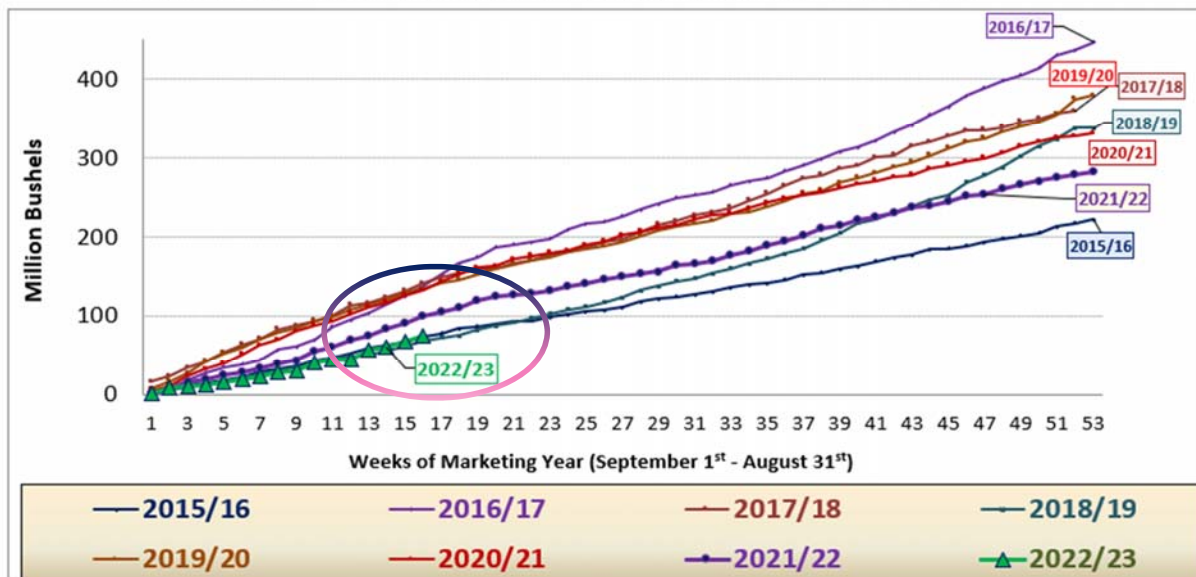
2021/22 as of USDA FAS Weekly Export reports through September 15, 2022



67

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

2022/23 as of USDA FAS Weekly Export reports through September 15, 2022



8

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.

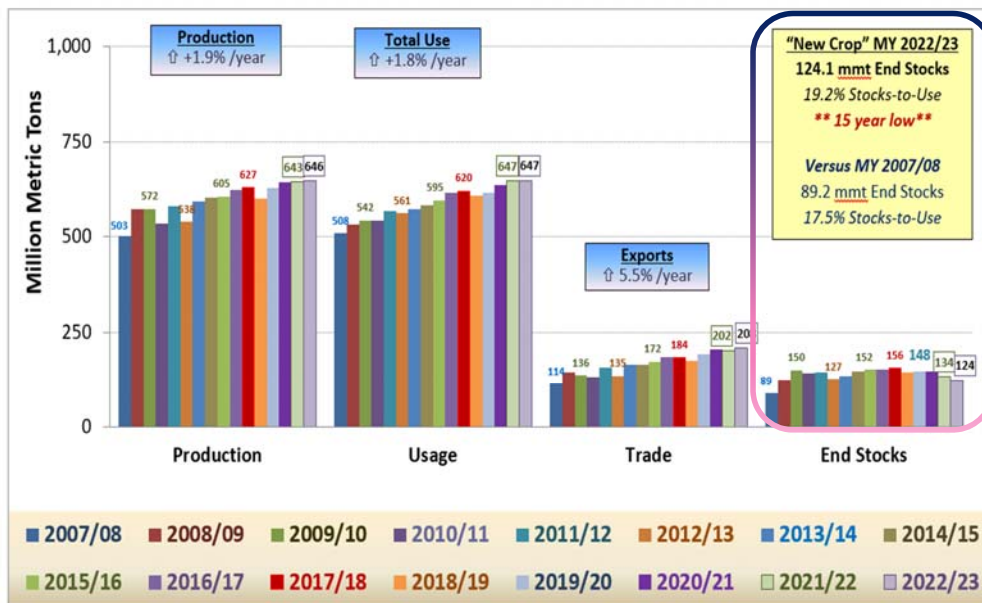
U.S. Wheat Ending Stocks vs U.S. Cash \$'s: MY 2009/10 thru

