

International Grain Market Outlook

2021 Risk & Profit Conference

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Topics to be discussed.....

1) Driving Factors in 2021 International Grain Markets

- Production Issues ^{U.S.-World} ⇒ "tight" Stocks/Use - "high" Price\$

2) Grain Market Analysis & Outlook

- Wheat
 - Grain Sorghum
 - Corn
 - Soybeans
 - Cotton

Most Recent Grain Market Headlines.....

3

Developing La Nina Threatens New Argentina Soy Season: Exchange – Analyst, 8/18/2021

Groups Tell Court E15 Ruling Will Have "Devastating" Consequences – Reuters, 8/18/2021

Bangladesh said to get no offers in 50,000 tonne wheat purchase tender- trade – Reuters, 8/18/2021

Russia's agriculture ministry pauses grain harvesting data – Reuters, 8/18/2021

Record Brazil corn imports for the Jan-Jul period? A harbinger of imports to come in Aug-Dec?
– AgRural, 8/18/2021

Kazakhstan on track to meet 2021-2022 grain export target of 6.5-7 mln tonnes – Reuters, 8/18/2021

Egypt's GASC Pays Highest Price in Over 6 Years for Wheat. Costs up \$38 MT in Just two weeks, Up \$106 MT in the Past Year – AgResource, 8/18/2021

More Recent Grain Market Headlines.....

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Manitoba farmers expect canola yields to drop to 10-year lows – AgResource, 8/18/2021

Some precip next 5 days for 60% western Corn Belt; No clear price direction for corn futures; Some support for MPLS wheat – AgResource, 8/18/2021

NOPA July soy crush at 155.105 million bushels, below all estimates– Reuters, 8/16/2021

Parana low water levels 'could last to end-2021': INA – Analyst, 8/16/2021

WTI Crude Oil Implied Volatility Rises – CME Group, 8/16/2021

Northern Corn Belt drought conditions worsen – Successful Farming, 8/16/2021

Rain-hit French wheat crop shows uneven test weights -France AgriMer & Kazakh ban feed export – Analyst, 8/16/2021

Russian wheat prices jump \$20 in past week – Analyst, 8/16/2021

Factors in 2021 International Grain Markets⁵

1) 2021 Drought in Canada

- **Canada Spring Wheat production** 2021 - August USDA WASDE
 - Production = 24.0 mmt (882 mln bu) ⇒ ↓ 7.5 mmt (↓ 276 mb) vs July²⁰²¹
⇒ ↓ 11.2 mmt (↓ 411 mb) vs year 2020
- **Canada Barley Production** 2021 - August USDA FAS PSD Online
 - Production = 8.8 mmt ⇒ ↓ from 10.741 mmt in year 2020
- **Canada Canola production** 2021 - August USDA FAS PSD Online
 - Production = 16.0 mmt ⇒ ↓ from 19.0 mmt in year 2020

Factors in 2021 International Grain Markets⁶

2) 2021 “Drought” & “Plenty” in World Crop Areas

- **Brazil Corn Production** 2021 - August USDA WASDE
 - Production = 87 mmt ⇒ ↓ vs 102 – 118 mmt in years 2019-2020
- **Russia Wheat production** 2021 - August USDA WASDE
 - Production = 72.5 mmt ⇒ ↓ vs 85.4 mmt in 2020 & 73.6 mmt in 2021
- **Ukraine Wheat production** 2021 - August USDA WASDE
 - Production = 33.0 mmt ⇒ ↑ vs 25.4 – 29.2 mmt in years 2019-2020

2) 2021 World “Drought” & “Plenty”.....

