Grain Market Outlook for Late 2019 - 2020

2019 Ag Horizons Conference

Pierre, South Dakota

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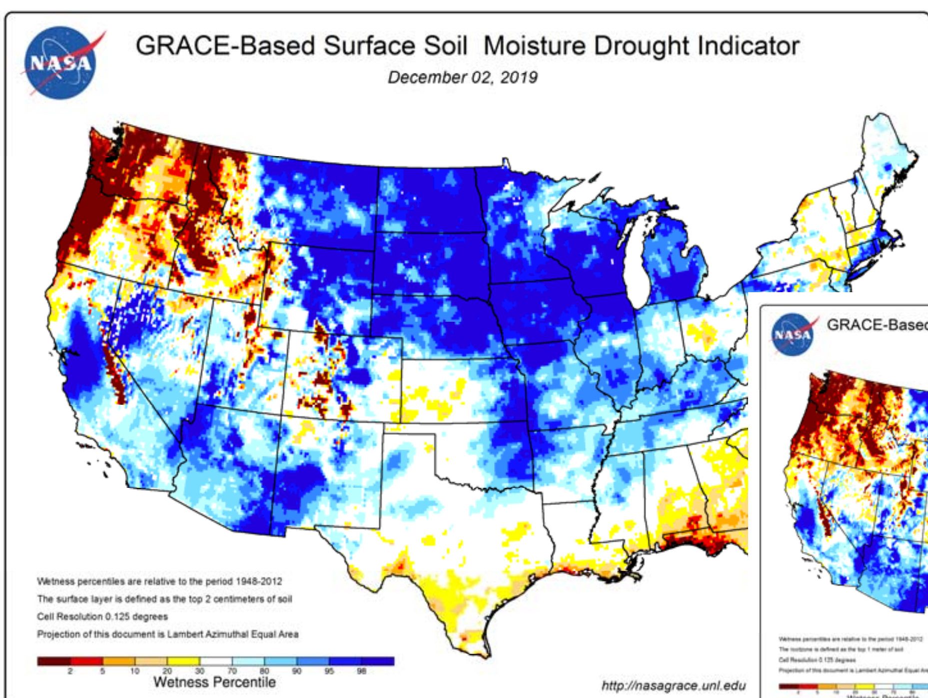

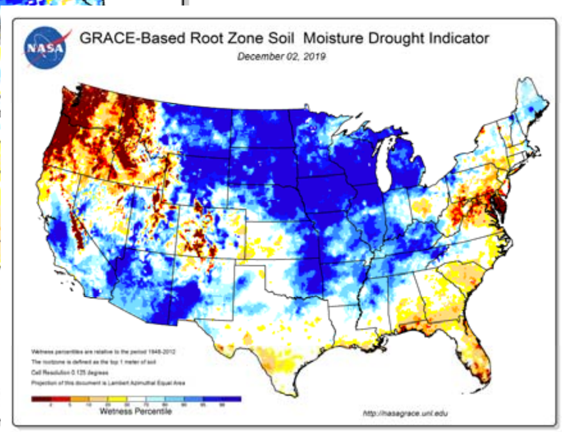

Crop Progress

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Corn Harvested – Selected States

[These 18 States harvested 94% of the 2018 corn acreage]

State	Week ending			2014-2018 Average
	December 8, 2018	December 1, 2019	December 8, 2019	
	(percent)	(percent)	(percent)	(percent)
Colorado	100	98	99	100
Illinois	100	93	96	100
Indiana	100	93	96	99
Iowa	100	92	95	100
Kansas	98	99	100	99
Kentucky	100	100	100	100
Michigan	99	66	74	96
Minnesota	100	91	93	100
Missouri	100	95	98	100
Nebraska	(NA)	96	98	(NA)
North Carolina	100	100	100	100
North Dakota	(NA)	36	43	(NA)
Ohio	94	90	93	99
Pennsylvania	82	86	91	88
South Dakota	(NA)	80	83	(NA)
Tennessee	100	100	100	100
Texas	98	100	100	99
Wisconsin	96	66	74	95
18 States	100	89	92	100

Crop Progress

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Soybeans Harvested – Selected States

[These 18 States harvested 96% of the 2018 soybean acreage]

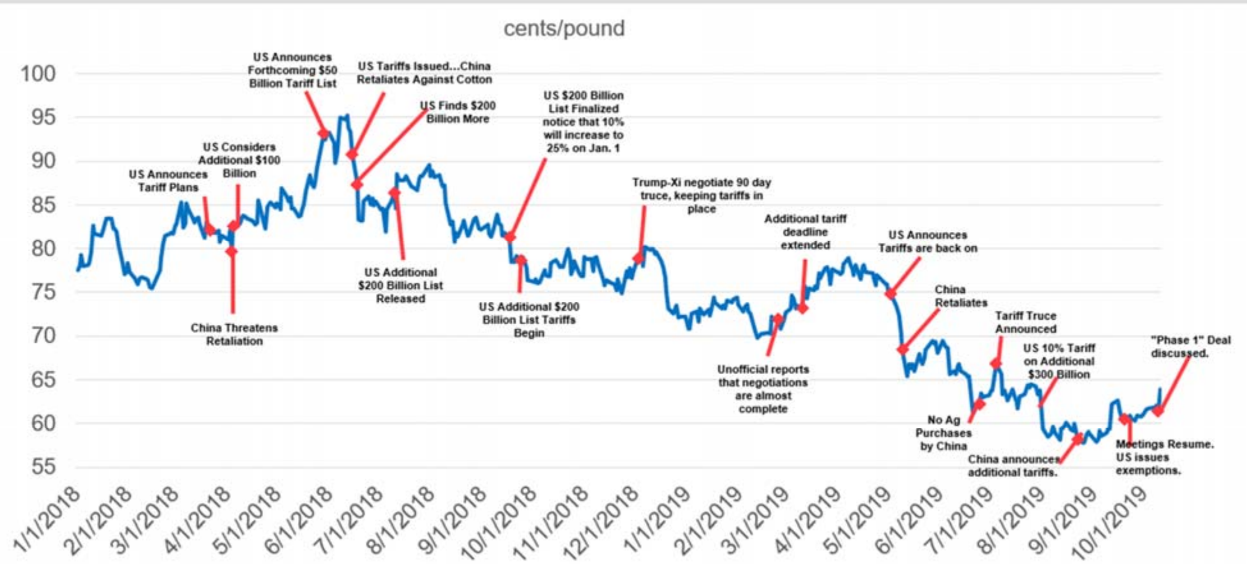
State	Week ending			2014-2018 Average
	December 1, 2018	November 24, 2019	December 1, 2019	
	(percent)	(percent)	(percent)	(percent)
Arkansas	93	96	98	98
Illinois	100	95	100	100
Indiana	98	94	96	99
Iowa	100	97	98	100
Kansas	95	95	97	98
Kentucky	90	92	96	95
Louisiana	99	100	100	100
Michigan	92	80	85	97
Minnesota	100	98	99	100
Mississippi	98	98	99	99
Missouri	98	91	96	96
Nebraska	100	100	100	100
North Carolina	71	67	75	77
North Dakota	95	89	92	99
Ohio	97	93	95	99
South Dakota	100	99	100	100
Tennessee	88	91	95	95
Wisconsin	99	82	86	99
18 States	97	94	96	99

Unpredictable Grain Markets in 2019-20

❑ The *“Ups & Downs”* of U.S. Trade Tensions

- **U.S.-Japan Trade Agreement (+)**
  - o Likely positive impact on U.S. wheat exports vs TPP Countries
- **USMCA Trade Agreement** U.S.-Mexico-Canada ⇨ *To be ratified* **(+)**
  - o **Mexico** grain purchases from the U.S.
  - o **Canada** grain export competition vs U.S. (Wheat, Oilseeds)
- **U.S. vs China (?)**
  - o Soybeans & Sorghum ***(Working towards final resolution)***

Trade War Effects on Cotton



Trade War Effects on Soybean Futures

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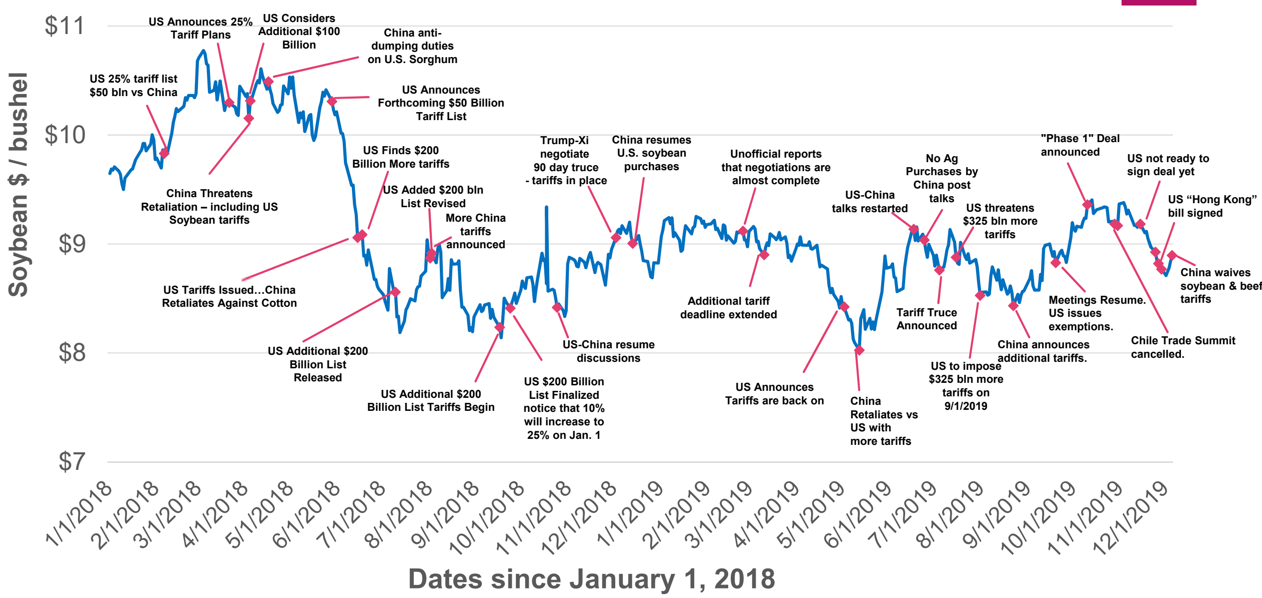

Market "Realities" to be determined ....

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1) 2019 U.S. Corn & Soybean harvest *(Jan 2020)*

- **Corn**2019 < 13.661 bln bu? ➲ End Stocks < 1.910 bb?
- **Soybeans**2019 < 3.550 bln bu? ➲ End Stocks < 475 mb?

2) U.S. HRW Wheat Seedings *(Jan 2020)*

- **Dry soils** may ⇩ 2020 HRW crop prospects (*BUT – is still early*)
- ***Struggling profitability*** *for 2013-2019 HRW Wheat*

More Grain Market Events to Anticipate

3) 2020 Production of Export Competitors

- **Soybeans** **So-Am 2020** → ***Up*** 2.5% ➲ "***China demand response***"
- **Corn** **So-Am + Ukraine 2020** → ***12.5% /year growth*** last 4-5 yrs
- **Argentina** ➲ *politics / exports*; **Brazil** - **Ukraine** ➲ *domestic issues*

4) U.S. Dollar *Strength* ⇨ *Limiting U.S. grain exports*

- *USD$ Index* *Trade Wghtd* → ⇧ *7.8% since February 2018*
- ***Brazil Reals ÷ USD$*** ≈ *4.10 in SEP-OCT 2019* ***(vs 1.56 in JUNE 2011)***

More Grain Market Events to Anticipate

5) U.S. Spring Plantings *(April-May 2020)*

- **Corn 2020** ***Up 5-10% ?*** → ⇧ ≈ ***U.S. Ethanol & Feed Demand***
- **Soybeans 2020** ***Up 5-10% ??*** → ⇧⇩ ≈ ***U.S.-China Trade Status***

6) *"Bearish"* Positions of Grain Futures' Traders…..

BUT – "Strong" local **Basis** in Cash Markets & Demand Centers

- **Corn** → ***Strong*** basis @ US. Ethanol Plants
- **HRW Wheat** → ***Strong basis*** @ Elevators in the Central / Southern Plains
- **Soybeans** → ***Moderate-to-weak basis*** in many areas – but improving

Wheat Markets

Kansas State University Department of Agricultural Economics

MGE HRS Wheat

Weekly Chart: December 2015 – December 9, 2019

CME Kansas HRW Wheat

Weekly Chart: December 2015 – December 9, 2019

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Managed Money (Spec) Positions in CME KS HRW Wheat

CFTC Commitment of Traders to December 3, 2019

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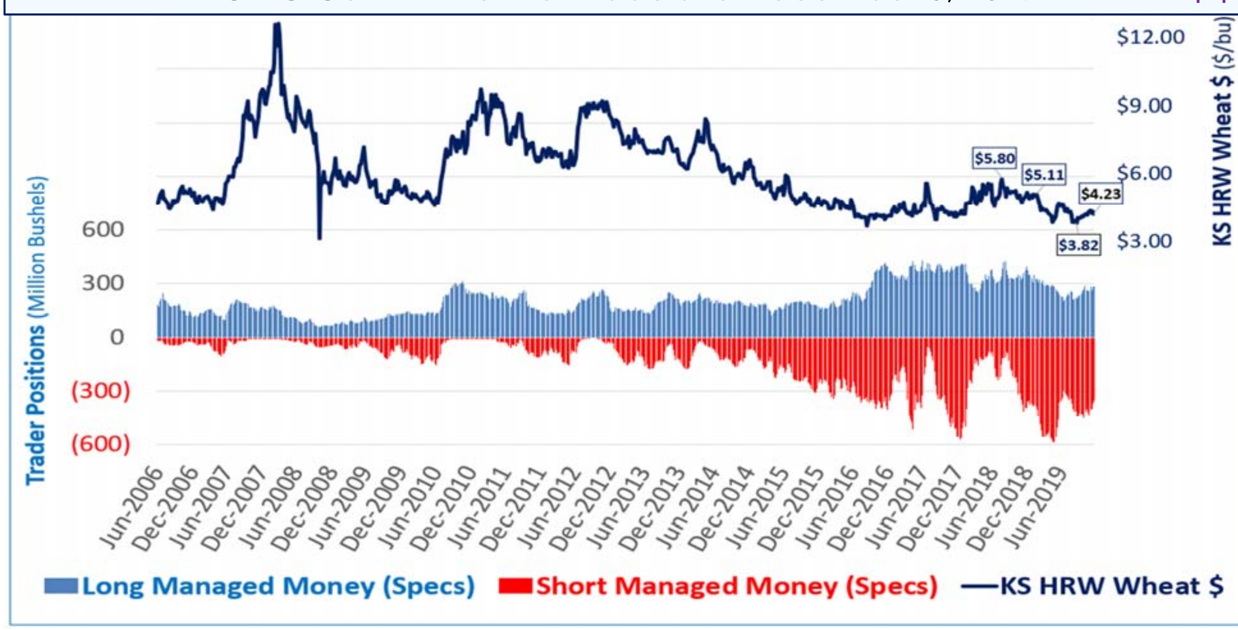
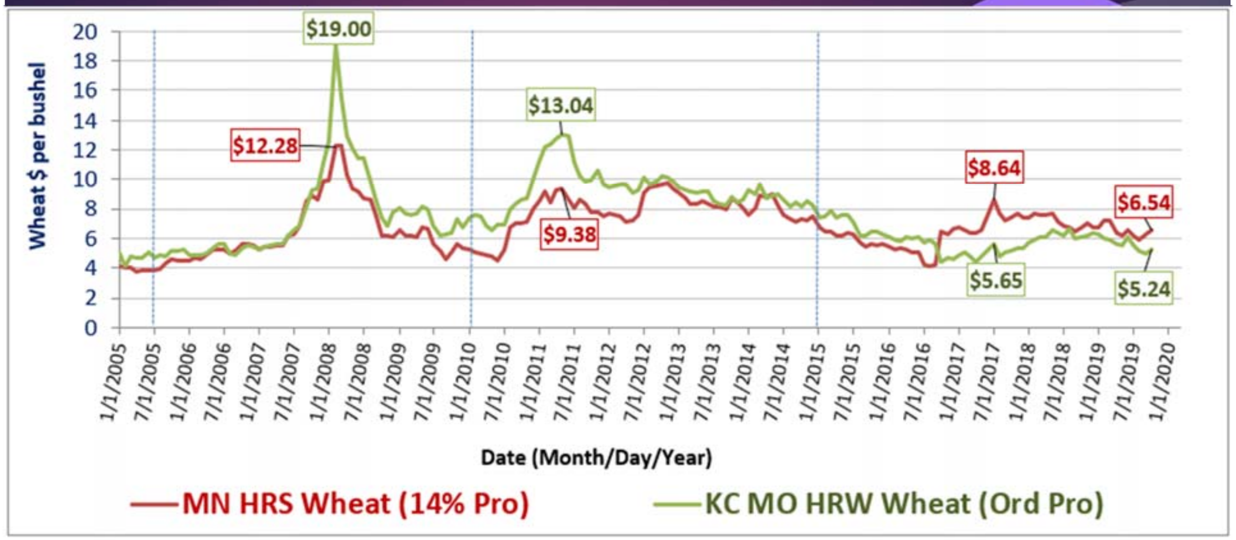