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



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

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



71

World Less-China Wheat Supply-Demand Trends

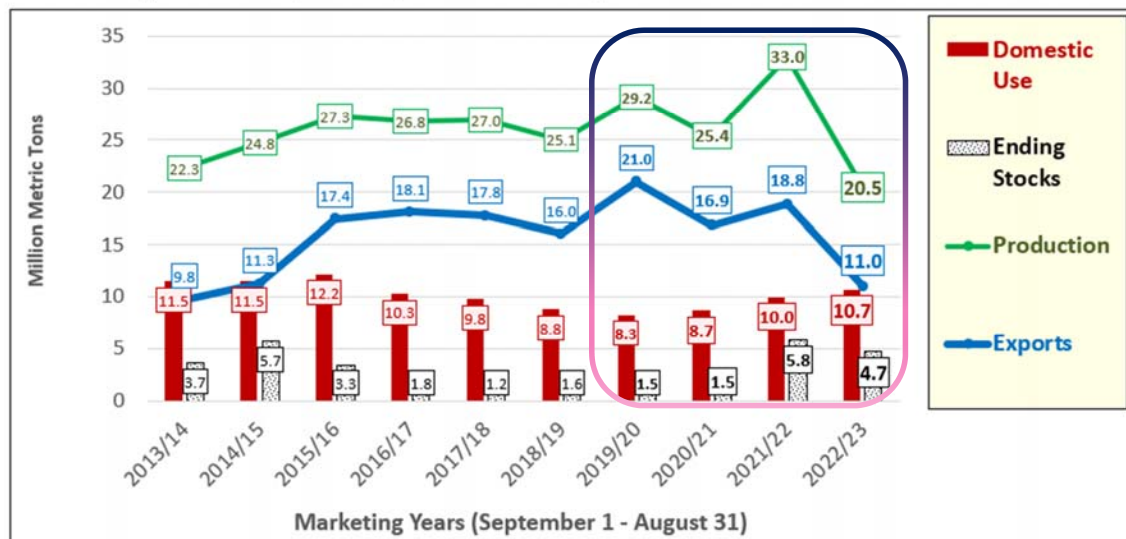
MY 2007/08 – "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report



72

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

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

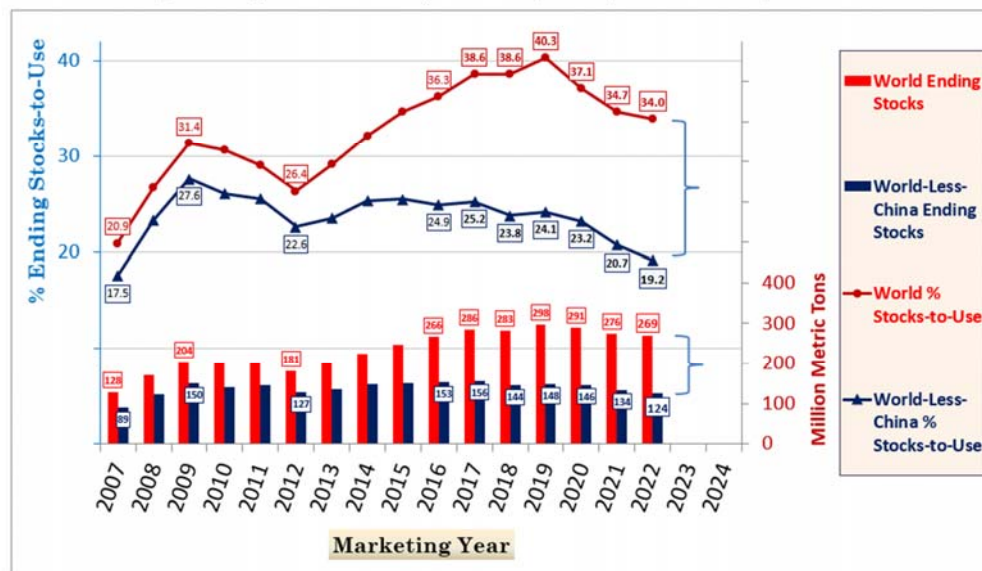


Russia Wheat Supply-Demand Trends: MY 2013/14 – “New Crop” MY 2022/23 as of the September 12, 2022 USDA WASDE report



