

Grain Markets & Cost-Returns *in 2022*

KARA-KSU Crop Production Update

Lindsborg, KS

December 1, 2021

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KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



Our Focus.....

1) Key Grain Market Factors in late 2021-2022

- Production Issues U.S.-World $\Rightarrow$ “tight” % Stocks/Use & “high” Price\$

2) Grain Market Analysis & Crop Budgets

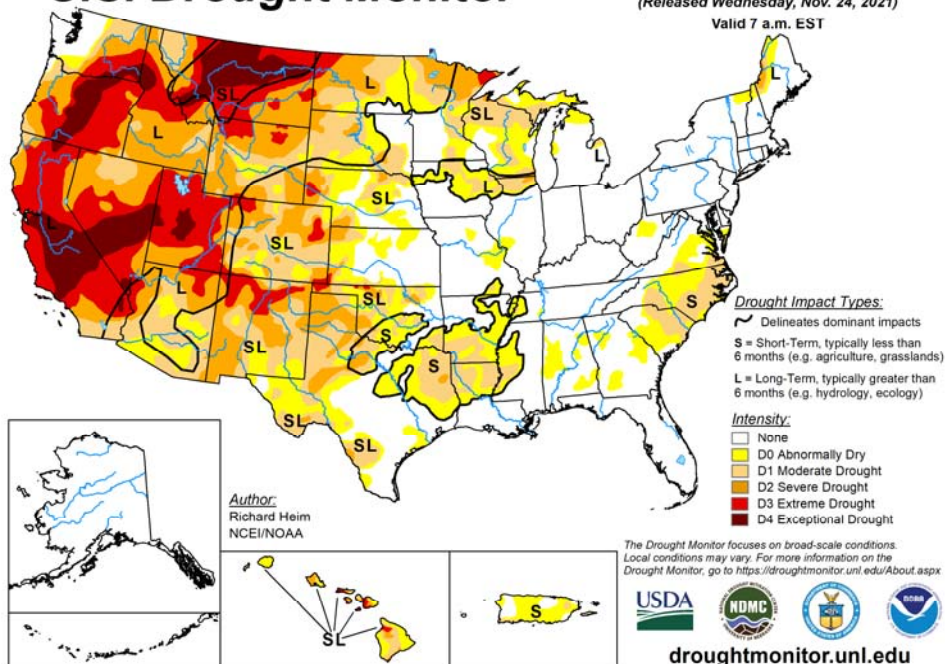
- Corn
 - Sorghum
 - Wheat
 - Soybeans

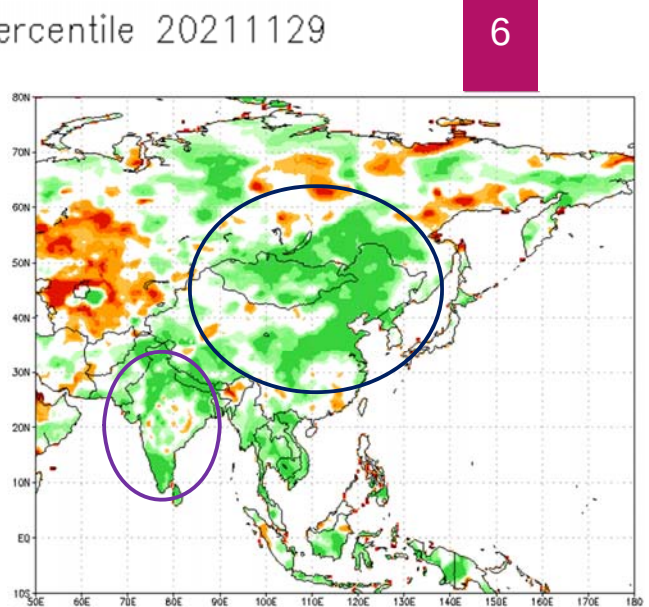
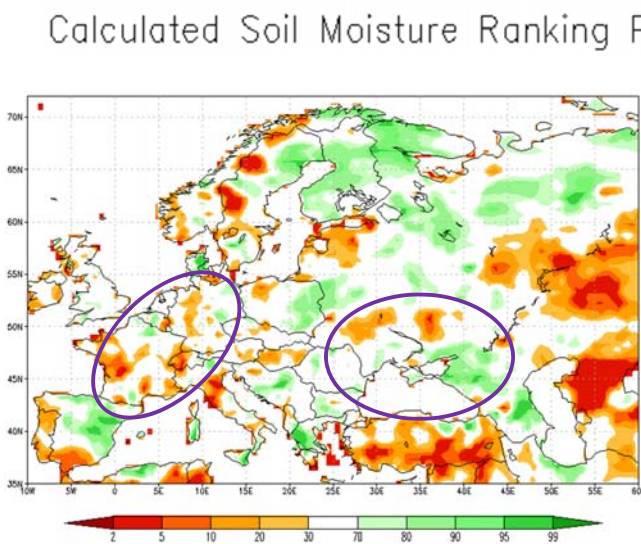
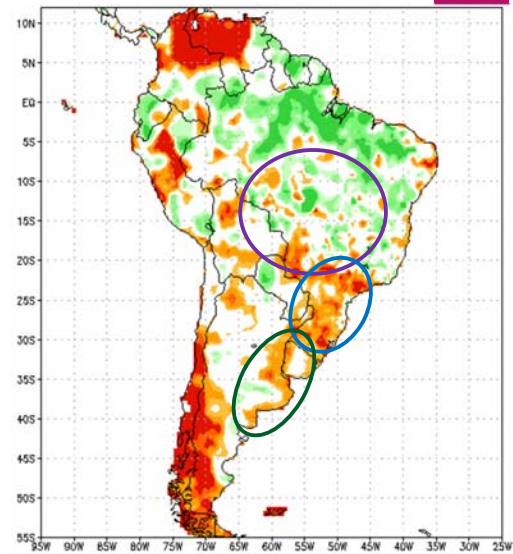
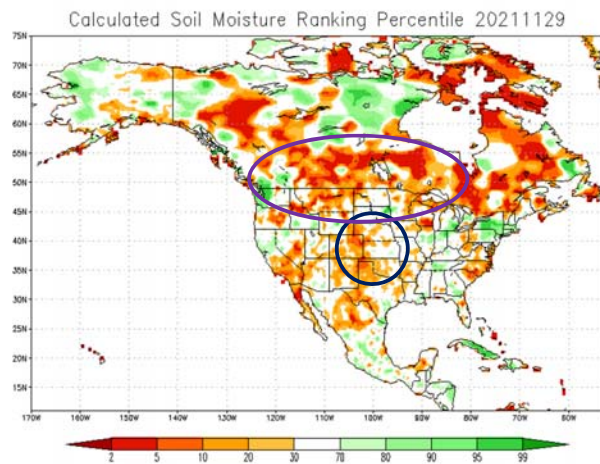
I. Grain Futures Closes, Changes & Market Carry on Tuesday, November 30, 2021