Prices for **HRS Wheat 14% Protein** (Minneapolis, MN) vs **HRW Wheat – Ord Protein** (Kansas City, MO) on 11/8/2019



U.S. Wheat Stocks…..

- **U.S. HRS Wheat:** *2019 Harvest Problems*
  - o **End Stocks 2019/20** → 269 mln bu *(263 bb last year)*
  - o **% Stocks/Use 2019/20** → 47.5% S/U *(45.1% Stx/Use last year)*
- **U.S. HRW Wheat:** *"Still Large"* **Carryover** (BUT *declining)*
  - o **End Stocks MY 2019/20** → 483 mln bu *(516 mb last year)*
  - o **% Stocks/Use MY 2019/20** → 55.5% S/U *(70.5% Stx/Use last year)*

U.S. Wheat Stocks…..

- **U.S. Durum Wheat:** *2019 Harvest Problems*
  - o **End Stocks 2019/20** → 26 mln bu *(55 mb last year)*
  - o **% Stocks/Use 2019/20** → 21.1% S/U *(50.0% Stx/Use last year)*

- **All U.S. Wheat:** *"Large" but "Moderating"* **Stocks**
  - o **End Stocks 2019/20** → 974 mln bu *(1.080 bb last year)*
  - o **% Stocks/Use 2019/20** → 54.71% S/U *(53.0% Stx/Use last yr)*

U.S. Wheat Supply and Demand

Item	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
Planted area (million acres)	47.8	45.2	--	-2.7
Harvested area (million acres)	39.6	37.2	--	-2.5
Yield (bushels per acre)	47.6	51.7	--	4.1
		------------ Million bushels ------------		
Beginning stocks	1,099	1,080	--	-19
Production	1,885	1,920	--	35
Imports	135	105	-15	-30
Total supply	3,119	3,105	-15	-14
Food use	955	955	--	**
Seed	59	61	--	2
Feed and residual	90	140	--	50
Domestic use	1,103	1,156	--	53
Exports	936	975	25	39
Total use	2,039	2,131	25	92
Ending stocks	1,080	974	-40	-106
		----------------- Percent -----------------		
Stocks to use ratio	52.9	45.7	-2.4	-7.2
		------------ Dollars per bushel ------------		
Average market price	5.16	4.55	-0.05	-0.61

U.S. Wheat Seeded Acreage

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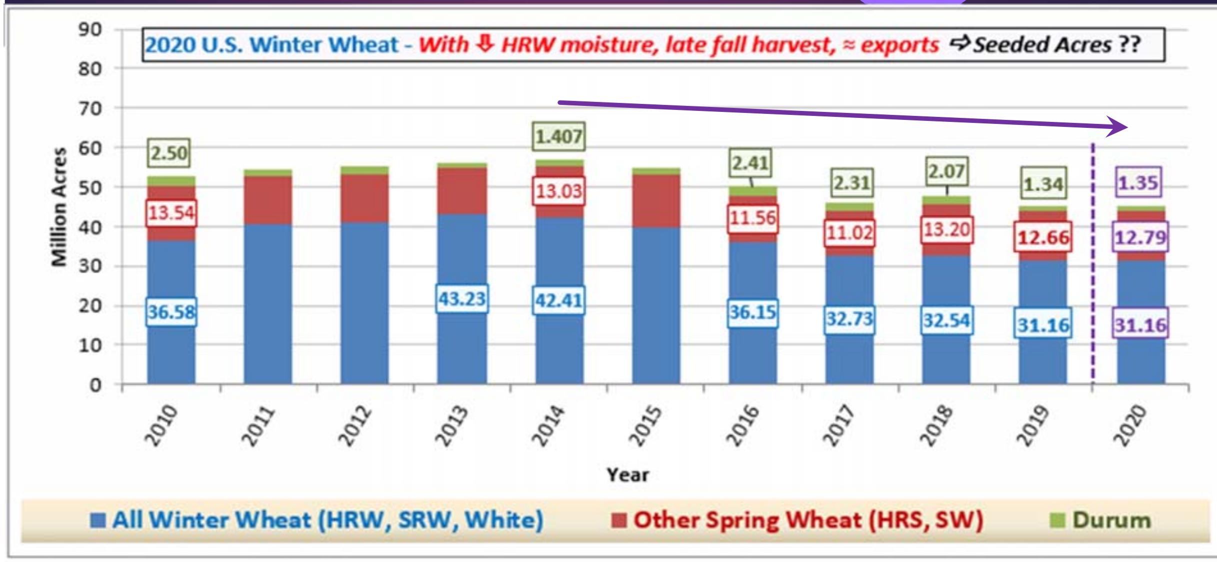

U.S. Wheat Planted & Harvested Acres

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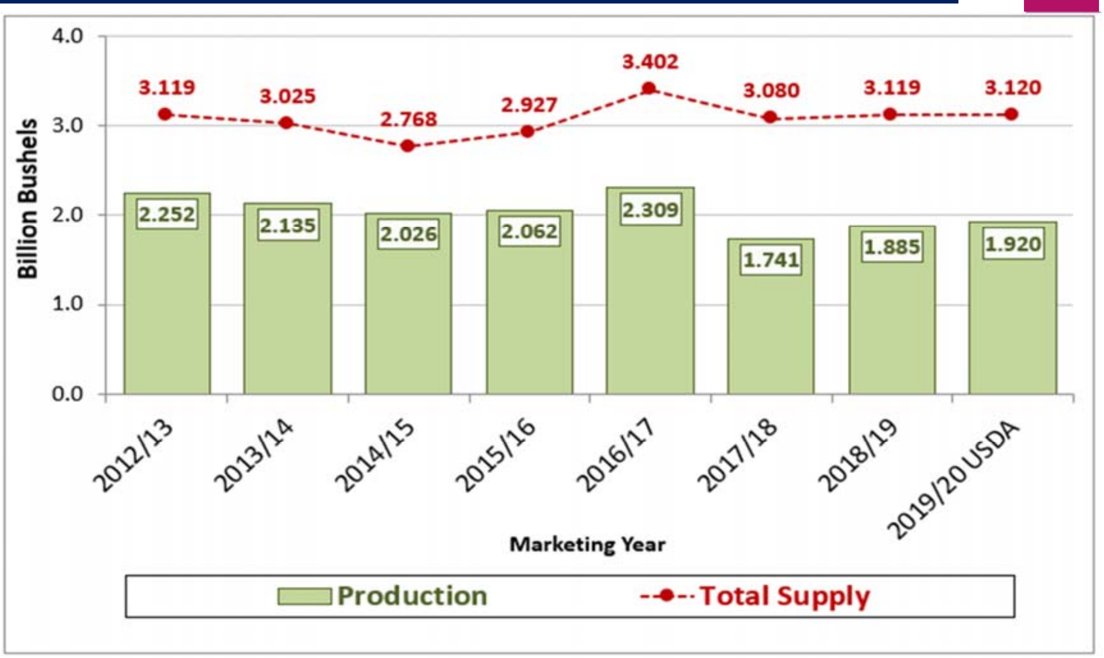
U.S. Wheat Yields

U.S. Wheat Production & Supplies



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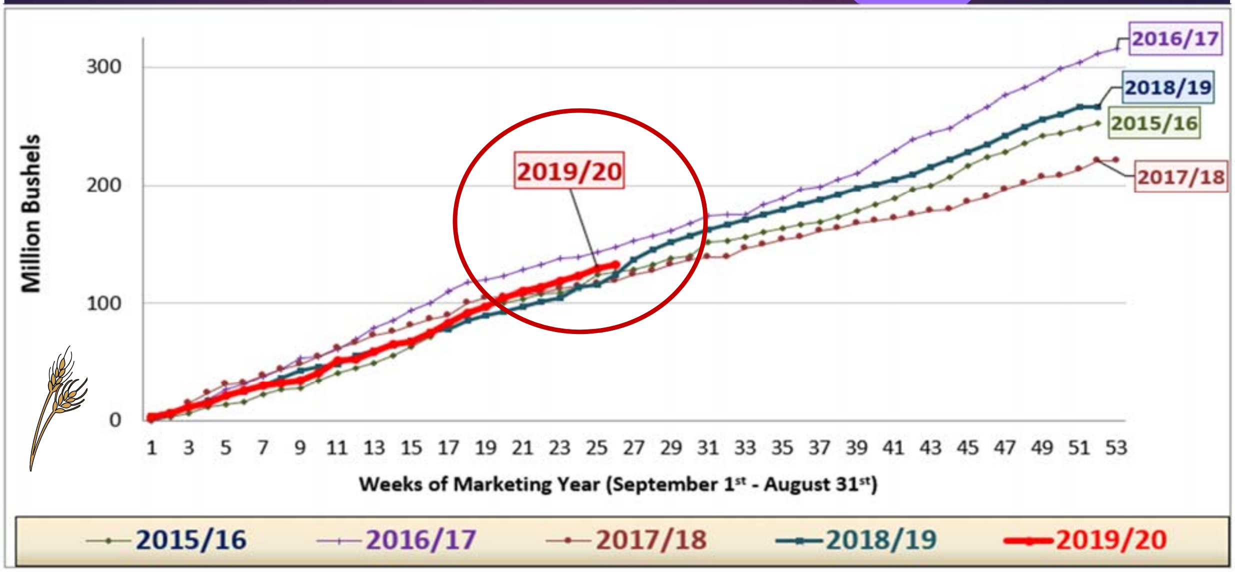
U.S. HRS Wheat Exports – Weekly thru Nov. 28, 2019



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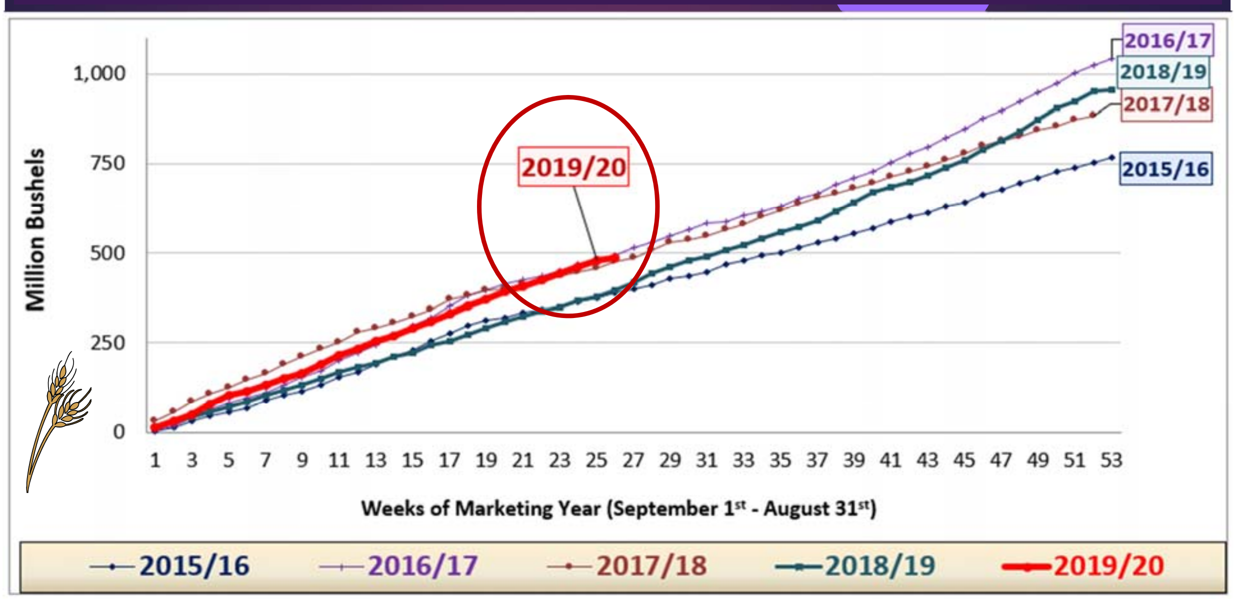
U.S. All Wheat Exports – Weekly thru November 28, 2019