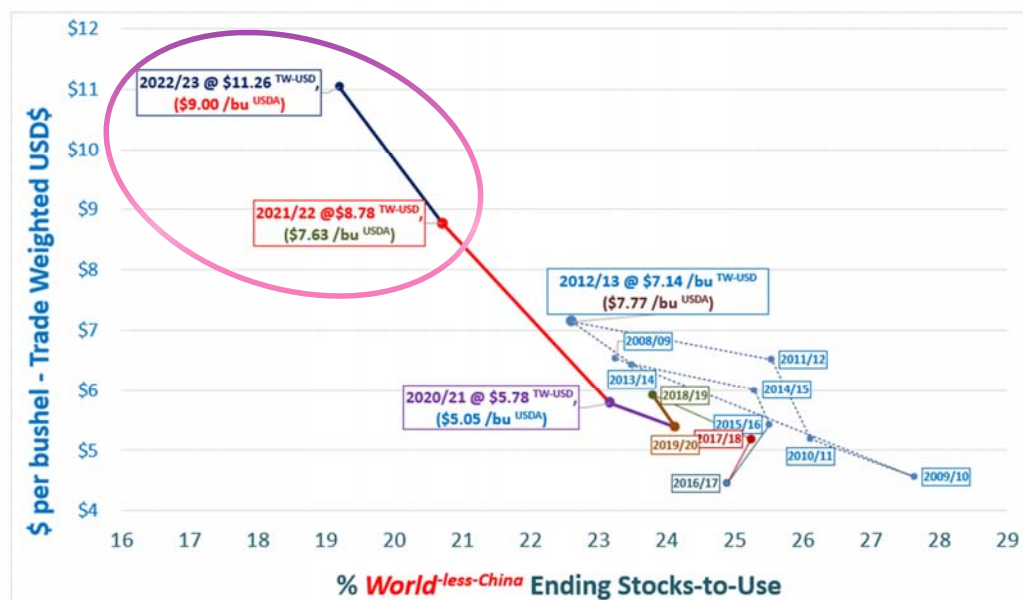
World vs "World Less-China" Ending Stocks & % Stocks-to-Use

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



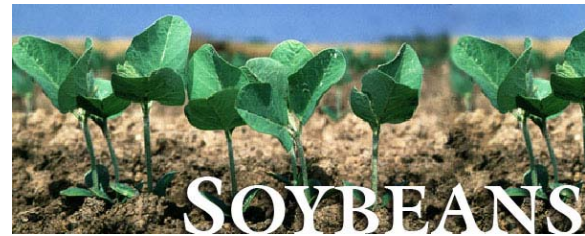
U.S. Wheat \$ Trade-Wtd. USD\$ Adj vs "World Less-China" % Stocks-to-Use:

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



Soybean Markets

77



KANSAS STATE
UNIVERSITY

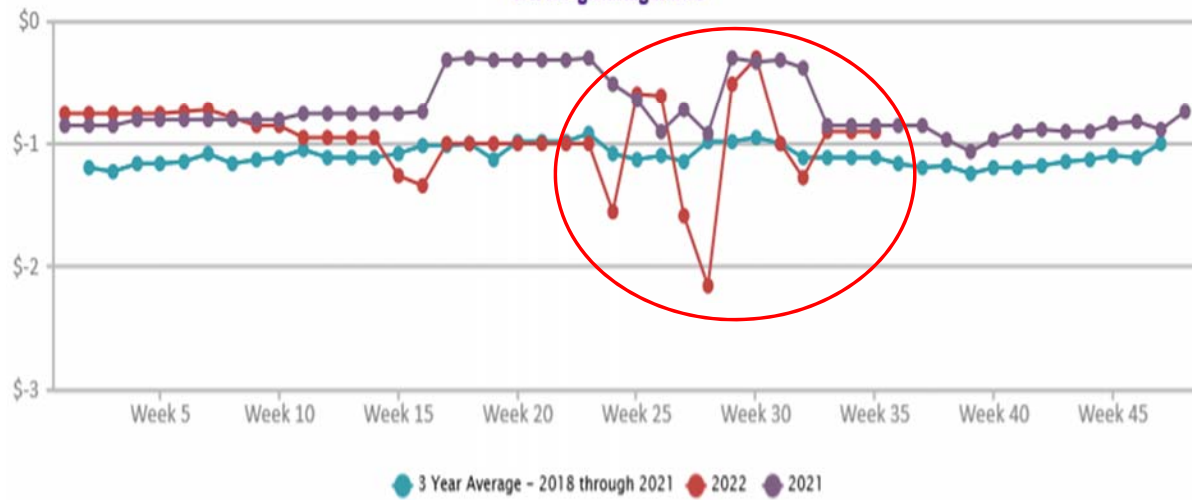
Department of Agricultural Economics

78

Kansas Cash & Futures Prices						
Date						
9/27/2022 (Closing Mkts)						
Grain Futures Contracts	Closing \$					
NOV 2022 Soybeans <small>(Lead Contract)</small>	\$14.0525					
NOV 2023 Soybeans <small>(2023 Harvest Contract)</small>	\$13.4575					
9/27/2022 (Closing Mkts)	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
Soybean Spot Cash\$	\$13.21	\$13.71	\$14.27	\$13.12	\$14.13	\$14.98
<i>Soybean Spot Cash Basis</i>	(\$0.84)	(\$0.34)	\$0.22	(\$0.93)	\$0.08	\$0.93
Soybean Harvest FC\$: Fall ²⁰²²	\$12.41	\$12.56	\$12.81		\$12.56	\$13.16
<i>Soybean Harvest FC\$ Basis</i>	(\$1.05)	(\$0.90)	(\$0.65)		(\$0.90)	(\$0.30)