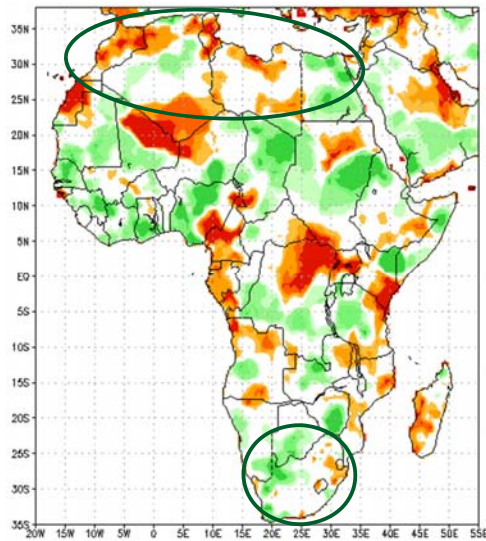
Corn Futures				Soybean Futures				Kansas HRW Wheat Futures			
Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo
Dec^D 21	\$5.67	↓ \$0.14	---	Jan^L 22	\$12.17 ¼	↓ \$0.24 ¼	---	Dec^D 21	\$8.19	↓ \$0.35	---
Mar^L 22	\$5.67 ½	↓ \$0.14 ¼	\$0.00 ¹⁶⁷	Mar 22	\$12.26 ½	↓ \$0.25 ½	\$0.04 ⁶²⁵	Mar^L 22	\$8.22 ¼	↓ \$0.35	\$0.01 ⁰⁸³
May 22	\$5.70	↓ \$0.15 ¼	\$0.01 ²⁵	May 22	\$12.35 ¼	↓ \$0.26	\$0.04 ³⁷⁵	May 22	\$8.22	↓ \$0.33	No Carry
July 22	\$5.70 ¾	↓ \$0.15 ¼	\$0.00 ³⁷⁵	July 22	\$12.42 ¼	↓ \$0.25 ¼	\$0.03 ⁵⁰	July^H 22	\$8.09 ¼	↓ \$0.28 ¼	No Carry
Sept 22	\$5.52 ¾	↓ \$0.12 ¼	No Carry	Aug 22	\$12.37 ¾	↓ \$0.24 ¼	No Carry	Sept 22	\$8.08	↓ \$0.26 ¼	No Carry
Dec^H 22	\$5.46 ½	↓ \$0.09 ¼	No Carry	Sep 22	\$12.19 ¾	↓ \$0.22	No Carry	Dec 22	\$8.11 ¾	↓ \$0.26 ¼	\$0.01 ²⁵
Mar 23	\$5.54 ¼	↓ \$0.09 ¼	\$0.02 ⁶⁶⁷	Nov^H 22	\$12.09	↓ \$0.20	No Carry	Mar 23	\$8.11	↓ \$0.26 ¼	No Carry
May 23	\$5.56 ½	↓ \$0.08 ¼	\$0.01 ¹²⁵	Jan 23	\$12.10 ¼	↓ \$0.19 ¼	\$0.00 ⁶²⁵	May 23	\$7.99 ½	↓ \$0.24 ¼	No Carry

U.S. Drought Monitor

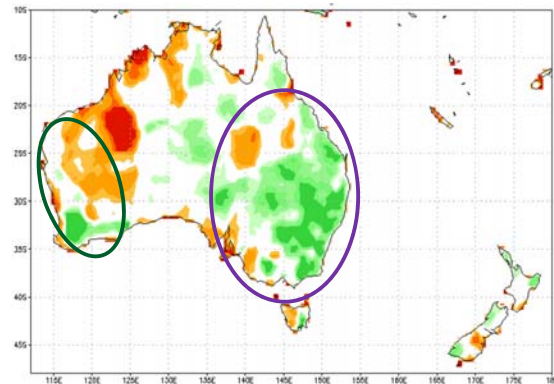
November 23, 2021
(Released Wednesday, Nov. 24, 2021)
Valid 7 a.m. EST







Africa



Australia

World Crop Production & Stocks MY 2021/22

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- **Corn** ^{World} ⇒ Production^e ↑ 7.6%; Ending Stocks^e ↑ 4.3%
 - **"World-Less-China"**: Production^e ↑ 8.5%; Ending Stocks^e ↑ 8.8%
 - **So America + Ukraine**: Production^e ↑ **26%**; Ending Stocks^e ↑ **50%**
- **Soybeans** ^{World} ⇒ Production^e ↑ 4.9%; Ending Stocks^e ↑ 3.7%
 - **"World-Less-China"**: Production^e ↑ 5.3%; Ending Stocks^e ↑ 3.8%
 - **South America**: Production^e ↑ 5.4%; Ending Stocks^e ↓ **0.3%**

World Crop Production & Stocks MY 2021/22

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• **Wheat** ^{World} ⇒ Production^e No Chg; Ending Stocks^e ↓ 4.2%

o “World-Less-China”: Production^e ↑ 2.4%; Ending Stocks^e ↑ 6.3%

o **Russia + Ukraine**: Production^e ↓ 3.0%; Ending Stocks^e ↓ 15.6%

• **Cotton** ^{World} ⇒ Production^e ↑ 8.6%; Ending Stocks^e ↓ 2.6%

o “World-Less-China”: Production^e ↑ 15.0%; Ending Stocks^e ↑ 0.9%

o **China**: Production^e ↓ 9.3%; Ending Stocks^e ↓ 7.1%

Anticipating 2022 U.S. Crop Acres...

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• **Winter Wheat** ²⁰²¹ ↑ ≈3-5% ⇒ “High” RMA Insurance \$’s; **\$7.08^{RMA\$}**

• **Soybeans** ²⁰²¹ ↑ ≈3.5% ⇒ Soybean cost < Corn; **≈\$12.00^{RMA\$}**

• **Corn** ²⁰²¹ ↓ ≈3% ⇒ ↑ N-P-K, other expenses; **≈\$5.50^{RMA\$}**

• **Sorghum** ²⁰²¹ ↑ 1% ? ⇒ Depends (2021/22 Exports); **≈\$5.23^{RMA\$}**

• **Cotton** ²⁰²¹ ↑ 2% ? ⇒ Strong MY 2021/22 \$’s, moisture?

Corn & Sorghum Markets

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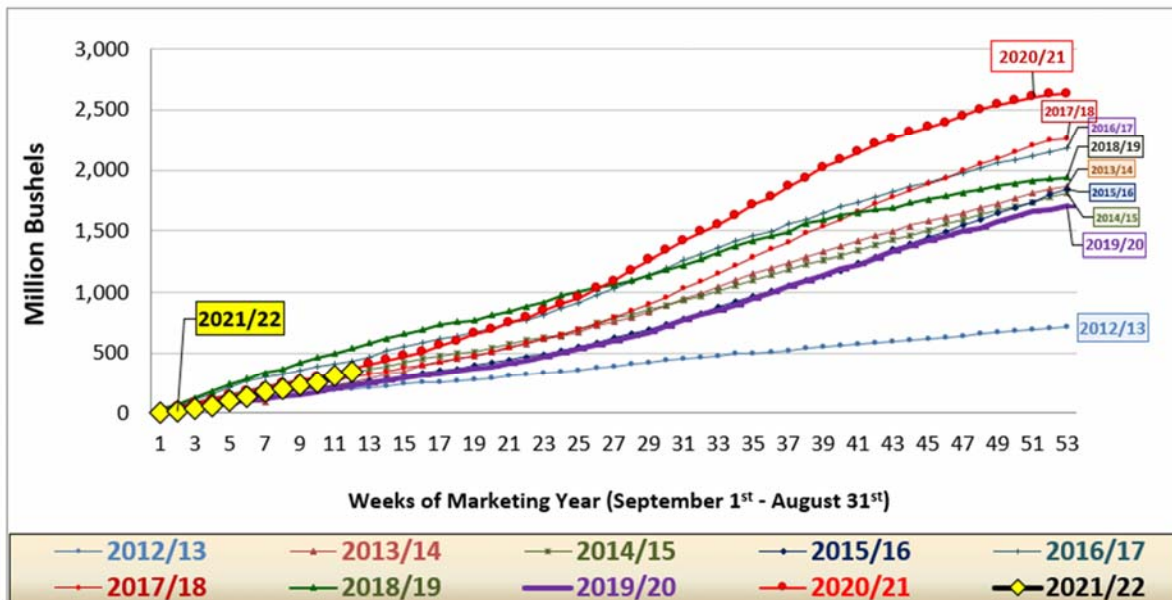
Kansas Corn Seasonal Price Index: MY 1999/00 – MY 2019/20 plus “Old Crop” MY 2020/21 & “New Crop” MY 2021/22 as of November 30, 2021