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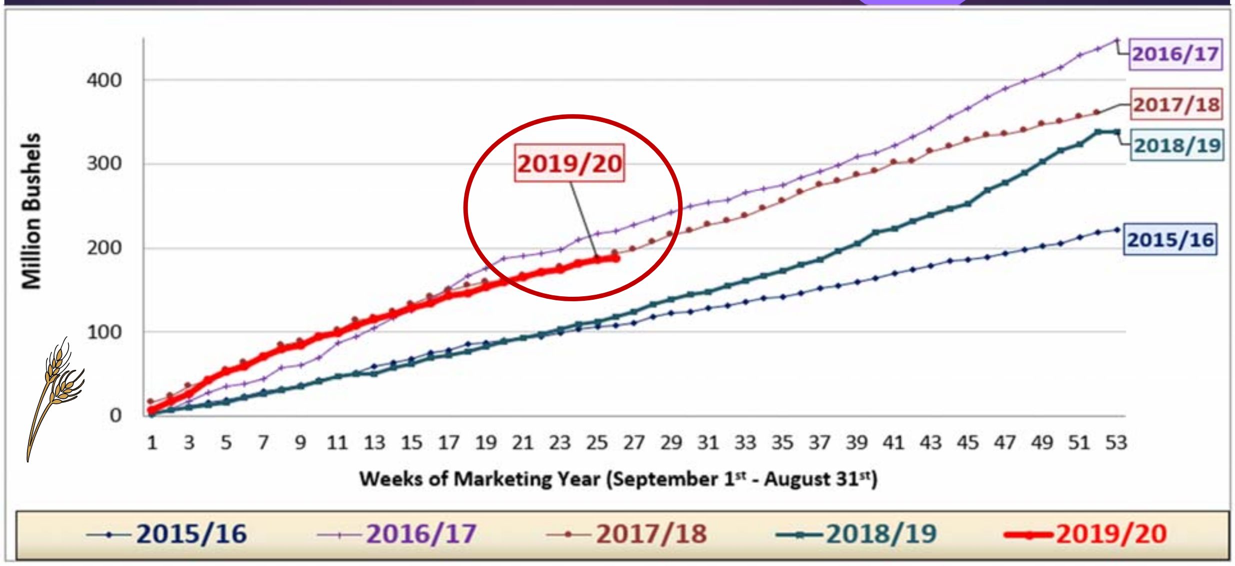
U.S. HRW Wheat Exports – Weekly thru Nov. 28, 2019



U.S. Wheat Use – By Category

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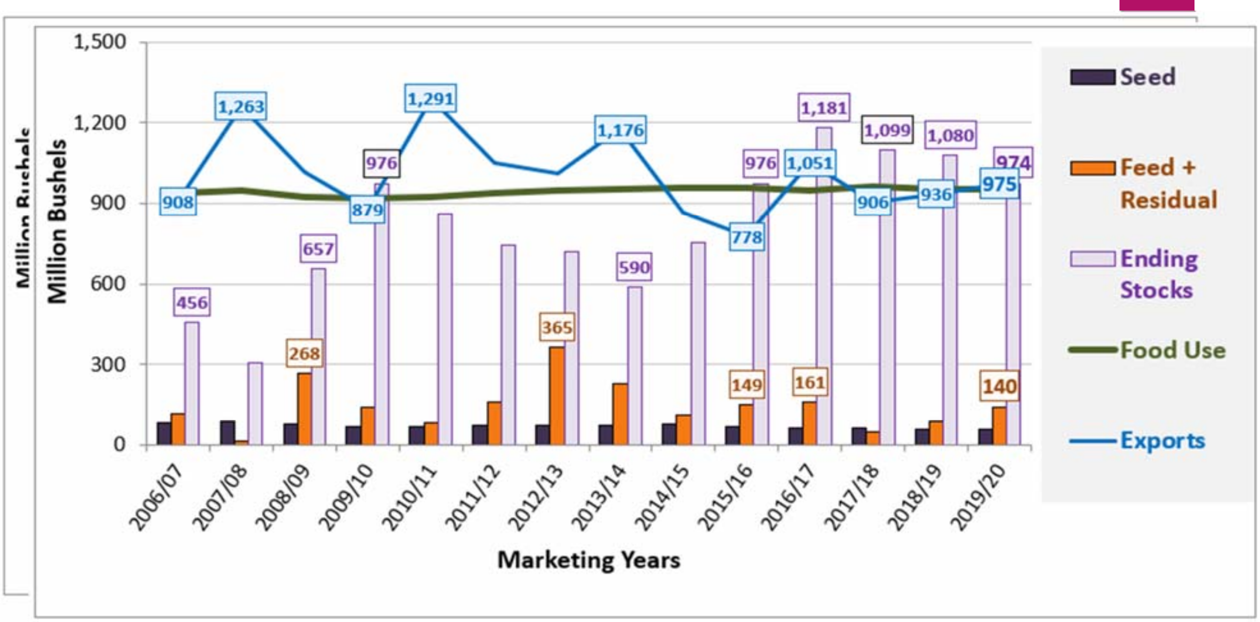

U.S. Wheat Use – By Category

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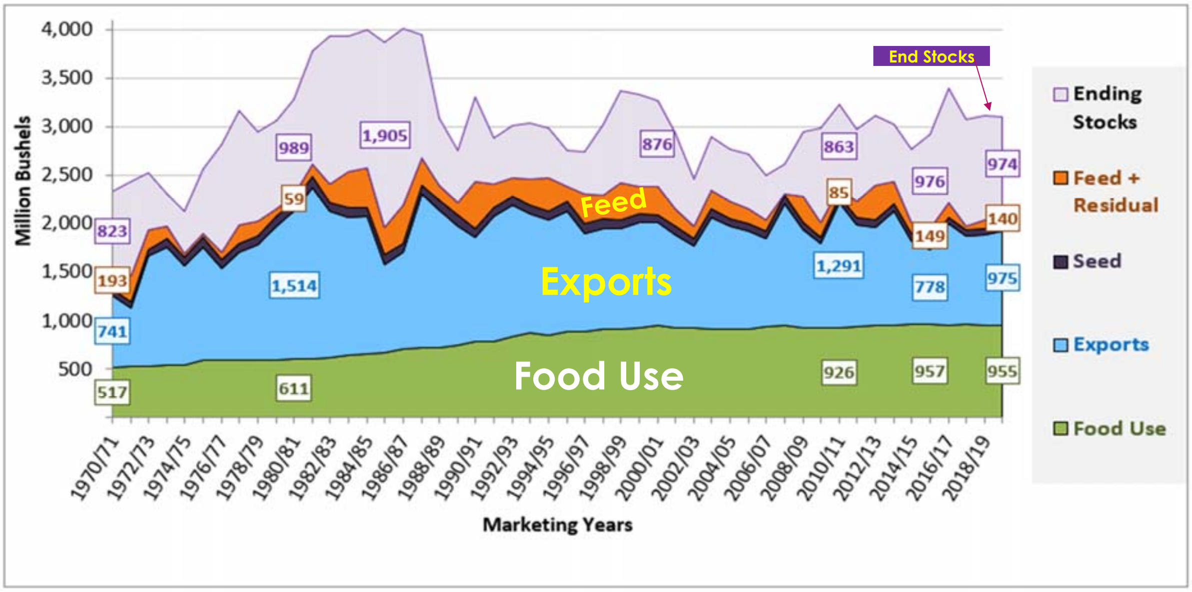

U.S. Wheat Total Use Projections (USDA)

For "Old Crop" MY 2018/19 & "New Crop" MY 2019/20

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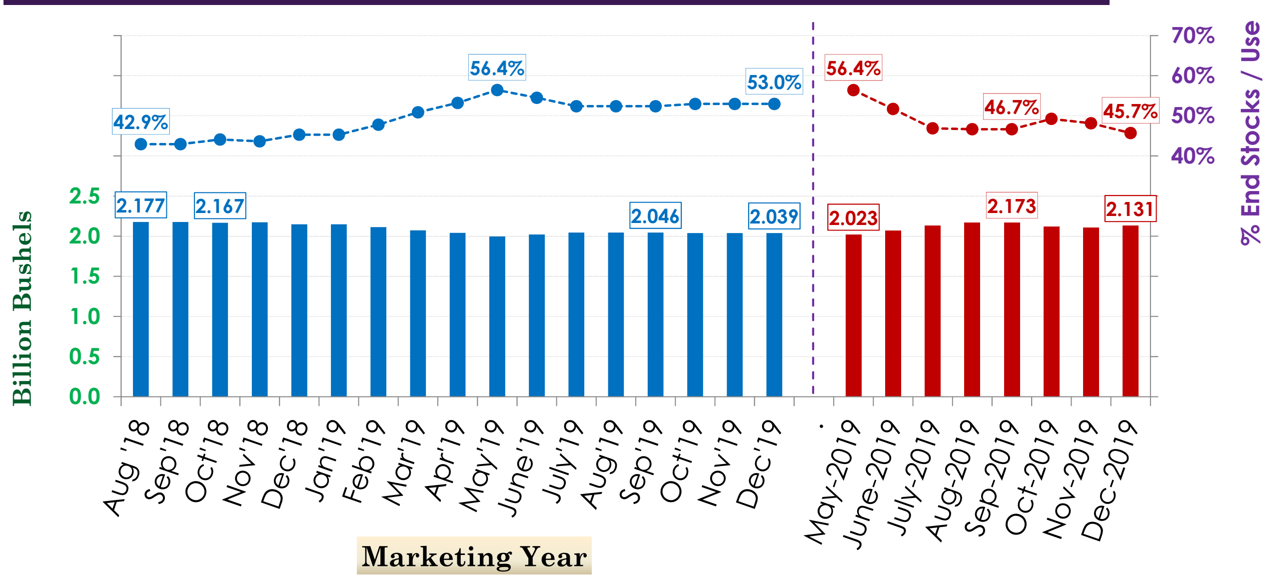
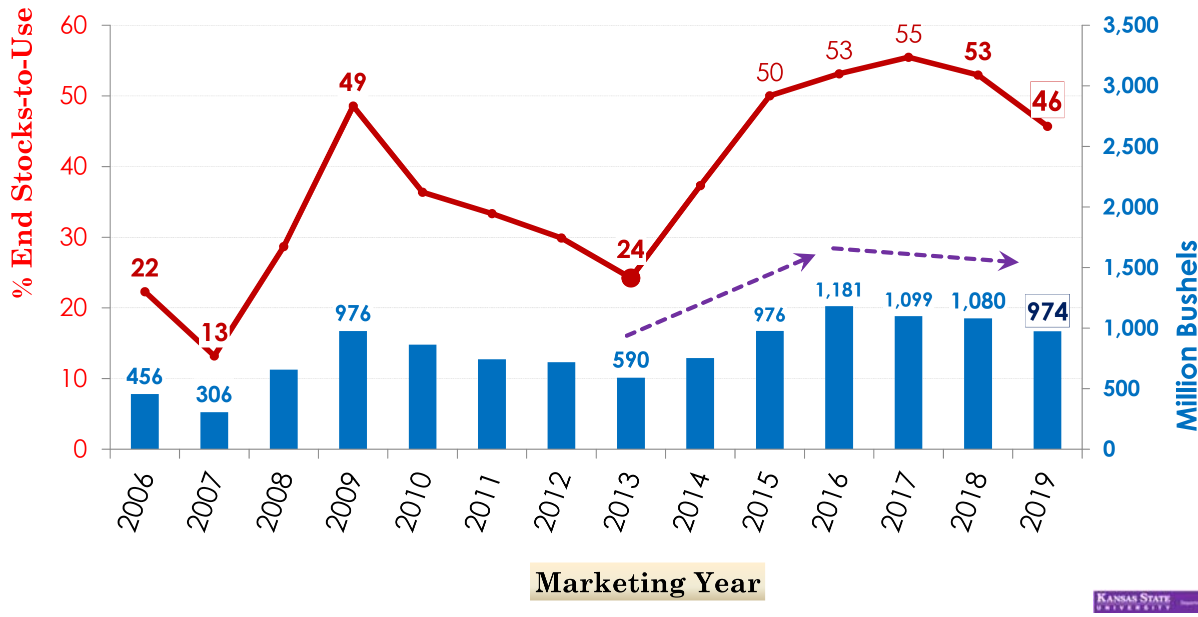
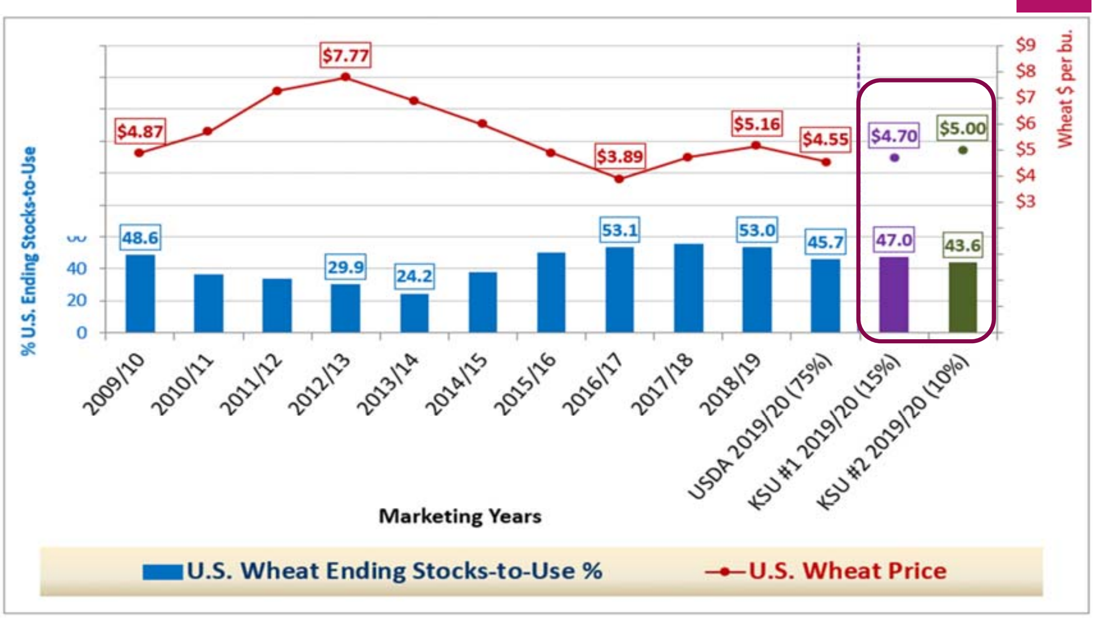