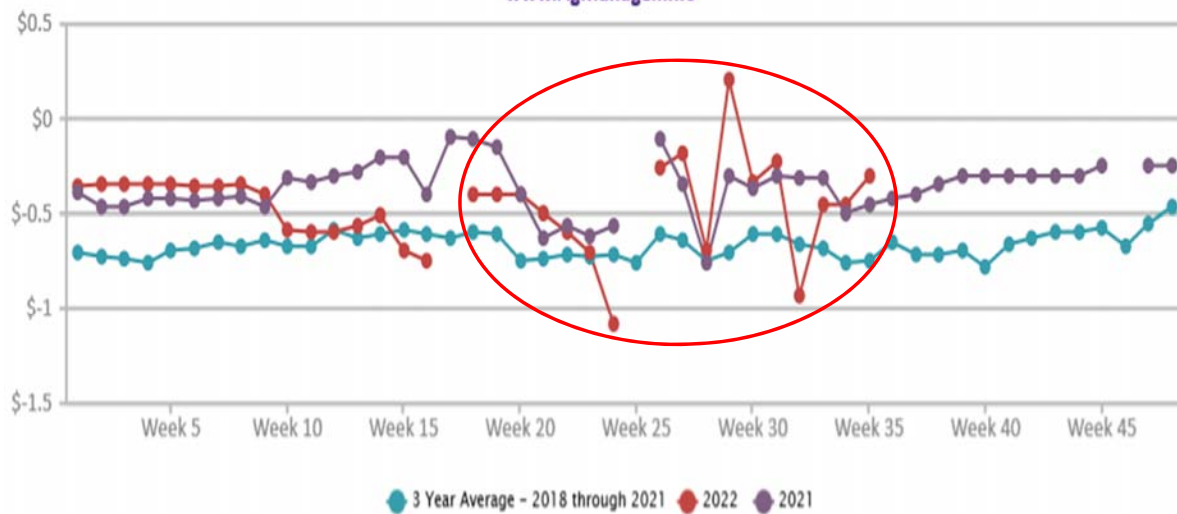
GARDEN CITY, KS: Soybeans Basis - GARDEN CITY COOP

www.AgManager.info



SALINA, KS: Soybeans Basis - CARGILL

www.AgManager.info



U.S. Soybeans Supply and Demand

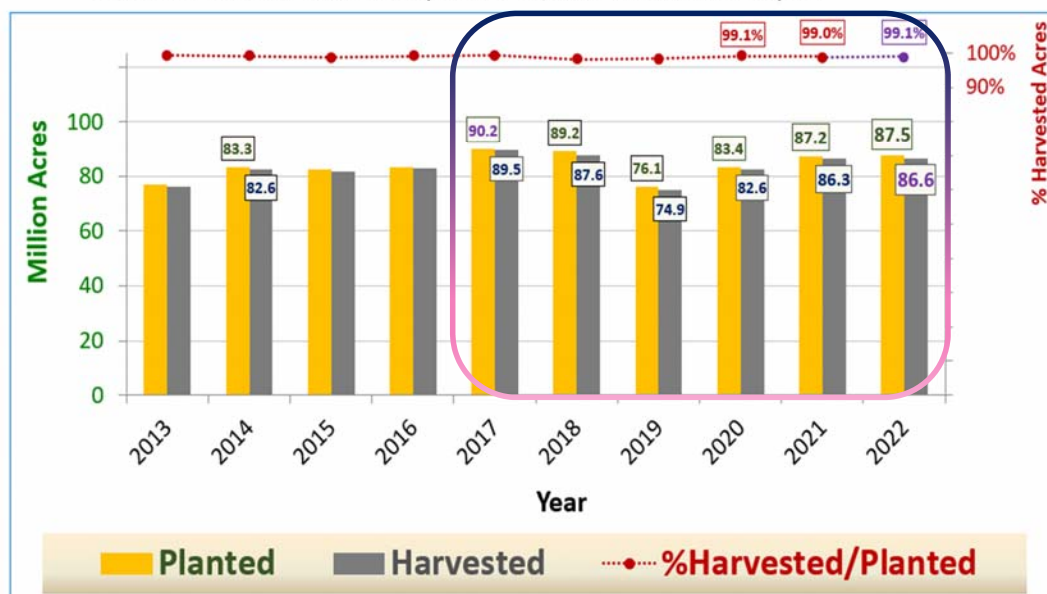
Item	2021/2022		2022/2023		
	Estimate	Change from August 12	Forecast	Change from August 12	Change from 2021/2022
Planted area (million acres)	87.2	--	87.5	-0.6	0.3
Harvested area (million acres)	86.3	--	86.6	-0.6	0.3
Yield (bushels per acre)	51.4	--	50.5	-1.4	-0.8
Million bushels					
Beginning stocks	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