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U.S. Corn Exports: MY 2012/13 through “New Crop” MY 2021/22 based on

USDA Foreign Agricultural Service Weekly Export reports through 11/18/2021 (Start of marketing year on 9/1)



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U.S. Corn % Ending Stocks vs U.S. Corn Prices: MY 2009/10 – “New Crop” MY 2021/22 as of the November 9, 2021 USDA WASDE report



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U.S. Corn Supply-Demand Balance Sheet: Projected "New Crop" MY 2021/22 as of the

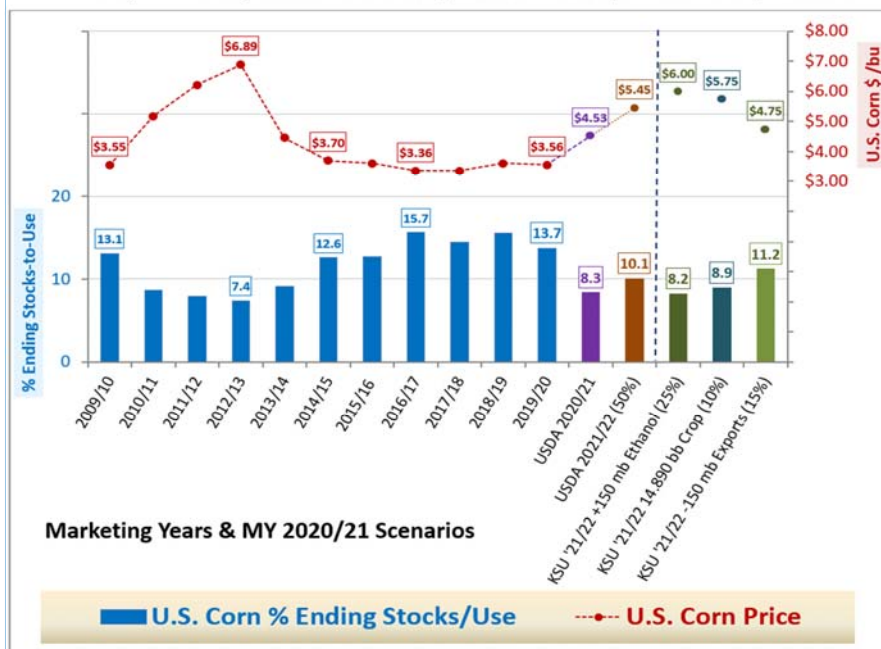
November 9, 2021 USDA WASDE report, with Alternative KSU "New Crop" 2021/22 Marketing Year Scenarios

Item	A. USDA 2021/22 11/9/2021 USDA WASDE Report	B. USDA ^{KSU Adjusted} MY 2021/22 11/9/2021 WASDE @ +150 mb Ethanol Use **14.980 bb Total Use**	C. USDA ^{KSU Adjusted} MY 2021/22 11/9/2021 WASDE @ **175.0 bu/ac Yield** & **14.890 bb Crop**	D. USDA ^{KSU Adjusted} MY 2021/22 11/9/2021 WASDE Less 150 mb U.S. Exports
% Probability of Occurring (KSU)	50% ^{KSUest}	25% ^{KSUest}	10% ^{KSUest}	15% ^{KSUest}
Planted Area (million acres)	93.304	93.304	93.304	93.304
Harvested Area (million acres)	85.085	85.085	85.085	85.085
% Harvested/Planted Area	91.2%	91.2%	91.2%	91.2%
Yield / harvested acre (bu/ac)	177.0	177.0	175.0	177.0
Million Bushels				
Beginning Stocks (million bushels)	1,236	1,236	1,236	1,236
Production (million bu.)	15,062	15,062	14,890	15,062
Imports (million bu.)	25.0	25	25	25.0
Total Supply (million bu.)	16,323	16,323	16,151	16,323
Ethanol for fuel Use (million bu.)	5,250	5,400	5,250	5,250
Food & Industrial Use (mln bu.)	1,400	1,400	1,400	1,400
Seed Use (million bu.)	30.6	31	31	31
Exports (million bu.)	2,500	2,500	2,500	2,300
Feed & Residual Use (million bu.)	5,650	5,650	5,650	5,650
Total Use (million bu.)	14,830	14,980	14,830	14,680
Ending Stocks (million bu.)	1,493	1,343	1,321	1,643
% Ending Stocks-to-Use	10.07%	8.23%	8.91%	11.19%
Days of Supply (% S/U x 365 days)	36.8 days	30.0 days	32.5 days	40.85 days
U.S. Corn Average Farm Price (\$/bushel)	\$5.45 /bu vs \$5.32 KSU Futures	\$6.00 /bu Adjusted from Nov ²⁰²¹ USDA frst	\$5.75 /bu Adjusted from Nov ²⁰²¹ USDA frst	\$4.75 /bu Adjusted from Nov ²⁰²¹ USDA frst

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U.S. Corn % Ending Stocks vs U.S. Corn Prices: MY 2009/10 – "New

Crop" MY 2021/22 as of the November 9, 2021 USDA WASDE report + KSU "new crop" estimates.



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World vs "World-Less-China" % Corn Stocks-to-Use: MY 2007/08 through "New Crop" MY 2021/22, as of the November 9, 2021 USDA WASDE report.

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Kansas Cash & Futures Prices

Date	
11/30/2021	
Grain Futures Contracts	Closing \$
MAR 2022 Corn (Lead contract)	\$5.6750
DEC 2022 Corn (2022 Harvest Contract)	\$5.4650
JAN 2022 Soybeans (Lead Contract)	\$12.1725
NOV 2022 Soybeans (2022 Harvest Contract)	\$12.0900
MAR 2022 KC HRW Wheat (Lead Contract)	\$8.2225
JULY 2022 KC HRW Wheat (Harvest Contract)	\$8.0925

11/30/2021	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	Representing the highest bids available in each location					
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$	\$5.85	\$5.88	\$5.77	\$5.97	\$6.02	\$5.47
Corn Spot Cash Basis	\$0.18	\$0.21	\$0.09	\$0.30	\$0.35	(\$0.21)
Corn Harvest FC\$: Fall ²⁰²²	\$5.21	\$5.21	\$5.17	\$5.56	\$5.30	\$5.21
Corn Harvest FC\$ Basis	(\$0.26)	(\$0.26)	(\$0.30)	\$0.09	(\$0.17)	(\$0.26)

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2022 Irrigated Corn (center-pivot) Cost-Return Budget

-----Northwest Kansas (ave yields)

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

Budget abstract

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Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Corn - Northwest KS	bu	\$5.31	240.00	\$1,274.40	\$1,274.40