U.S. Wheat Ending Stocks & % Stx/Use

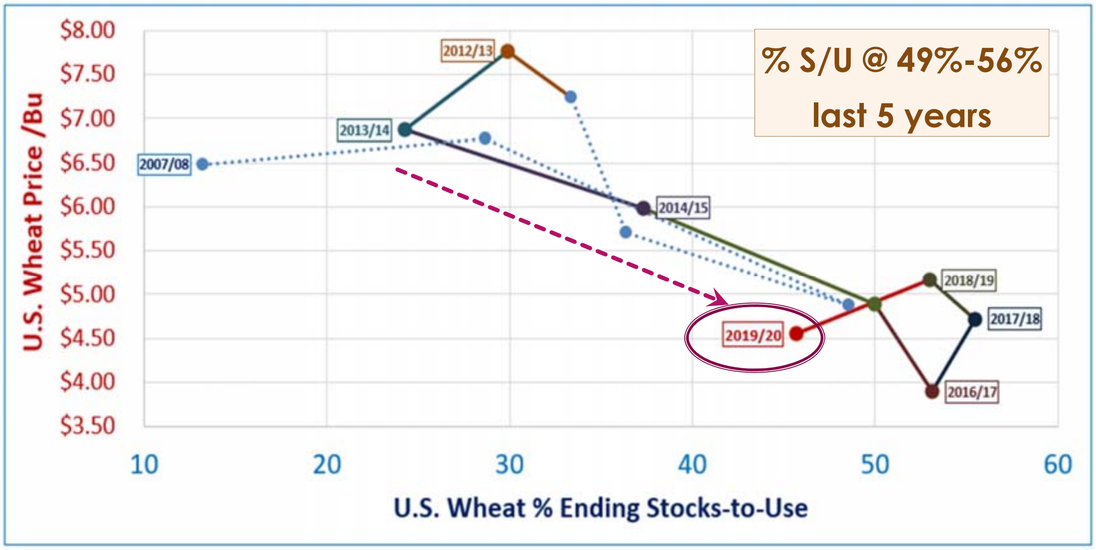


U.S. Wheat Ending Stocks/Use & Prices

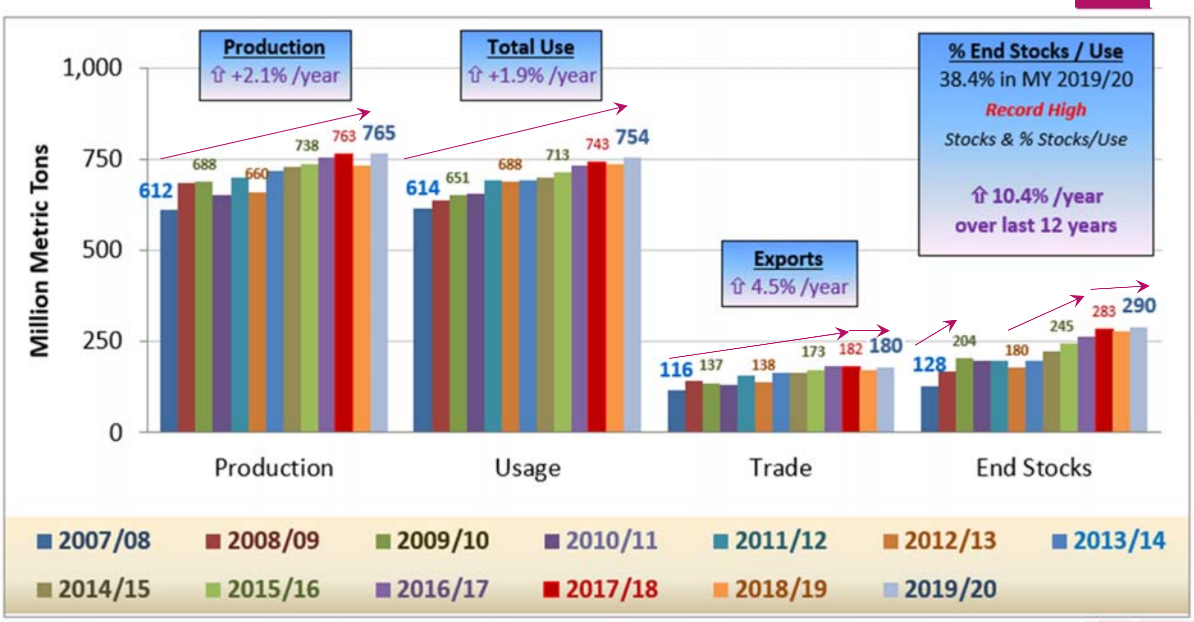


U.S. Wheat Price ($) vs U.S. % Stocks/Use

MY 2007/08 – "New Crop" MY 2019/20



World Wheat Supply, Use & Stocks



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World Wheat Production

Country or Region	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
		---------------- *Million Tons* ----------------		
World	731.3	765.4	-0.1	34.1
United States	51.3	52.3	--	1.0
Foreign	680.0	713.2	-0.1	33.1
Argentina	19.5	19.0	-1.0	-0.5
Canada	32.2	32.3	-0.6	0.1
Australia	17.3	16.1	-1.1	-1.2
European Union	136.9	153.5	0.5	16.6
Turkey	19.0	19.0	--	--
Russia	71.7	74.5	0.5	2.8
Ukraine	25.1	29.0	--	3.9
Kazakhstan	13.9	11.5	--	-2.4
China	131.4	133.6	1.6	2.2
India	99.9	102.2	--	2.3
Northwest Africa	12.3	9.9	--	-2.5

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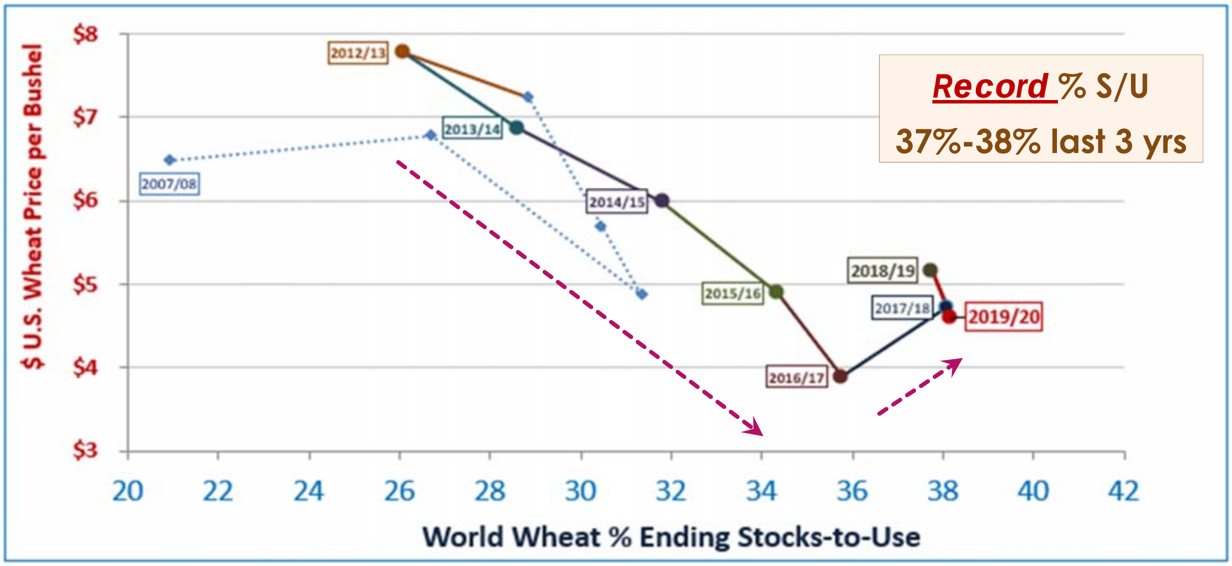
World Wheat Supply and Use

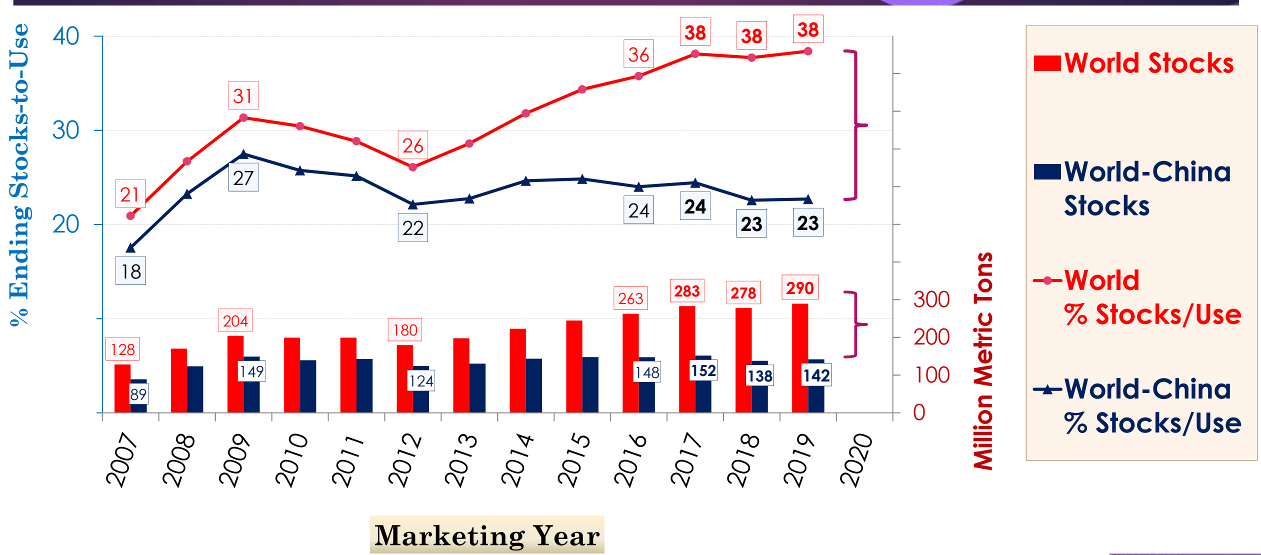
Item	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
		---------------- *Million Tons* ----------------		
Beginning stocks	283.1	277.8	-0.1	-5.2
Production	731.3	765.4	-0.1	34.1
Total Supply	1,014.4	1,043.3	-0.2	28.9
Feed use	139.4	148.7	0.2	9.3
Total use	736.6	753.8	-1.4	17.2
Trade	173.2	179.8	-0.9	6.6
Ending Stocks	277.8	289.5	1.2	11.6

U.S. Wheat Price ($) vs World % Stx/Use

MY 2007/08 – "New Crop" MY 2019/20



World & *World-less-China* WHEAT Stocks & %S/U



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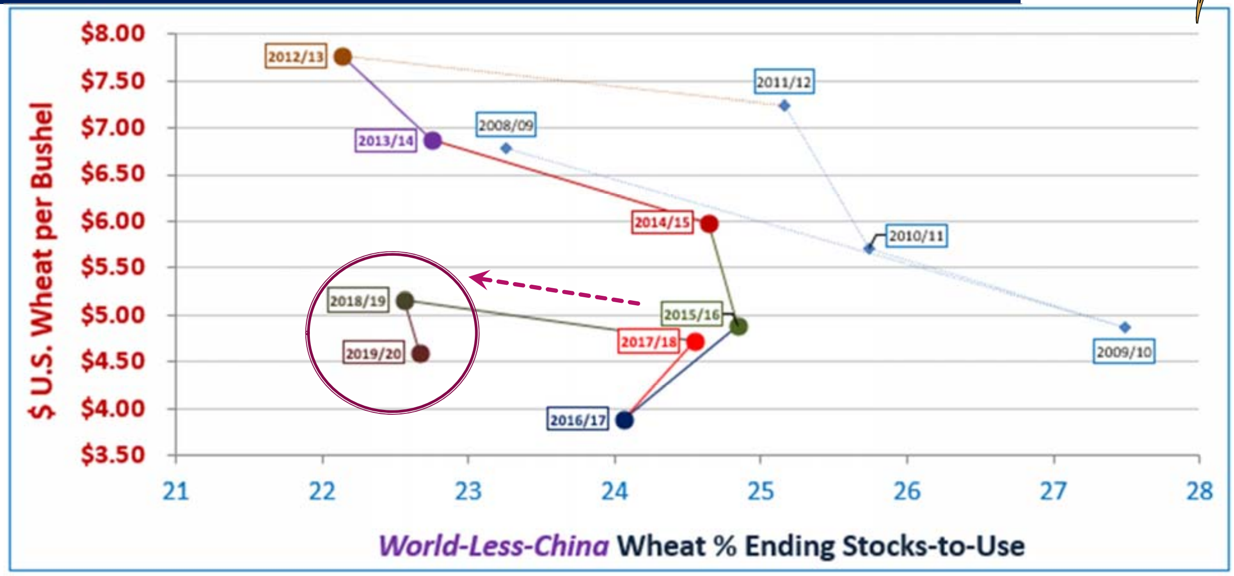
U.S. Wheat $ vs Non-China %Stx/Use

MY 1973/74 – "New Crop" MY 2019/20



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World Wheat Market Prospects:

Large Supplies ⇨ Less of a *"Buyer's Market"*

- ***Record*** **Supplies &** ***Record*** **Use in MY 2019/20**
  - **Production** ⇧2.1% /yr vs **Use** ⇧1.9% ⇨ **Stocks** ⇧13.3% Since 2007/08
- **MY 2019/20 crops ⇧ - most nations** (*except* Kazakhstan, Brazil, No. Africa)
- **Ongoing *"competitive buying pressure"* in World Trade**
  - *Slowed growth in **% Stocks/Use** over last 2-3 years*
  - *"Tighter" supplies from a **"World-Less-China" perspective***

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Soybean Markets

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U.S. Soybean Market Prospects in 2019-2020

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A. U.S.-China Trade Dispute

- ***HAS*** affected U.S. Soybean export shipments, forward purchases & prices, with recent positive negotiation news

B. U.S. Exports forecast ***down 17%+*** vs 2-3 years ago *highs*

- Foreign buyer *"switching" between* ***U.S****.* & ***South America***

C. Market Focus in Winter-Spring 2019-2020

- **So. America** crops – response to China demand in 2019??

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CME Soybean Futures

Weekly Chart: December 2015 through December 9, 2019

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Managed Money (Spec) Positions in Soybeans

CFTC Commitment of Traders to December 3, 2019

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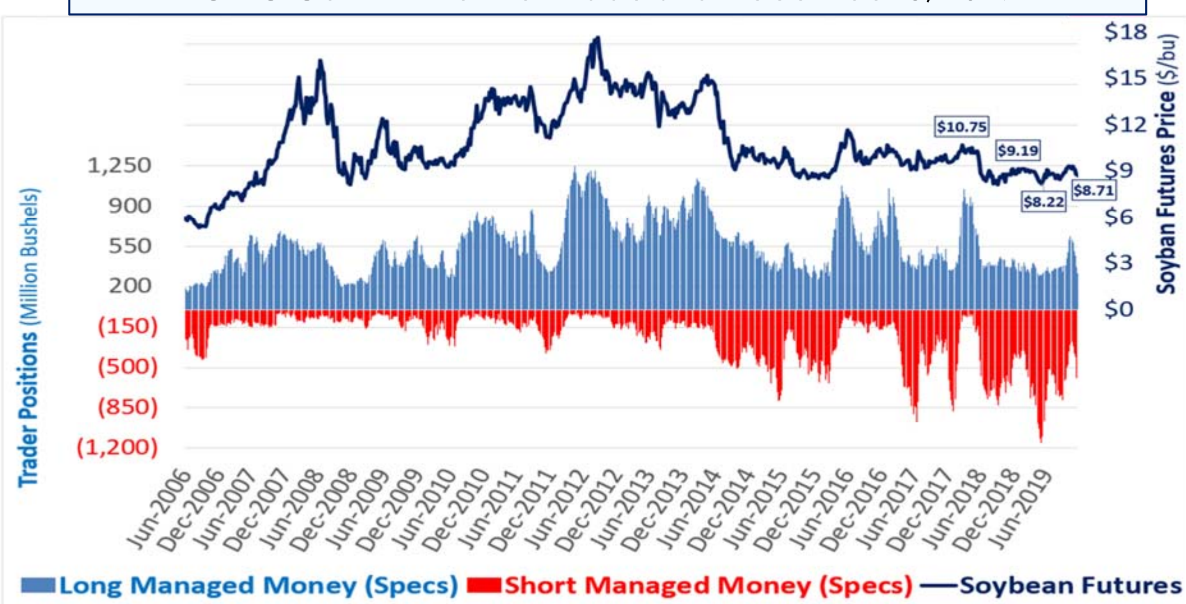

U.S. Soybeans Supply and Demand

Item	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
Planted area (million acres)	89.2	76.5	--	-12.7
Harvested area (million acres)	87.6	75.6	--	-12.0
Yield (bushels per acre)	50.6	46.9	--	-3.6
		------------ *Million bushels* ------------		
Beginning stocks	438	913	--	475
Production	4,428	3,550	--	-878
Imports	14	20	--	6
Total supply	4,880	4,483	--	-397
Crush	2,092	2,105	--	13
Seed and Residual	128	128	--	1
Domestic use	2,220	2,233	--	14
Exports	1,748	1,775	--	27
Total use	3,967	4,008	--	41
Ending stocks	913	475	--	-438
		----------------- *Percent* -----------------		
Stocks to use ratio	23.0	11.8	--	-11.2
		------------ *Dollars per bushel* ------------		
Average market price	8.48	8.85	-0.15	0.37

U.S. Soybean Stocks…..