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

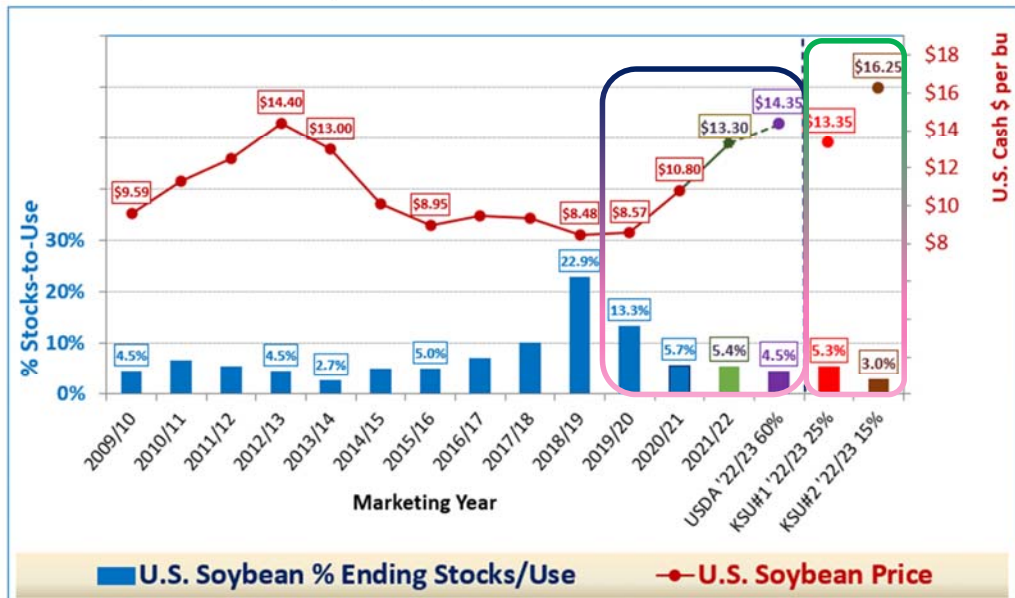


U.S. Soybean Supply-Demand Balance Sheet: "New Crop" MY 2022/23 as of the September 12, 2022 USDA WASDE report with KSU Scenarios for "New Crop" MY 2022/23

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 Crushings	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
U.S. Avg. Farm Price (\$/bu)	\$14.35 Vs \$14.81 /bu KSU Futures & Basis-based forecast 8/15/2022	\$13.35 Vs \$14.81 /bu KSU Futures & Basis-based forecast 8/15/2022	\$16.25 Vs \$14.81 /bu KSU Futures & Basis-based forecast 8/15/2022

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

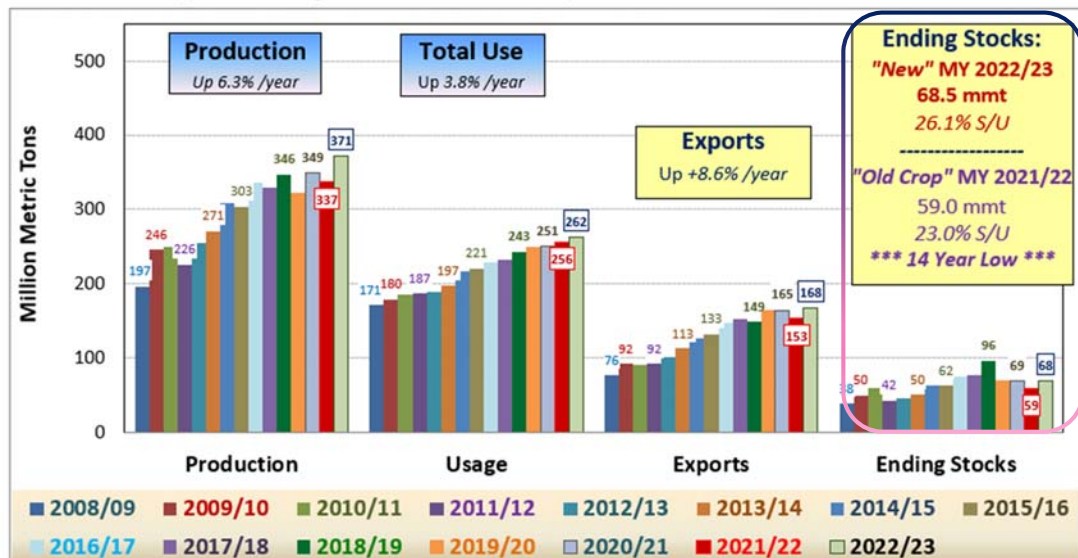
2009/10 – “New Crop” 2022/23 as of the Sept. 12, 2022 USDA WASDE, with KSU scenarios