DIRECT EXPENSES

Additional labor				\$0.61	15 acre-inches of water applied
Crop consulting				\$6.76	300 foot well depth
Crop insurance				\$41.77	\$ 3.57 fuel cost per acre-inch of water applied
Diesel				\$12.90	.71 Mcf of natural gas per acre-inch of water applied
Fertilizers				\$191.43	\$ 5 per Mcf for cost of natural gas
Fungicides				\$6.30	10.7 Mcf of fuel used in total
Herbicides				\$72.79	
Insecticides				\$8.41	
Irrigation energy (NG)				\$53.49	
Irrigation labor				\$9.30	
Miscellaneous				\$10.80	
Operator labor				\$7.71	
Repair & Maintenance				\$19.54	
Seeds				\$131.38	
Interest on operating capital	6% percent on direct expenses			\$17.20	

--TOTAL DIRECT EXPENSES-- \$590.38

-----Total direct expenses per bu (\$2.46)

FIXED EXPENSES

Cash rent				\$215.00	
Capital recovery (depreciation + interest)				\$237.81	

--TOTAL FIXED EXPENSES-- \$452.81

-----Total expenses per bu (\$4.35)

KSU Estimates²⁰²²

240 bu/ac Yield

15 ac. inches water

\$2.46 /bu Direct Cost

\$4.35 /bu Total Cost

2022 Corn Cost-Return Budget (W-C-F Rotation) in Northwest Kansas

-----Average yields

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

Budget abstract

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Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Corn - Northwest KS	bu	\$5.31	89.00	\$472.59	\$472.59

DIRECT EXPENSES

Additional labor				\$0.77	
Crop insurance				\$17.19	
Diesel				\$9.94	
Fertilizers				\$71.56	
Herbicides				\$83.23	
Miscellaneous				\$5.94	
Operator labor				\$5.70	
Repair & Maintenance				\$12.83	
Seeds				\$46.17	
Interest on operating capital	6% percent on direct expenses			\$7.60	

--TOTAL DIRECT EXPENSES-- \$260.94

-----Total direct expenses per bu (\$2.93)

FIXED EXPENSES

Cash rent				\$97.50	
Capital recovery (depreciation + interest)				\$42.96	

--TOTAL FIXED EXPENSES-- \$140.46

-----Total expenses per bu (\$4.51)

KSU Estimates²⁰²²

89 bu/ac Yield

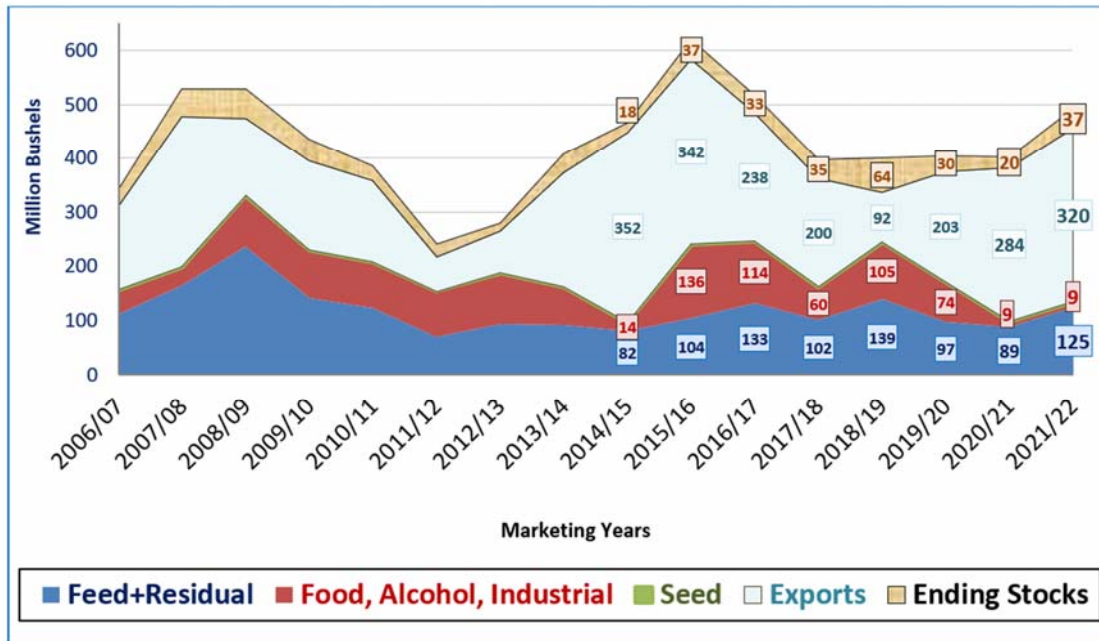
\$2.93 /bu Direct Cost

\$4.51 /bu Total Cost

Trends in U.S. Grain Sorghum Use & Ending Stocks: MY 2006/07

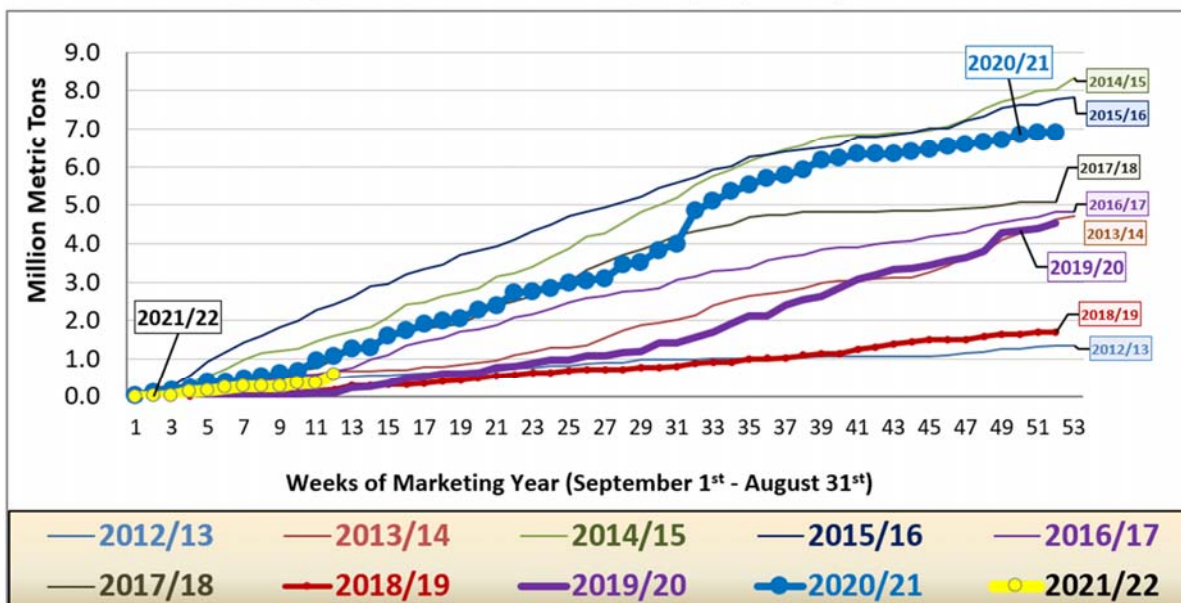
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"New Crop" MY 2021/22 as of the November 9, 2021 USDA WASDE report



U.S. Grain Sorghum Exports: for MY 2012/13 - "New Crop" MY 2021/22 as of November 18, 2021 - via USDA FAS Weekly Export reports