- Soybean: "***Moderate-Large***" **Stocks & % S/U**
  - **End Stocks 2019/20** → 475 mln bu *(vs 913 mb last yr)*
  - **% Stocks/Use 2019/20** → 11.9% S/U *(vs 23.0% last yr)*

U.S. Soybean Acreage

For 2020 ???
Increase of 5-10%

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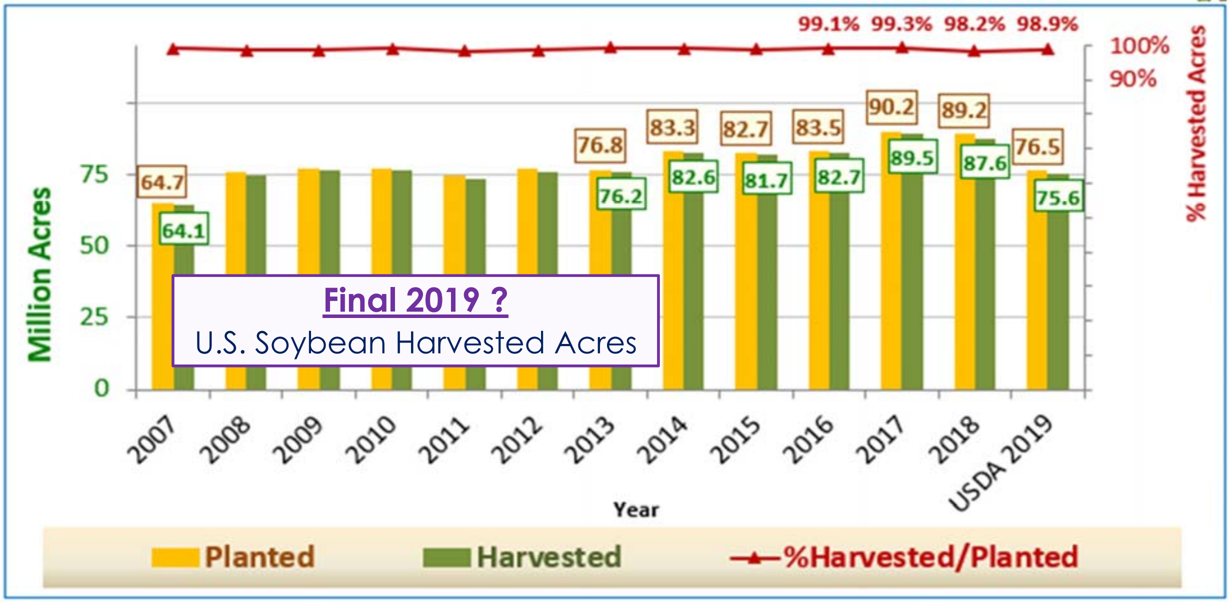

U.S. Soybean Yields

USDA 2019 = 46.9 bu/ac

Final 2019???
Impact of Late Harvest???
IS < 45-46 bu/ac possible???

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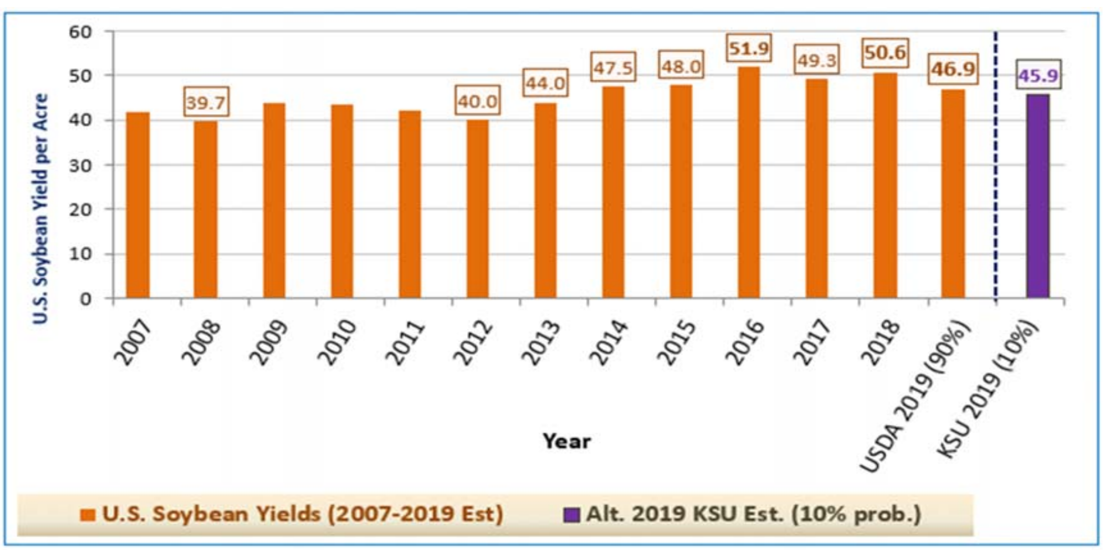
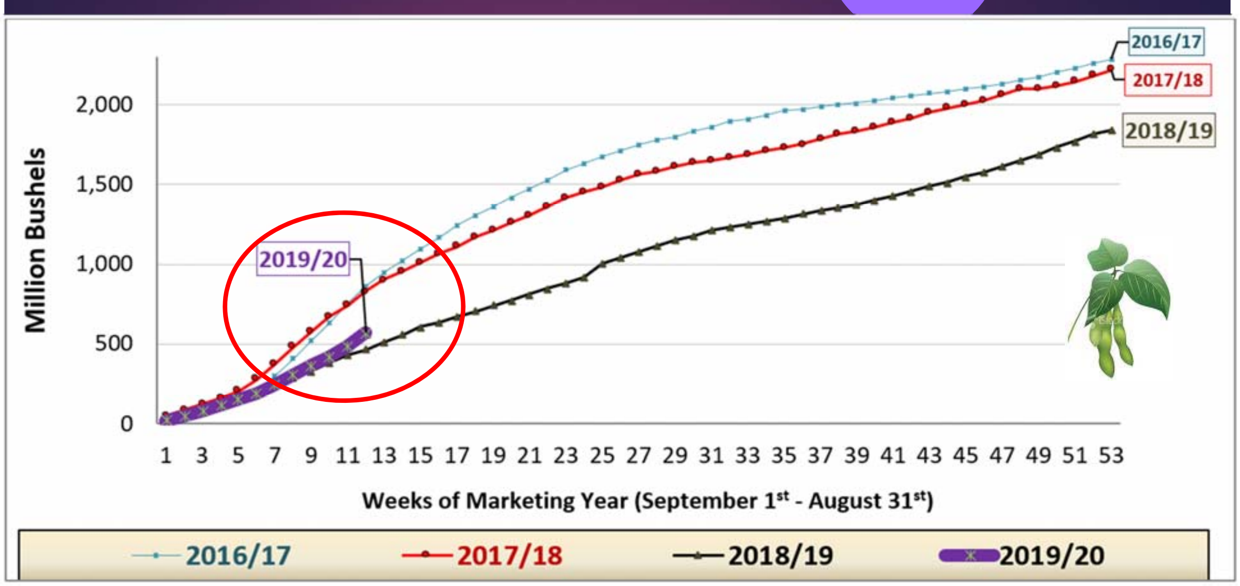


U.S. Soybean Production & Supplies

U.S. Soybean Exports – Weekly thru November 28, 2019



U.S. Soybean Use & End Stocks

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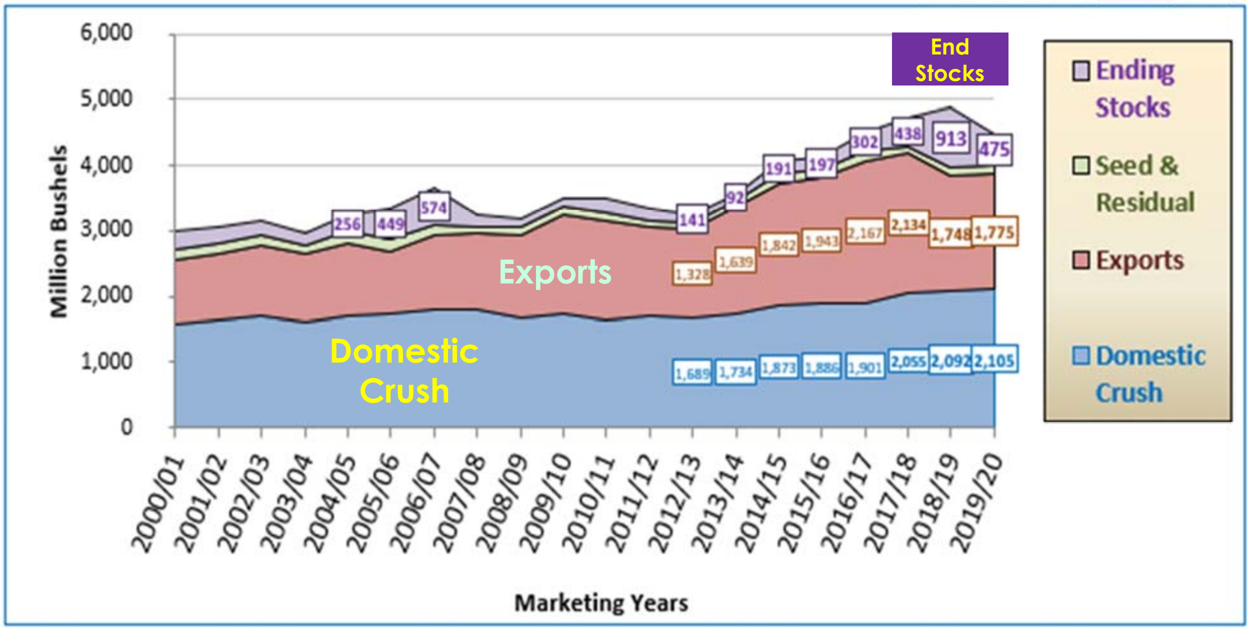

U.S. Soybean Total Use Projections (USDA)

For "Old Crop" MY 2018/19 & "New Crop" MY 2019/20

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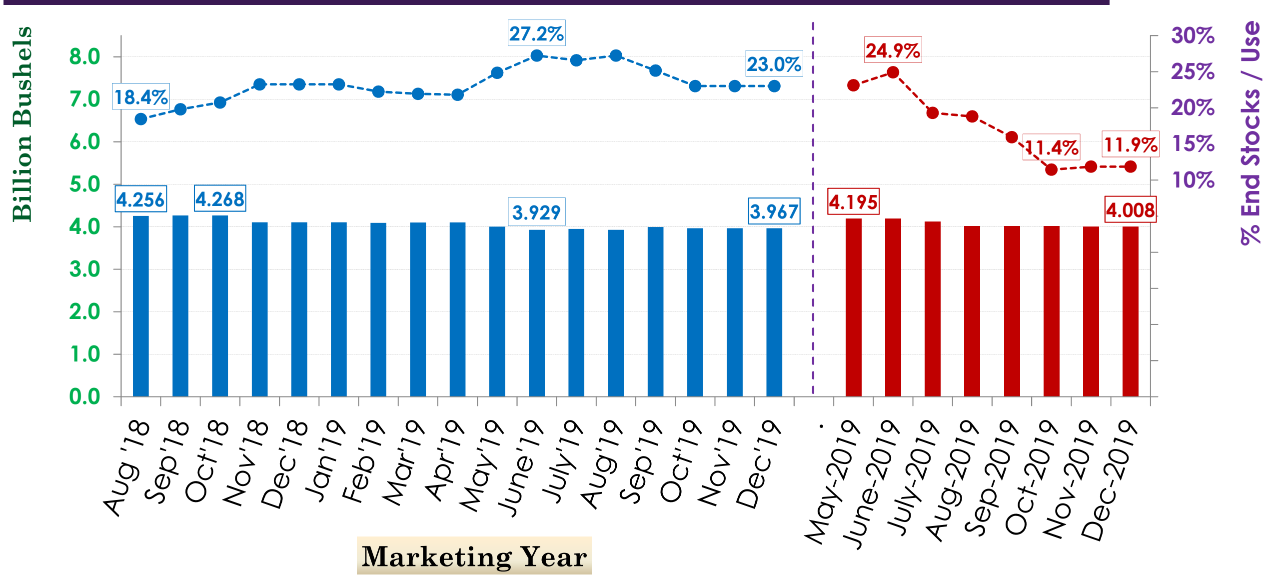

U.S. Soybean % Stocks/Use vs Price$

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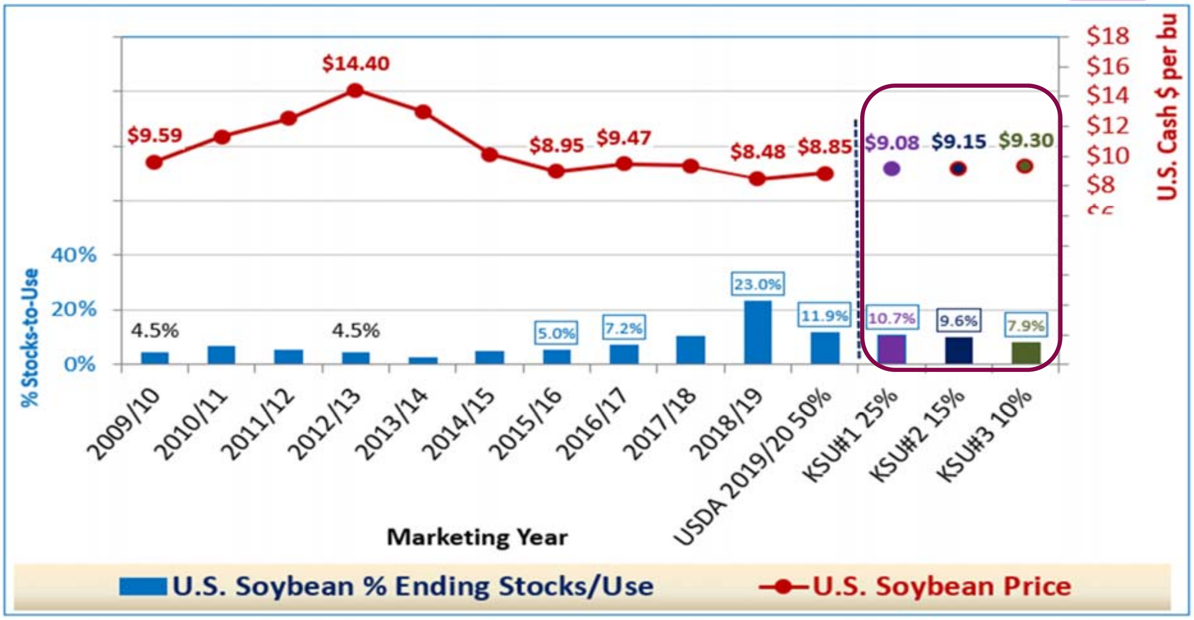