85

“World Less-China” Soybean Use & Ending Stocks

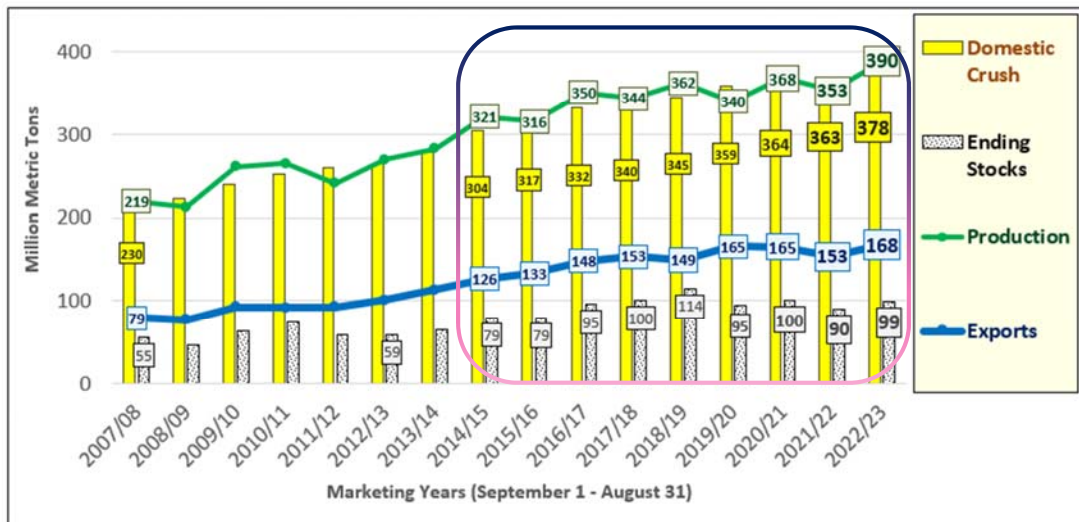
MY 2008/09 through “New” MY 2022/23 as of the September 12, 2022 WASDE Report



86

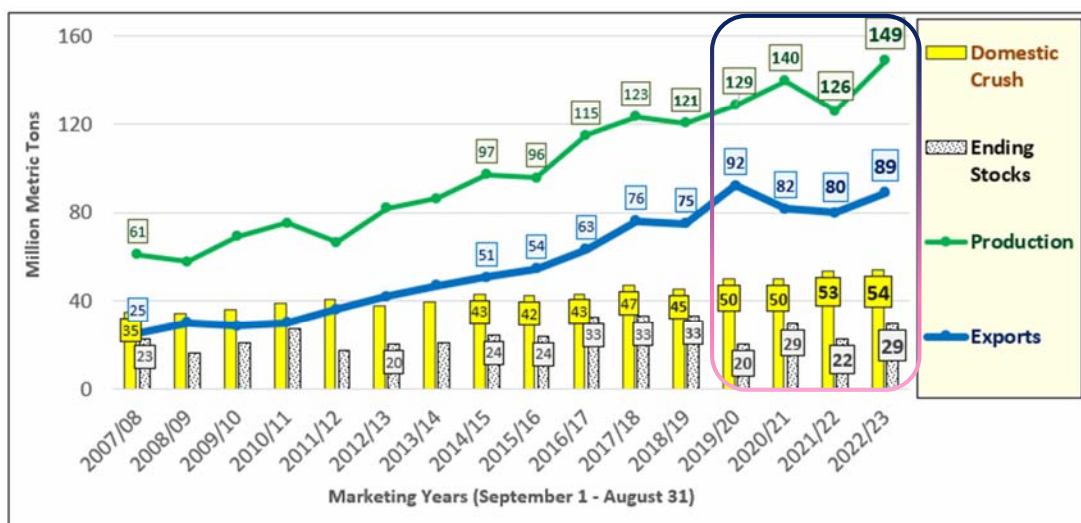
World Soybean Supply-Demand

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

89

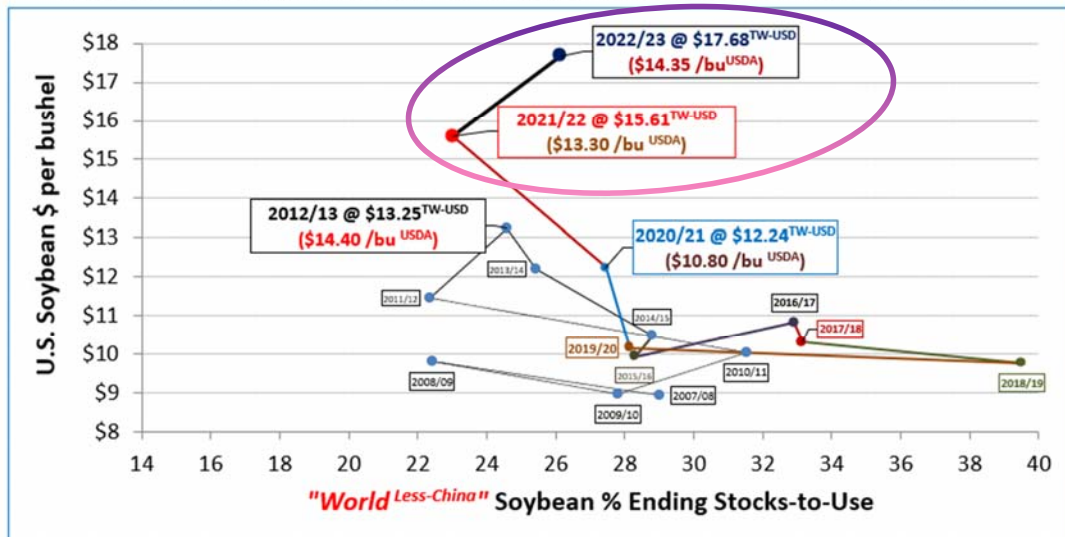
MY 2007/08 through "New Crop" MY 2022/23, as of the September 12, 2022 USDA WASDE report.