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Kansas Cash & Futures Prices	
Date	
11/30/2021	
Grain Futures Contracts	Closing \$
MAR 2022 Corn ^(Lead contract)	\$5.6750
DEC 2022 Corn ^(2022 Harvest Contract)	\$5.4650
JAN 2022 Soybeans ^(Lead Contract)	\$12.1725
NOV 2022 Soybeans ^(2022 Harvest Contract)	\$12.0900
MAR 2022 KC HRW Wheat ^(Lead Contract)	\$8.2225
JULY 2022 KC HRW Wheat ^(Harvest Contract)	\$8.0925

11/30/2021	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	Representing the highest bids available in each location					
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Grain Sorghum Spot Cash\$	\$5.93	\$6.12	\$6.27	\$5.77	\$5.97	\$5.67
Sorghum Spot Cash Basis	\$0.26	\$0.45	\$0.60	\$0.09	\$0.30	(\$0.00)
Grain Sorghum Harvest FC\$: Fall ²⁰²²	\$4.96	\$5.26	\$4.87	\$5.12	\$4.90	\$5.12
Sorghum Harvest FC\$ Basis	(\$0.51)	(\$0.21)	(\$0.60)	(\$0.35)	(\$0.57)	(\$0.35)

2022 Grain Sorghum Cost-Return Budget in South Central Kansas

-----Average yields

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Grain Sorghum - South Central KS	bu	\$5.37	115.00	\$617.55	\$617.55

DIRECT EXPENSES

Additional labor				\$0.00	
Crop insurance				\$0.55	
Custom Operations				\$17.65	
Diesel				\$16.13	
Fertilizers				\$11.44	
Herbicides				\$84.07	
Miscellaneous				\$19.73	
Operator labor				\$6.48	
Repair & Maintenance				\$7.10	
Seeds				\$11.11	
Interest on operating capital	6% percent on direct expenses			\$8.92	
				\$5.50	
--TOTAL DIRECT EXPENSES--					\$188.67
-----Total direct expenses per bu					\$1.64

FIXED EXPENSES

Cash rent				\$50.00	
Capital recovery (depreciation + interest)				\$43.19	
--TOTAL FIXED EXPENSES--					\$93.19
-----Total expenses per bu					\$2.45

Alt: \$2.89 /bu

KSU Estimates²⁰²²

115 bu/ac Yield

\$1.64 /bu Direct Cost

\$2.45 /bu Total Cost

or

\$2.89 /bu Total Cost^{Alt}.

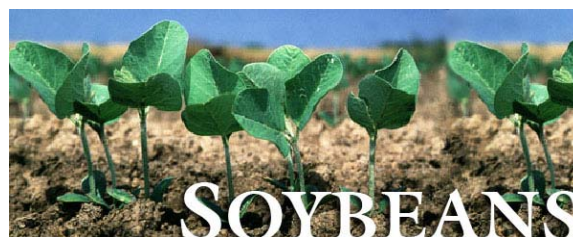
Alternative: \$100

Alternative: \$143

11/30/2021	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	<i>Representing the highest bids available in each location</i>					
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$	\$5.85	\$5.88	\$5.77	\$5.97	\$6.02	\$5.47
Corn Spot Cash Basis	\$0.18	\$0.21	\$0.09	\$0.30	\$0.35	(\$0.21)
Corn Harvest FC\$: Fall ²⁰²²	\$5.21	\$5.21	\$5.17	\$5.56	\$5.30	\$5.21
Corn Harvest FC\$ Basis	(\$0.26)	(\$0.26)	(\$0.30)	\$0.09	(\$0.17)	(\$0.26)
Grain Sorghum Spot Cash\$	\$5.93	\$6.12	\$6.27	\$5.77	\$5.97	\$5.67
Sorghum Spot Cash Basis	\$0.26	\$0.45	\$0.60	\$0.09	\$0.30	(\$0.00)
Grain Sorghum Harvest FC\$: Fall ²⁰²²	\$4.96	\$5.26	\$4.87	\$5.12	\$4.90	\$5.12
Sorghum Harvest FC\$ Basis	(\$0.51)	(\$0.21)	(\$0.60)	(\$0.35)	(\$0.57)	(\$0.35)

Soybean Markets

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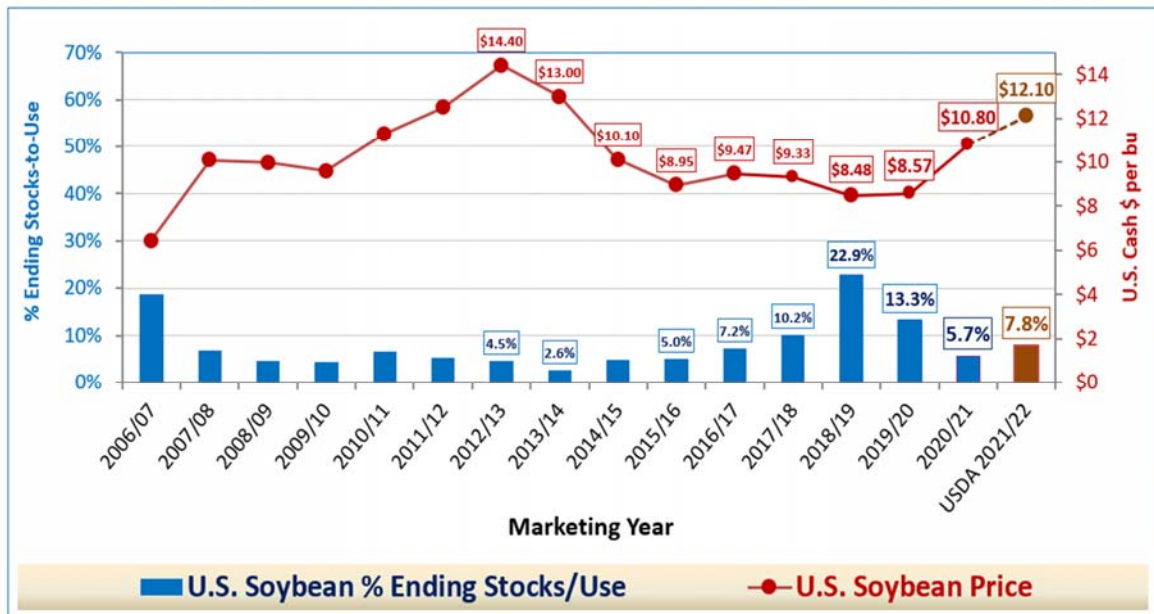
SOYBEANS

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U.S. Soybean % Stocks/Use vs U.S. Cash Prices: MY 2006/07 – “New Crop” MY 2021/22 as of the November 9, 2021 USDA WASDE Report

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U.S. Soybean Supply-Demand Balance Sheet: “New Crop” MY 2021/22 as of the November 9, 2021 USDA WASDE report with KSU Adjustments & Scenarios