U.S. Soybean % Stocks/Use vs Price$

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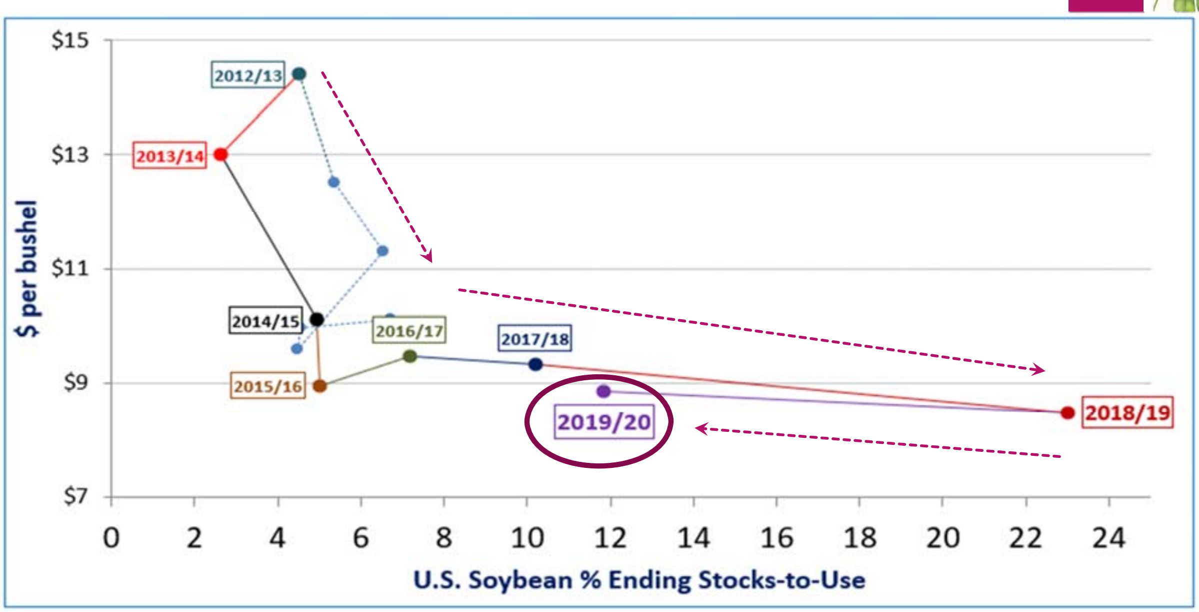
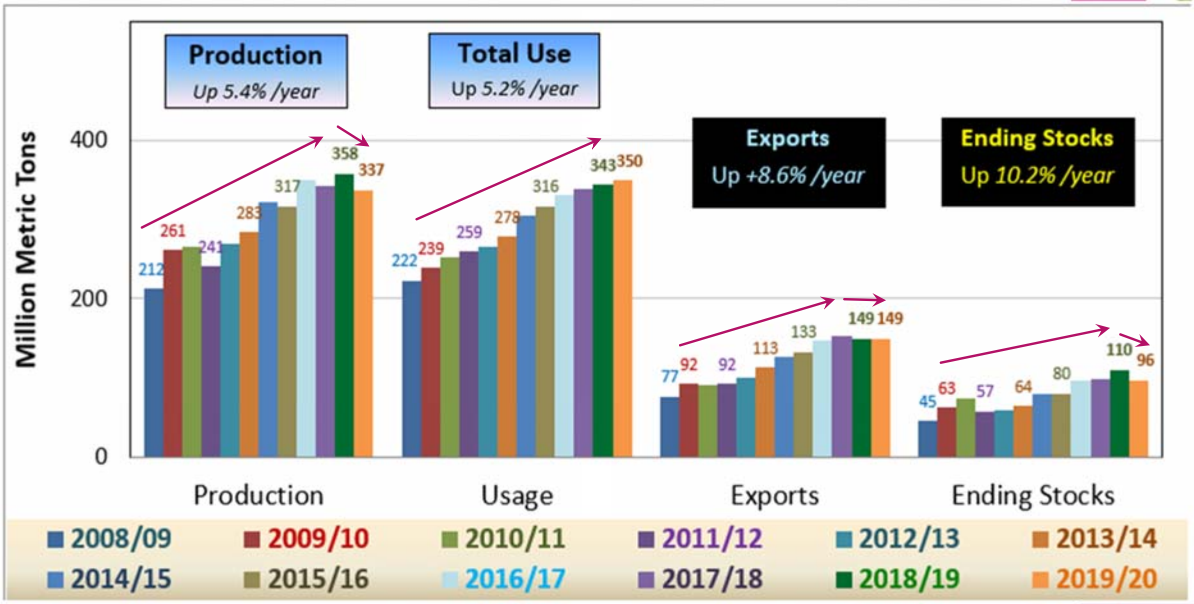


World Soybean Supply, Use & Stocks



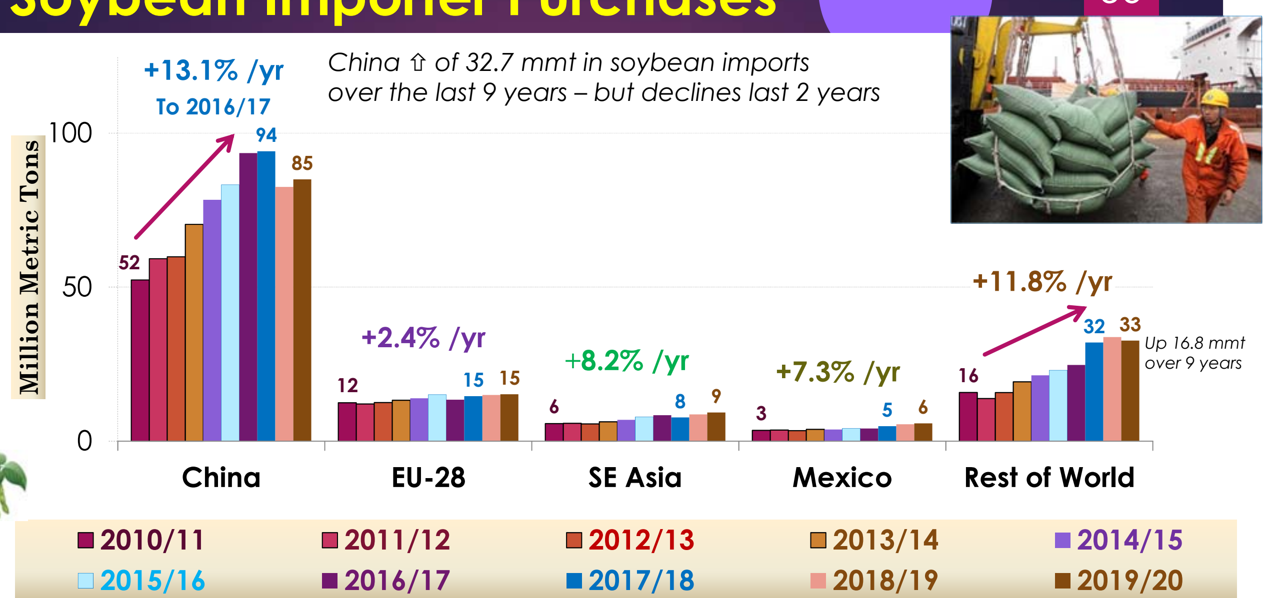
World Soybean Production

Country or Region	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
	---------------- Million Tons ----------------			
World	358.2	337.5	0.9	-20.7
United States	120.5	96.6	--	-23.9
Foreign	237.7	240.9	0.9	3.2
Argentina	55.3	53.0	--	-2.3
Brazil	117.0	123.0	--	6.0
Paraguay	8.8	10.2	--	1.3
Canada	7.3	6.0	--	-1.3
India	10.9	9.0	--	-1.9
China	15.9	18.1	1.0	2.2

World Soybean Supply and Use

Item	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
		Million Tons		
Beginning stocks	98.9	109.8	0.1	10.9
Production	358.2	337.5	0.9	-20.7
Total Supply	457.1	447.3	1.0	-9.8
Crush	297.7	302.8	0.1	5.1
Total use	343.4	349.7	0.1	6.3
Trade	149.2	149.1	-0.6	-0.1
Ending Stocks	109.8	96.4	1.0	-13.4
Addendum				
Beginning stocks				
Argentina plus Brazil	56.5	58.7	0.4	2.2
Imports*				
China	82.5	85.0	--	2.5

Soybean Importer Purchases



U.S. Soybean$ vs World %Stx/Use

MY 2007/08 through "New Crop" MY 2019/20

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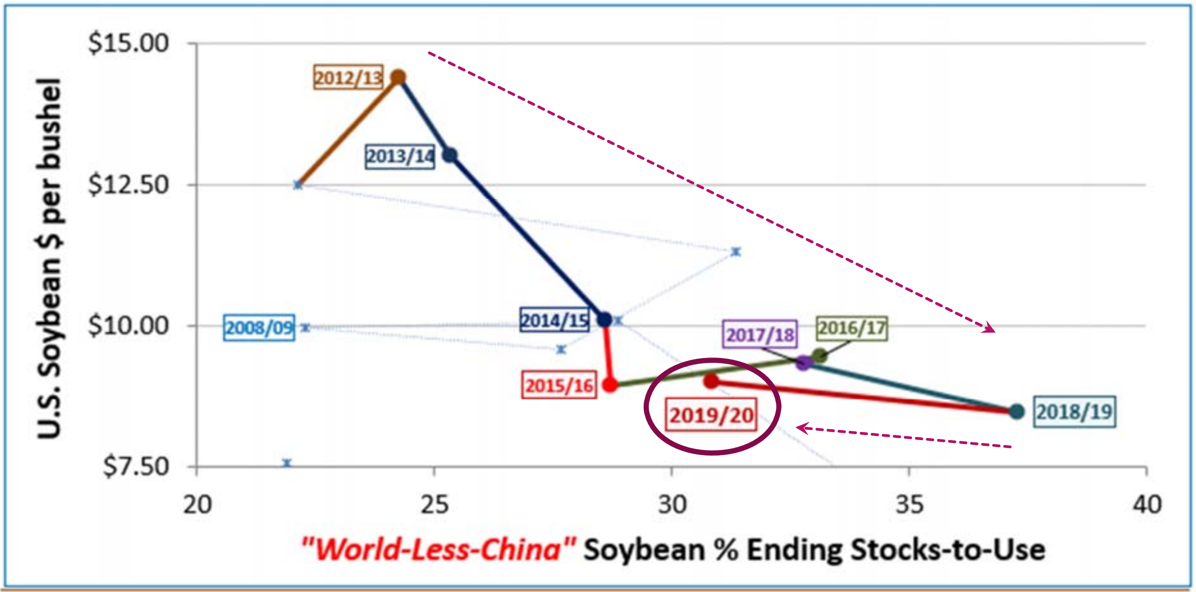

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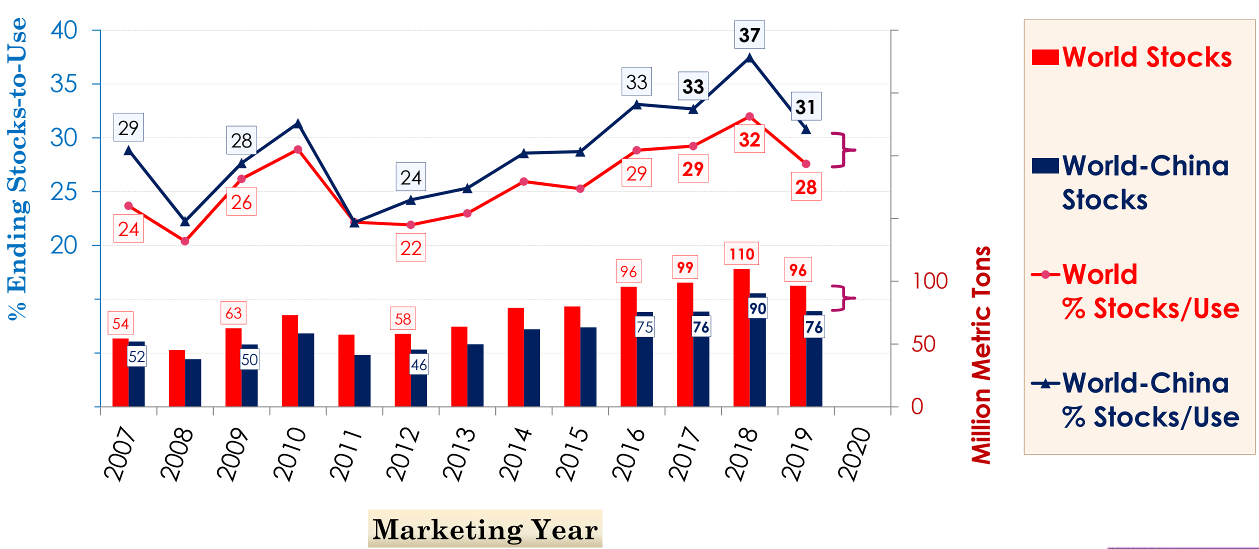
World & *World-less-China* SOYBEAN Stocks & %S/U



Corn Markets

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KANSAS STATE UNIVERSITY Department of Agricultural Economics

CME Corn Futures

Weekly Chart: November 2014 – December 9, 2019

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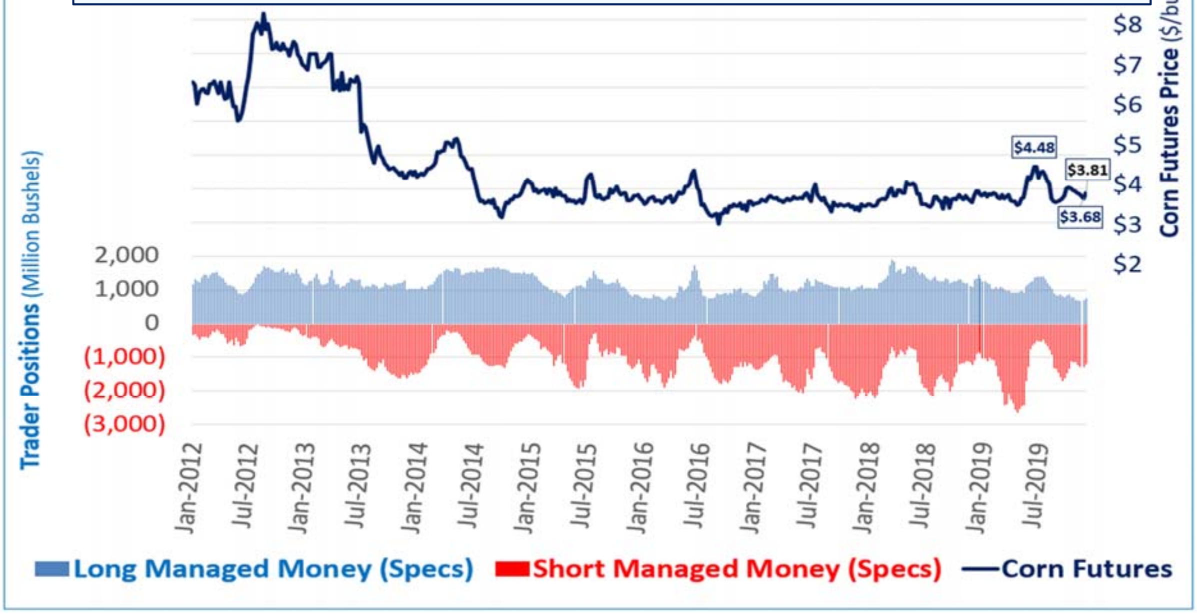
Managed Money (Spec) Positions in CME Corn