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

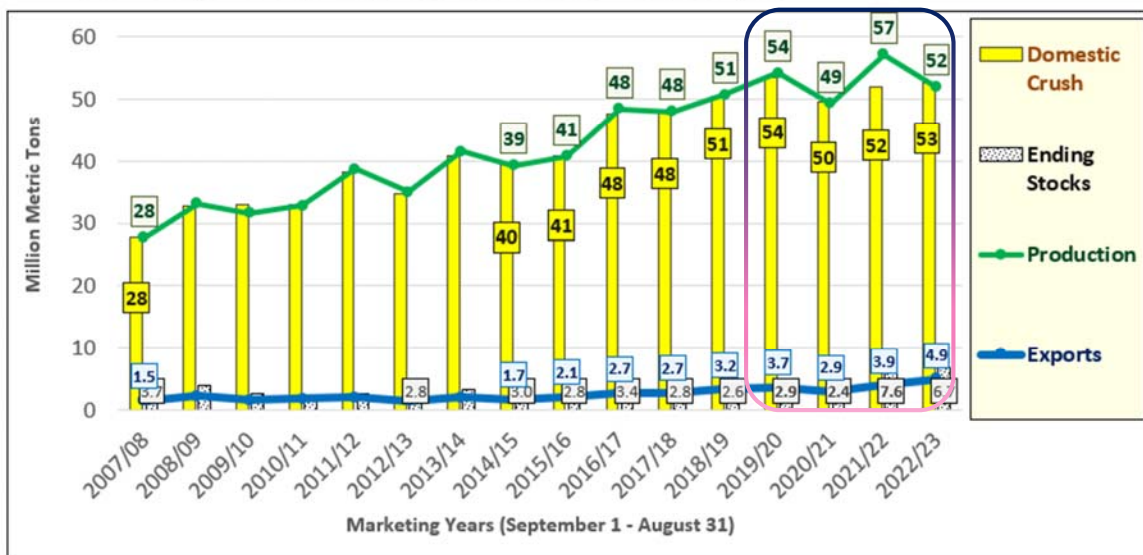
90

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



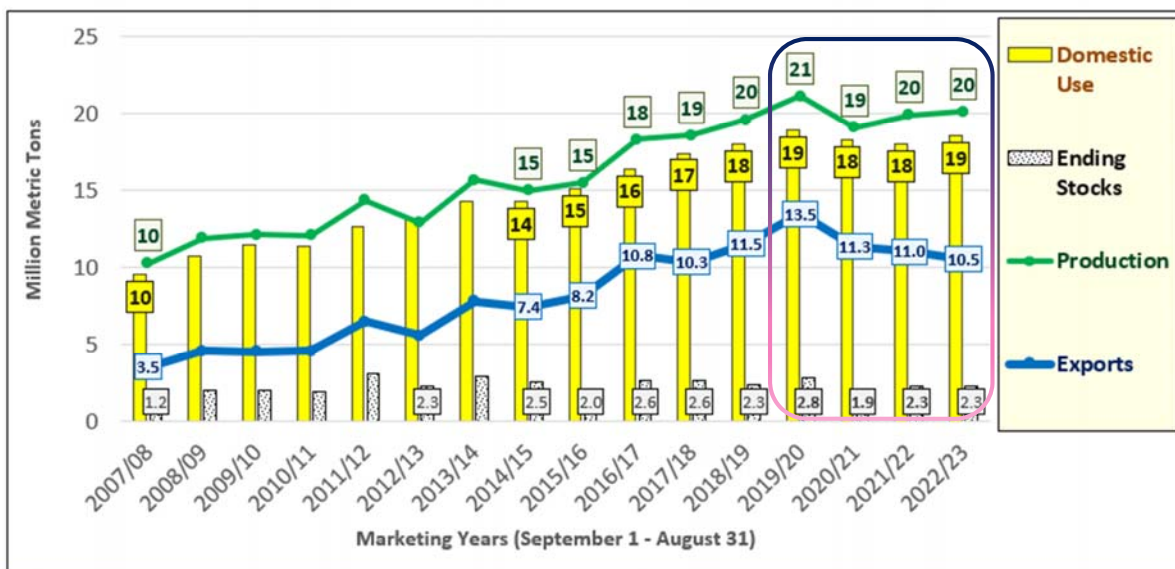
World Sunflower Supply-Demand Trends: MY 2007/08 – “New”