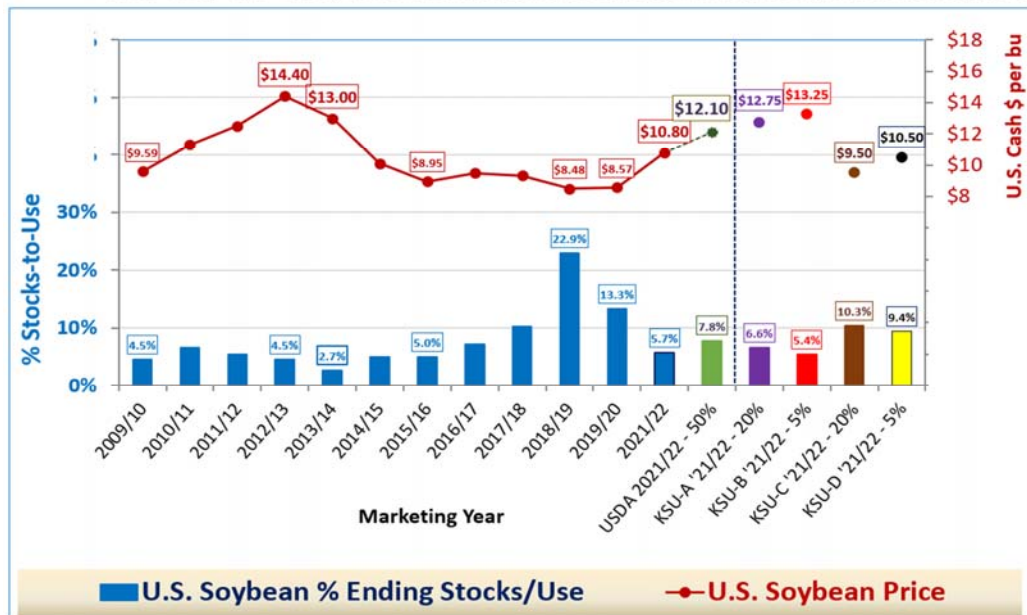
30

Item	A. USDA WASDE “New Crop” MY 2021/22 November 9, 2021	B. KSU #1 USDA Adj. “New Crop” MY 2021/22 Higher Exports: 2,150 bb	C. KSU #2 USDA Adj. “New Crop” MY 2021/22 Lower Yield: 50 bu/ac	D. KSU #3 USDA Adj. “New Crop” MY 2021/22 Lower Exports: 1,950 bb	E. KSU #4 USDA Adj. “New Crop” MY 2021/22 Higher Yield: 52 bu/ac
% Probability of Occurring (KSU)	50% ^{KSUest}	20% ^{KSUest}	5% ^{KSUest}	20% ^{KSUest}	5% ^{KSUest}
Planted Area (million acres)	87.235	87.235	87.235	87.235	87.235
Harvested Area (million acres)	86.436	86.436	86.436	86.436	86.436
% Harvested/Planted Area	99.08%	99.08%	99.08%	99.08%	99.08%
Yield / harvested acre (bu/ac)	51.2	51.2	50.0	51.2	52.0
Beginning Stocks (million bushels)	256	256	256	256	256
Production (million bu.)	4,425	4,425	4,322	4,425	4,495
Imports (million bu.)	15	15	15	15	15
Total Supply (million bu.)	4,696	4,696	4,593	4,696	4,766
Domestic Crushings	2,190	2,190	2,190	2,190	2,190
Exports	2,050	2,150	2,050	1,950	2,050
Seed	102	102	102	102	102
Residual	15	15	15	15	15
Total Use	4,356	4,406	4,356	4,256	4,356
Ending Stocks	340	290	237	440	410
% Ending Stocks-to-Use	7.81%	6.58%	5.44%	10.34%	9.41%
Days of Supply (% S/U x 365 days)	28.5 days	24.0 days	19.9 days	37.7 days	34.4 days
U.S. Avg. Farm Price (\$/bu)	\$12.10 ^{USDA} Vs \$11.17/bu KSU Futures & Basis-based forecast 4/10/2021	\$12.75 ^{USDA}	\$13.25 ^{USDA}	\$9.50 ^{KSU}	\$10.50 ^{KSU}

U.S. Soybean % Stocks/Use vs U.S. Cash Prices: MY 2009/10

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— “New Crop” MY 2021/22 as of the Nov. 9, 2021 USDA WASDE Report & KSU forecast scenarios



Kansas Cash & Futures Prices

Date	
11/30/2021	
Grain Futures Contracts	Closing \$
MAR 2022 Corn (Lead contract)	\$5.6750
DEC 2022 Corn (2022 Harvest Contract)	\$5.4650
JAN 2022 Soybeans (Lead Contract)	\$12.1725
NOV 2022 Soybeans (2022 Harvest Contract)	\$12.0900
MAR 2022 KC HRW Wheat (Lead Contract)	\$8.2225
JULY 2022 KC HRW Wheat (Harvest Contract)	\$8.0925

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11/30/2021	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	Representing the highest bids available in each location					
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Soybean Spot Cash\$	\$11.47	\$11.87	\$11.92	\$11.42	\$11.70	\$11.57
Soybean Spot Cash Basis	(\$0.70)	(\$0.30)	(\$0.25)	(\$0.75)	(\$0.47)	(\$0.60)
Soybean Harvest FC\$: Fall ²⁰²²	\$11.14	\$11.44	\$11.44	\$11.14	\$11.35	\$11.09
Soybean Harvest FC\$ Basis	(\$0.95)	(\$0.65)	(\$0.65)	(\$0.95)	(\$0.74)	(\$1.00)

2022 Irrigated Soybeans (center-pivot) Cost-Return

-----North Central Kansas - Average yields

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Stewart Duncan

Budget abstract

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Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Soybeans - North Central KS	bu	\$11.22	75.00	\$841.50	\$841.50

DIRECT EXPENSES

Additional labor				\$0.96	
Crop insurance				\$28.90	
Diesel				\$9.46	
Fertilizers				\$50.42	
Herbicides				\$69.00	
Irrigation energy (NG)				\$27.28	
Irrigation labor				\$8.37	
Miscellaneous				\$10.80	
Operator labor				\$5.44	
Repair & Maintenance				\$16.97	
Seeds				\$38.50	
Interest on operating capital	6% percent on direct expenses			\$7.98	

13.5 acre-inches of water applied
150 foot well depth
\$ 2.02 fuel cost per acre-inch of water applied
4 Mcf of natural gas per acre-inch of water applied
\$ 5 per Mcf for cost of natural gas
5.46 Mcf of fuel used in total

KSU Estimates²⁰²²

75 bu/ac Yield

13.5 ac. Inches H₂O

\$3.65 /bu Direct Cost

\$8.67 /bu Total Cost

--TOTAL DIRECT EXPENSES--
-----Total direct expenses per bu **\$3.65**

FIXED EXPENSES

Cash rent				\$190.00	
Capital recovery (depreciation + interest)				\$186.25	

--TOTAL FIXED EXPENSES--
-----Total expenses per bu **\$8.67**

2022 Soybean Cost-Return Budget in North Central Kansas

-----Average yields

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Stewart Duncan

Budget abstract

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Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Soybeans - North Central KS	bu	\$11.22	41.00	\$460.02	\$460.02

DIRECT EXPENSES

Additional labor				\$0.99	
Crop insurance				\$19.41	
Diesel				\$9.94	
Fertilizers				\$31.21	
Herbicides				\$65.16	
Miscellaneous				\$7.02	
Operator labor				\$6.06	
Repair & Maintenance				\$12.36	
Seeds				\$38.50	
Interest on operating capital	6% percent on direct expenses			\$5.72	