CFTC Commitment of Traders to December 3, 2019



U.S. Corn Supply and Demand

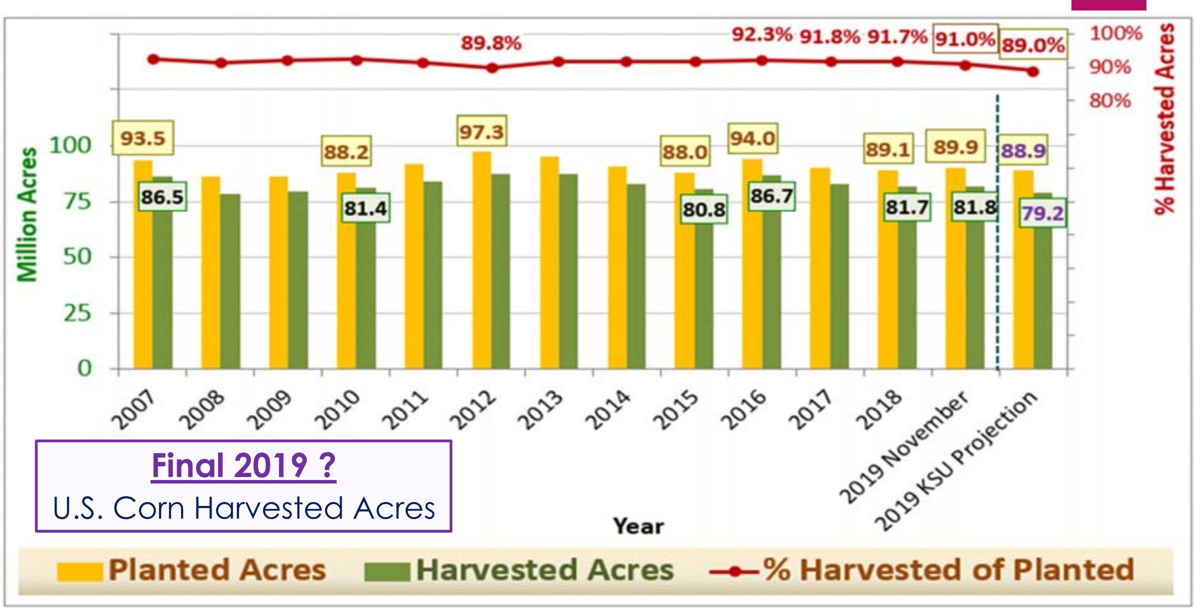
Item	2018/2019 estimate	2019/2020 forecast	Change from October 10	Change from 2018/2019
Planted area (million acres)	89.1	89.9	--	0.8
Harvested area (million acres)	81.7	81.8	--	0.1
Yield (bushels per acre)	176.4	167.0	-1.4	-9.4
		------------ *Million bushels* ------------		
Beginning stocks	2,140	2,114	--	-26
Production	14,420	13,661	-118	-759
Imports	28	50	--	22
Total supply	16,588	15,825	-118	-763
Feed and residual	5,618	5,275	-25	-343
Food, seed, and industrial	6,791	6,790	-25	-1
Ethanol	5,376	5,375	-25	-1
Domestic use	12,409	12,065	-50	-344
Exports	2,065	1,850	-50	-215
Total use	14,474	13,915	-100	-559
Ending stocks	2,114	1,910	-18	-204
		----------------- *Percent* -----------------		
Stocks to use ratio	14.6	13.7	**	-0.9
		------------ *Dollars per bushel* ------------		
Average market price	3.61	3.85	0.05	0.24

U.S. Corn Stocks.....

- **<u>Corn</u>: "*Moderate*" Stocks & % S/U**
  - **End Stocks 2019/20** → 1.910 bln bu (vs ***2.114 bb*** *last yr*)
  - **% Stocks/Use 2019/20** → 13.7% S/U (vs ***14.6%*** *S/U last yr*)

U.S. Corn Acreage

<u>For 2020 ???</u>
Increase of 5-<u>10</u>%?



U.S. Corn Yields

USDA 2019 USDA Forecast = 167.0 bu/ac

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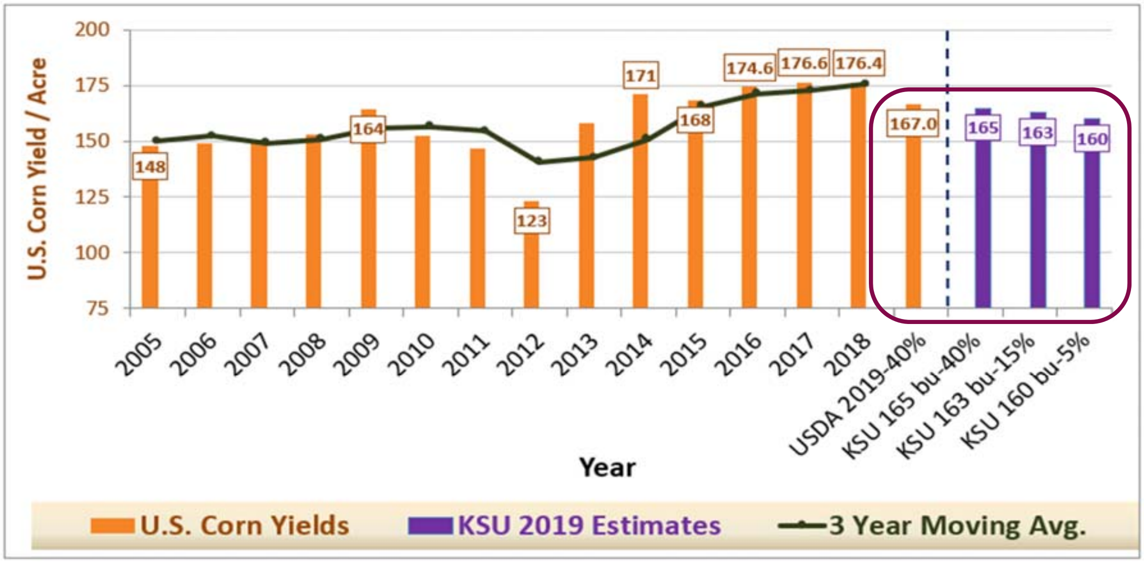

U.S. Corn Production & Supplies

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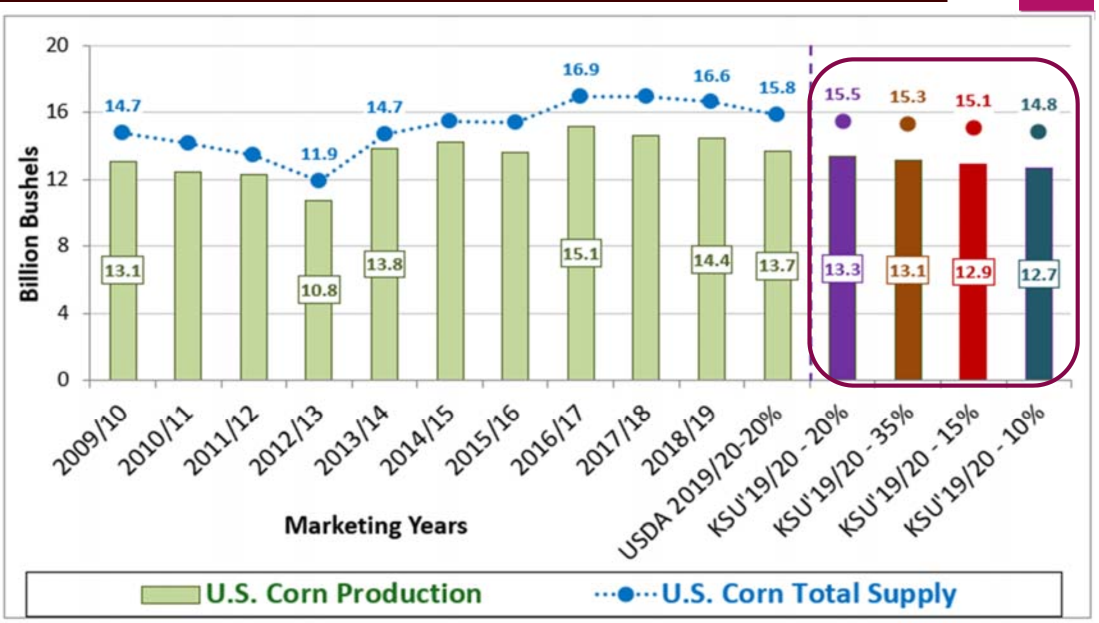

U.S. Corn Use – By Category

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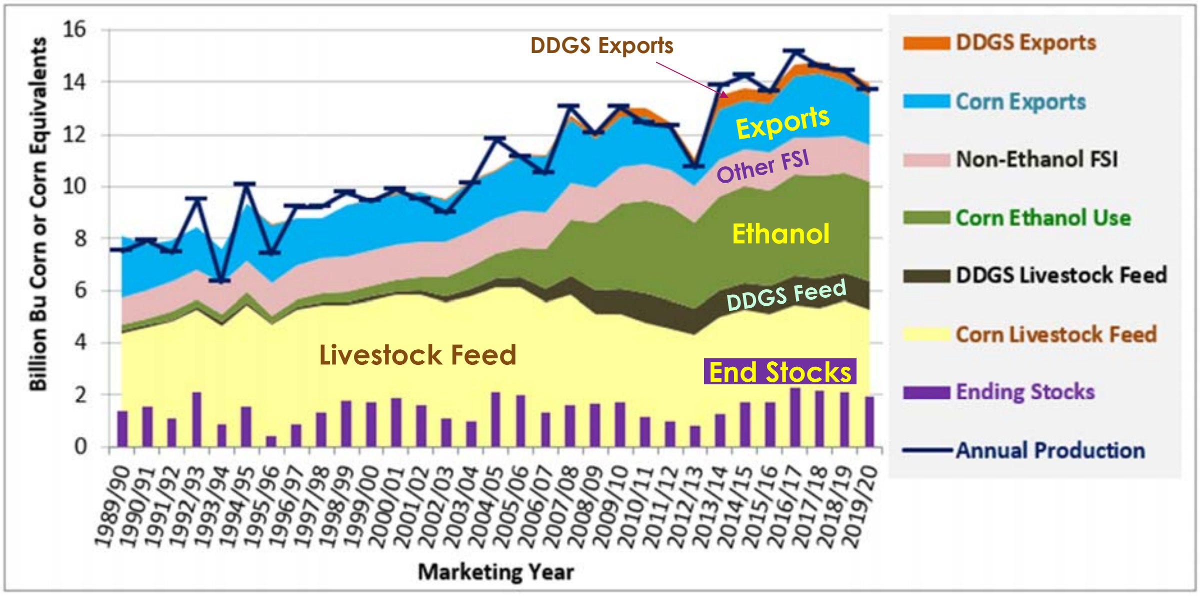

U.S. Corn Exports – Weekly thru 11/28/2019

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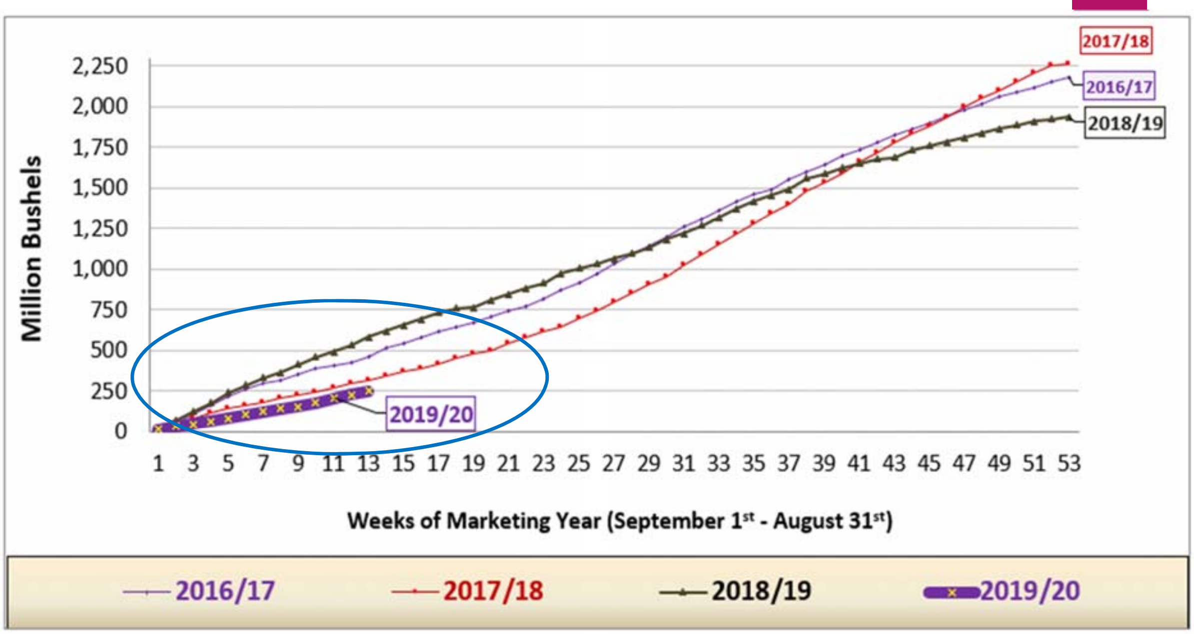