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

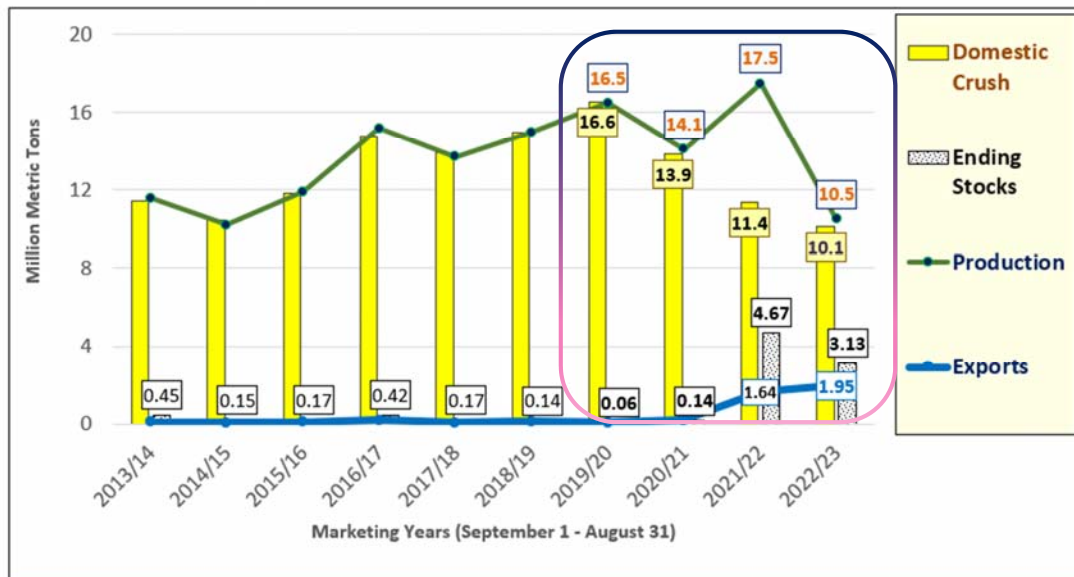


World Sunflower Oil Supply-Demand Trends: MY 2007/08 –

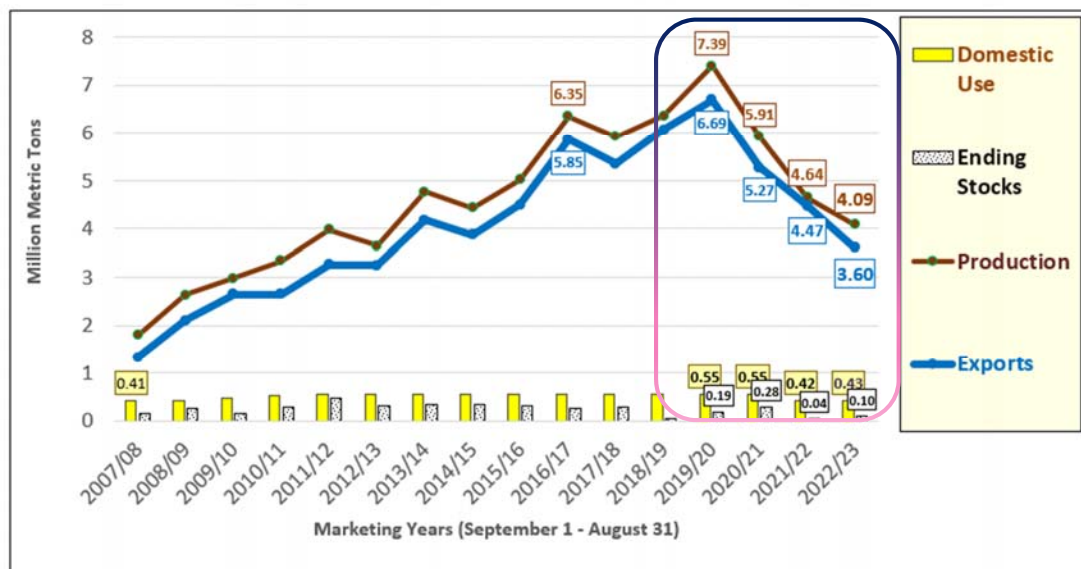
“New” MY 2022/23 as of the September 12, 2022 USDA WASDE Report



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





Questions?

Daniel O'Brien – Extension Ag Economist

Blog: www.ksugrains.wordpress.com

KSUGrains on Twitter

www.AgManager.info



KANSAS STATE
UNIVERSITY

Department of Agricultural Economics