KSU Estimates²⁰²²

41 bu/ac Yield

\$4.79 /bu Direct Cost

\$8.02 /bu Total Cost

--TOTAL DIRECT EXPENSES--
-----Total direct expenses per bu **\$4.79**

FIXED EXPENSES

Cash rent				\$90.00	
Capital recovery (depreciation + interest)				\$42.39	

--TOTAL FIXED EXPENSES--
-----Total expenses per bu **\$8.02**

Wheat Markets

35



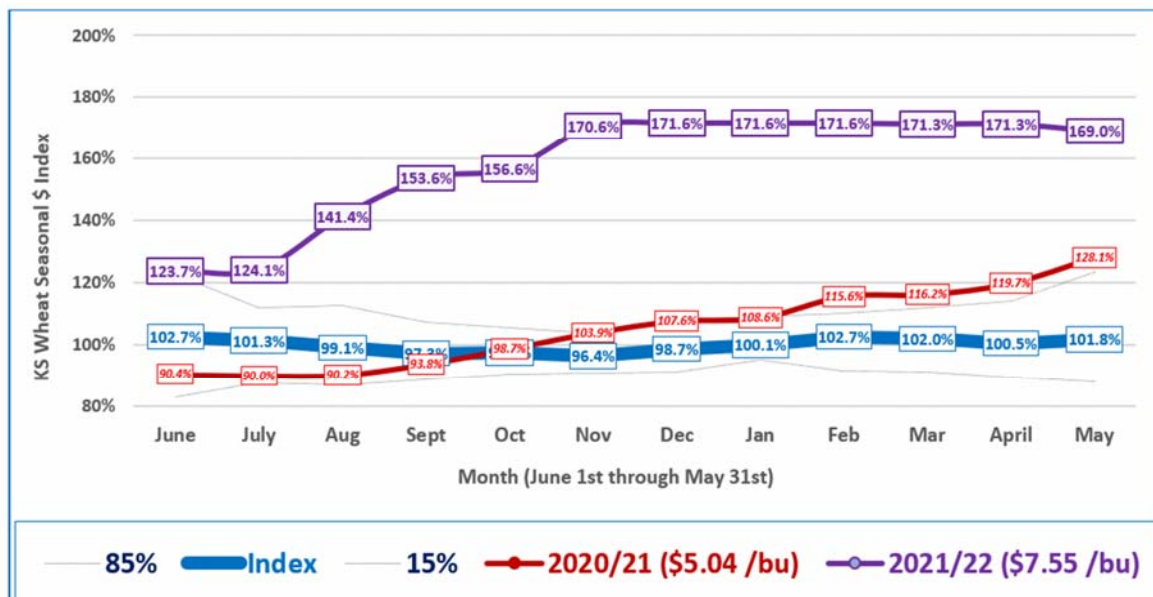
KANSAS STATE
UNIVERSITY

Department of Agricultural Economics

Seasonal \$ Index for KS Hard Red Winter (HRW) Wheat:

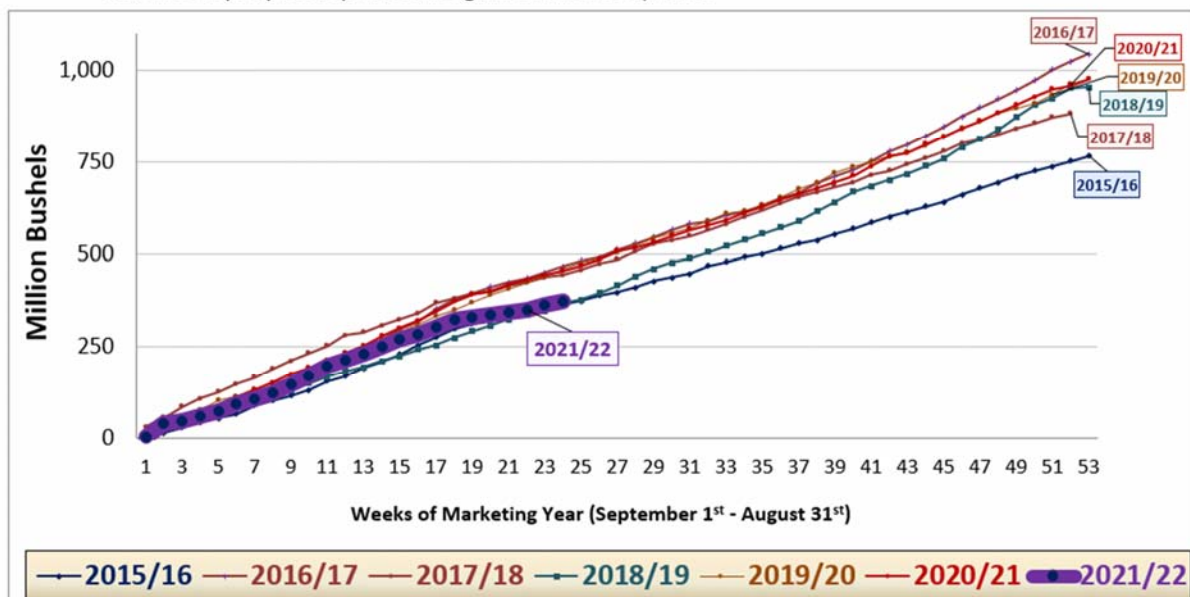
36

MY 1999/00 – 2019/20 + “New Crop” MY 2021/22 Ests. through November 30, 2021



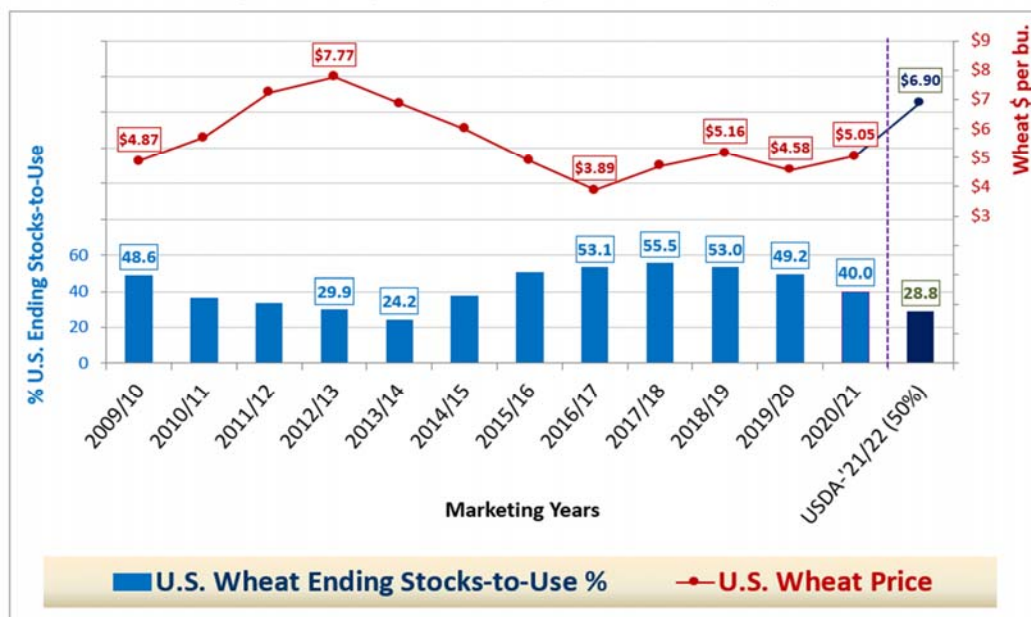
U.S. All Wheat Exports: MY 2015/16 thru "New Crop" MY 2021/22 as of USDA

FAS Weekly Export reports through November 18, 2021



U.S. Wheat Ending Stocks vs U.S. Cash Prices: MY 2009/10

thru "New Crop" MY 2021/22 – November 9, 2021 USDA WASDE Report



U.S. Wheat Supply-Demand Balance Sheet:

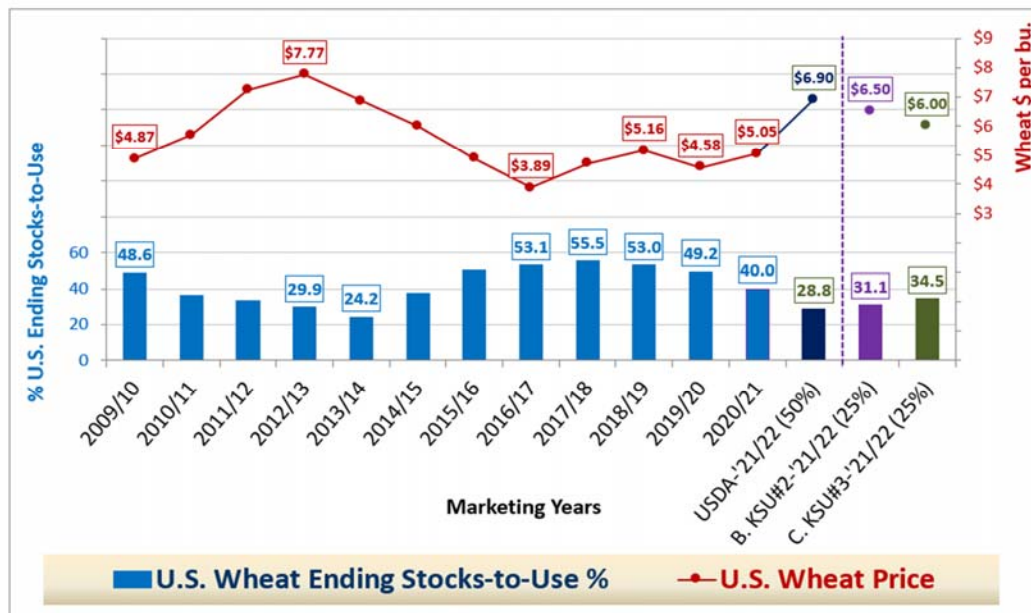
"New Crop" MY 2021/22 as of the November 10, 2021 USDA WASDE report, with KSU scenarios

Item	USDA 2021/22	B. KSU Scenario #2 "New" MY 2021/22 Lower Feed Use ^{35 mb}	C. KSU Scenario #3 "New" MY 2021/22 Lower Exports ^{50 mb} Lower Feed Use ^{35 mb}
% Probability of Occurring ^{KSU est}	50% prob	30% prob.	20% prob.
Planted Area (million acres)	46,703	46,703	46,703
Harvested Area (million acres)	37,163	37,163	37,163
% Harvested/Planted Area	79.57%	79.57%	79.57%
Yield / harvested acre (bu/ac)	44.3	44.3	44.3
Million Bushels			
Beginning Stocks	845	845	845
Production	1,646	1,646	1,646
Imports	115	115	115
Total Supply (million bushels)	2,606	2,606	2,606
Food Use	962	962	962
Seed Use	66	66	66
Exports	860	860	810
Feed & Residual Use	135	100	100
Total Use (million bushels)	2,023	1,988	1,938
Ending Stocks (million bushels)	583	618	668
% Ending Stocks-to-Use	28.82%	31.09%	34.47%
Days of Supply (% S/U x 365 days)	105 days	113 days	126 days
U.S. Wheat Avg. Farm Price (\$/bushel)	\$6.90 Vs \$7.55 /bu KSU Futures- based forecast	\$6.50	\$6.00

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U.S. Wheat Ending Stocks vs U.S. Cash Prices: MY 2009/10

thru "New Crop" MY 2021/22 – November 9, 2021 USDA WASDE Report, with KSU Projections



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World vs "World-Less-China" Ending Stocks & % Stocks-to-Use: MY 2007/08
through "New Crop" MY 2021/22 as of the November 9, 2021 USDA WASDE report

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Kansas Cash & Futures Prices	
Date	
11/30/2021	
Grain Futures Contracts	Closing \$
MAR 2022 Corn (Lead contract)	\$5.6750
DEC 2022 Corn (2022 Harvest Contract)	\$5.4650
JAN 2022 Soybeans (Lead Contract)	\$12.1725
NOV 2022 Soybeans (2022 Harvest Contract)	\$12.0900
MAR 2022 KC HRW Wheat (Lead Contract)	\$8.2225
JULY 2022 KC HRW Wheat (Harvest Contract)	\$8.0925

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11/30/2021	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	Representing the highest bids available in each location					
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
KC HRW Wheat Spot Cash\$	\$7.91	\$8.09	\$8.09	\$8.02	\$8.09	\$7.68
HRW Wheat Spot Cash Basis	(\$0.31)	(\$0.13)	(\$0.13)	(\$0.20)	(\$0.13)	(\$0.54)
KC HRW Wheat FC\$ - Harvest ²⁰²²	\$7.71	\$7.70	\$7.89	\$7.74	\$7.75	\$7.69
HRW Wheat Harvest FC\$ Basis	(\$0.38)	(\$0.39)	(\$0.20)	(\$0.35)	(\$0.34)	(\$0.40)

2022 Wheat (W-S_C-F Rotation) Cost-Return Budget in Northwest KS

-----Average yield

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

Budget abstract

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Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Wheat - Northwest KS	bu	\$7.56	50.00	\$378.00	\$378.00
DIRECT EXPENSES					
Additional labor					\$1.31
Crop insurance					\$14.77
Diesel					\$11.53
Fertilizers					\$66.81
Fungicides					\$3.85
Herbicides					\$58.56
Miscellaneous					\$5.94
Operator labor					\$6.81
Repair & Maintenance					\$11.71
Seeds					\$17.70
Interest on operating capital		6% percent on direct expenses			\$5.97
--TOTAL DIRECT EXPENSES--					\$204.97
-----Total direct expenses per bu					\$4.1
FIXED EXPENSES					
Cash rent					\$97.50
Capital recovery (depreciation + interest)					\$44.22
--TOTAL FIXED EXPENSES--					\$141.72
-----Total expenses per bu					\$6.93

KSU Estimates²⁰²²

50 bu/ac Yield

\$4.10 /bu Direct Cost

\$6.93 /bu Total Cost

or

\$6.28 /bu Total Cost^{Alt.}

Alt.: \$65 (no follow)

Alt.: \$109 (no follow)

2022 Wheat (Rotation) Cost-Return Budget in South Central KS

-----Average yield

Gregg Ibendahl, Daniel O'Brien, Sarah Lancaster, and Douglas Shoup

Budget abstract

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Date: Nov-01-2021

item	unit	price	quantity	amount	Sub-total
Wheat - South Central KS	bu	\$7.72	50.00	\$386.00	\$386.00
DIRECT EXPENSES					
Additional labor					\$0.96
Crop insurance					\$10.50
Diesel					\$10.73
Fertilizers					\$83.63
Fungicides					\$6.10
Herbicides					\$4.06
Miscellaneous					\$6.48
Operator labor					\$6.52
Repair & Maintenance					\$10.96
Seeds					\$24.50
Interest on operating capital		6% percent on direct expenses			\$4.93
--TOTAL DIRECT EXPENSES--					\$169.37
-----Total direct expenses per bu					\$3.39
FIXED EXPENSES					
Cash rent					\$50.00
Capital recovery (depreciation + interest)					\$41.21
--TOTAL FIXED EXPENSES--					\$91.21
-----Total expenses per bu					\$5.21

KSU Estimates²⁰²²

50 bu/ac Yield

\$3.39 /bu Direct Cost

\$5.21 /bu Total Cost

or

\$6.21 /bu Total Cost^{Alt.}

Alternative: \$100

Alternative: \$141



Questions?

Daniel O'Brien – Extension Ag Economist

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