U.S. Corn Ending Stocks & % Stocks/Use

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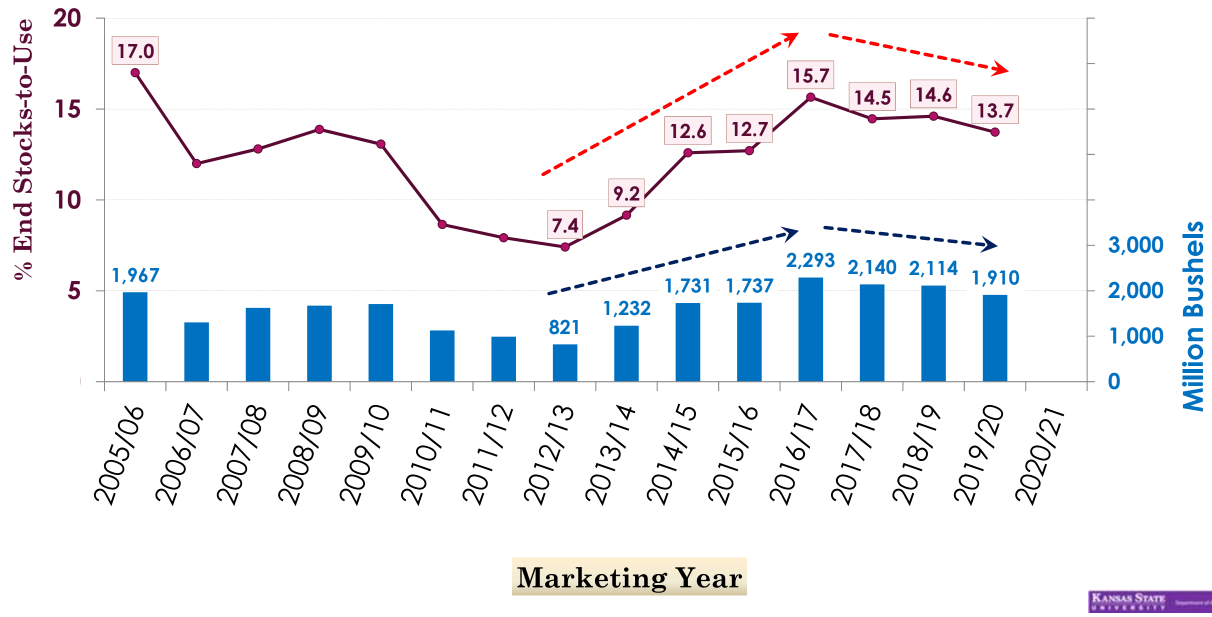

U.S. Corn Total Use Projections (USDA)

For "Old Crop" MY 2018/19 & "New Crop" MY 2019/20

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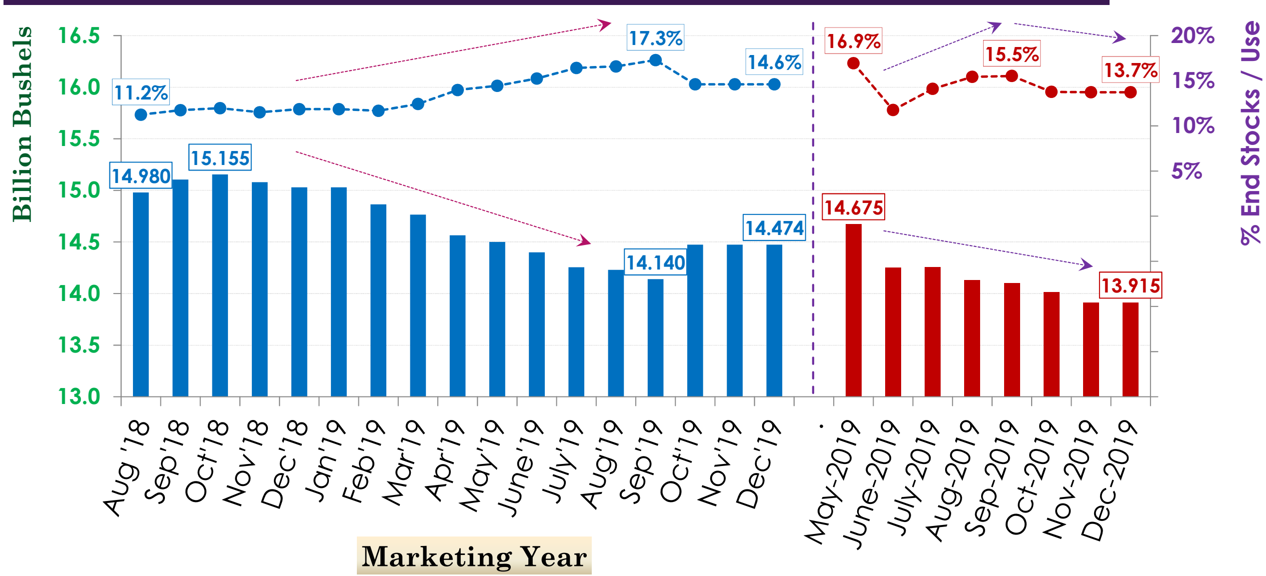

U.S. Corn % Stocks/Use vs Price$

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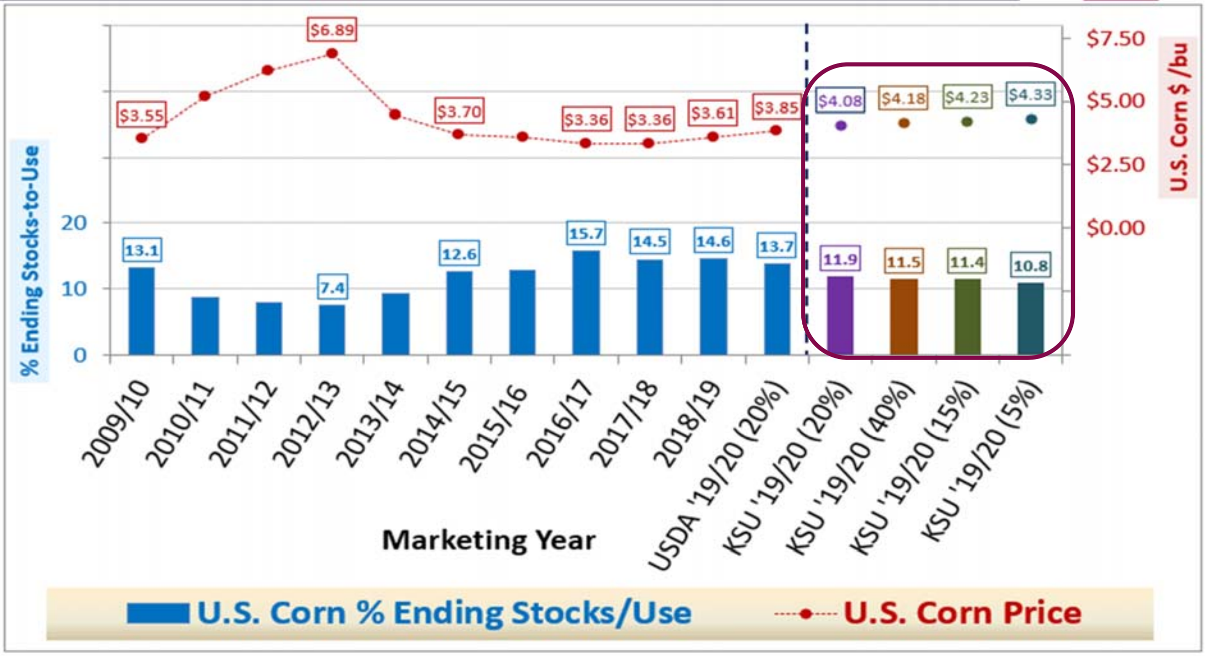

U.S. Corn % Stocks/Use vs Price$

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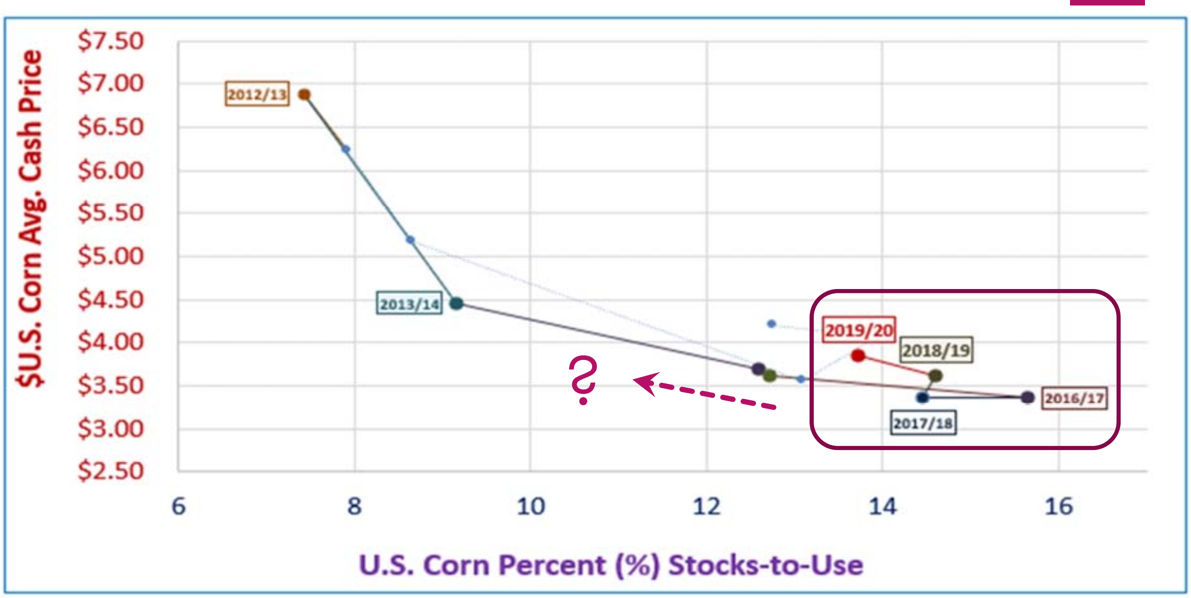

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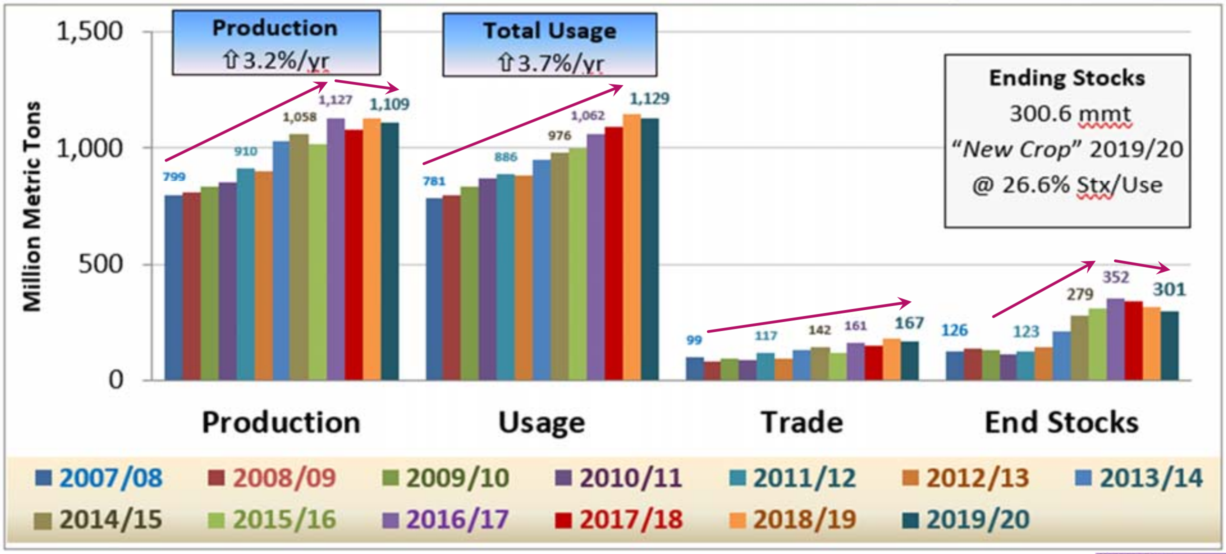
World Corn Supply, Use & Stocks



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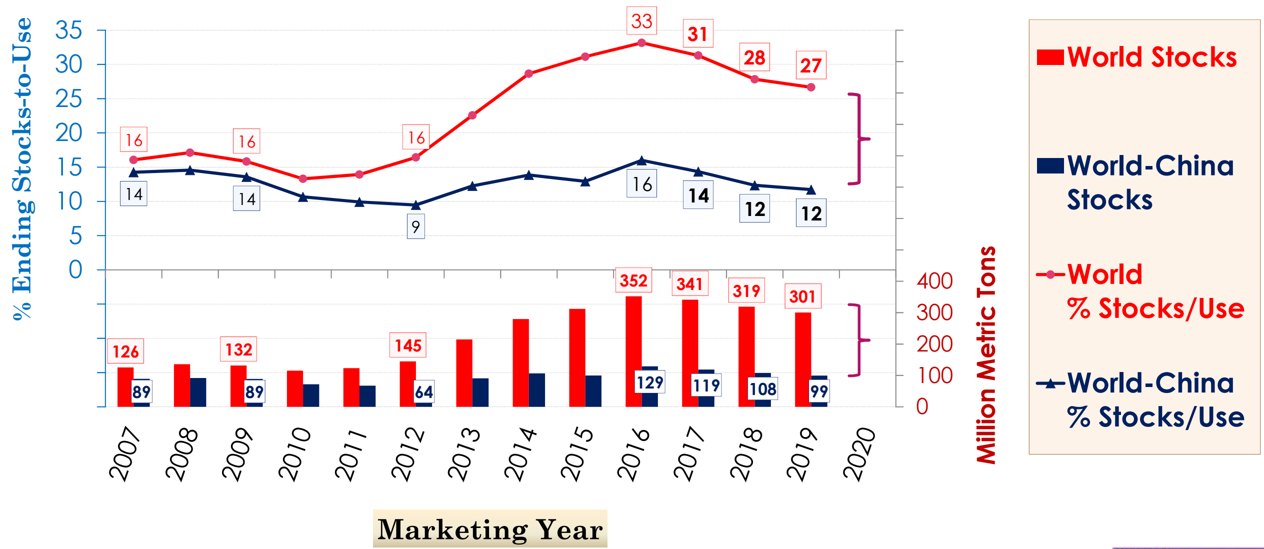
World Corn Production

Country or Region	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
	---------------- *Million Tons* ----------------			
World	1,124.5	1,108.6	6.5	-15.9
United States	366.3	347.0	--	-19.3
Foreign	758.2	761.6	6.5	3.4
Argentina	51.0	50.0	--	-1.0
Brazil	101.0	101.0	--	--
Mexico	27.6	25.0	--	-2.6
Canada	13.9	13.4	-0.6	-0.5
European Union	64.2	64.6	--	0.3
Serbia	7.0	6.8	--	-0.3
FSU-12	52.5	54.4	--	1.9
Ukraine	35.8	35.5	--	-0.3
Russia	11.4	14.0	--	2.6
South Africa	11.8	14.0	--	2.2
China	257.3	260.8	6.8	3.4
India	27.2	29.0	--	1.8

World Corn Supply and Use

Item	2018/2019 estimate	2019/2020 forecast	Change from November 10	Change from 2018/2019
		---------------- *Million Tons* ----------------		
Beginning stocks	341.3	319.2	-0.9	-22.1
Production	1,124.5	1,108.6	6.5	-15.9
Total Supply	1,465.8	1,427.8	5.6	-38.0
Feed use	704.9	696.3	1.4	-8.6
Total use	1,146.6	1,127.2	1.0	-19.4
Trade	180.4	166.6	-0.4	-13.8
Ending Stocks	319.2	300.6	4.6	-18.6

World & *World-less-China* CORN Stocks & %S/U



Questions?

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