- **Ukraine Coarse Grain Production** 2021 - August USDA WASDE
 - Production = 50.3 mmt ⇒ ↑ vs 39.6 – 46.6 mmt in years 2019-2020
- **Argentina Corn production** 2021 - August USDA Crop Production
 - Production = 60.8 mmt ⇒ ↑ vs 57.1 – 58.1 mmt in years 2019-2020
- **China Coarse Grain production** 2021 - August USDA Crop Production ***
 - Production = 275.4 mmt ⇒ ↑ vs 268 mmt in years 2019/2020

Factors in 2021 International Grain Markets⁸

3) Tightening grain % End Stocks-to-Use: World markets

- Wheat
- Corn
- Soybeans
- Grain Sorghum
- Cotton

Wheat Markets *International*

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Key World Wheat Crop Issues in 2021

❑ Crop Problems in Key Wheat Exporters

- **Russia** ⇒ short production – 72.5 mmt²⁰²¹ (vs 85.35 mmt²⁰²⁰)
- **European Union** ⇒ wet harvest & quality problems in Germany & France (*low milling quality*)
- **Canada** ⇒ Hot, dry conditions – 24 mmt²⁰²¹ (vs 35.2 mmt²⁰²⁰)
- **U.S.** ⇒ Hot, dry conditions – 46.2 mmt²⁰²¹ (vs 49.7 mmt²⁰²⁰)

❑ Larger Crops in Ukraine, Australia, Argentina & China

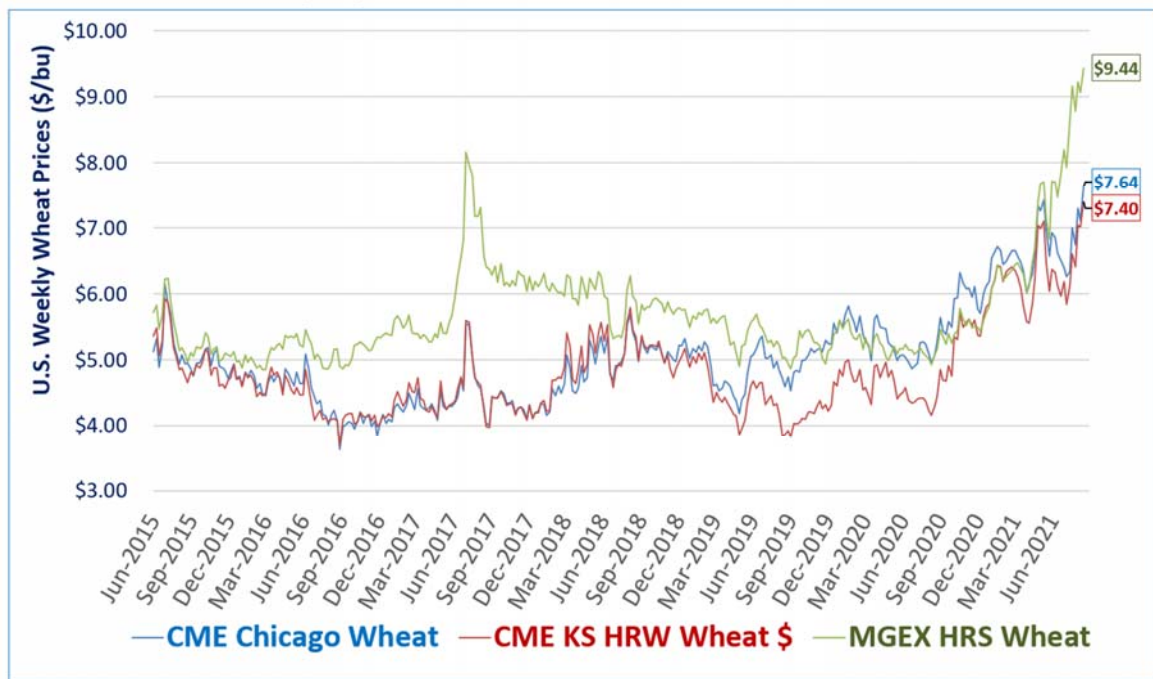
More World Wheat Market Issues

- U.S. Dollar ➡ Lower, supporting U.S. wheat exports
- Wheat feeding
 - Domestic U.S. ➡ 160 mb²⁰²¹ (4.35 mmt) vs 99 mb²⁰²⁰ (2.7 mmt)
 - China & elsewhere ???? ➡ Reports of increased wheat feed use
- High Ocean Freight Rates
 - Baltic Dry Index (BDI) = 3,606 August 16, 2021 (vs 393 March 2020)
 - Logistics *disadvantage* to U.S. wheat exports in ocean shipping costs into **Middle Eastern** & other foreign markets



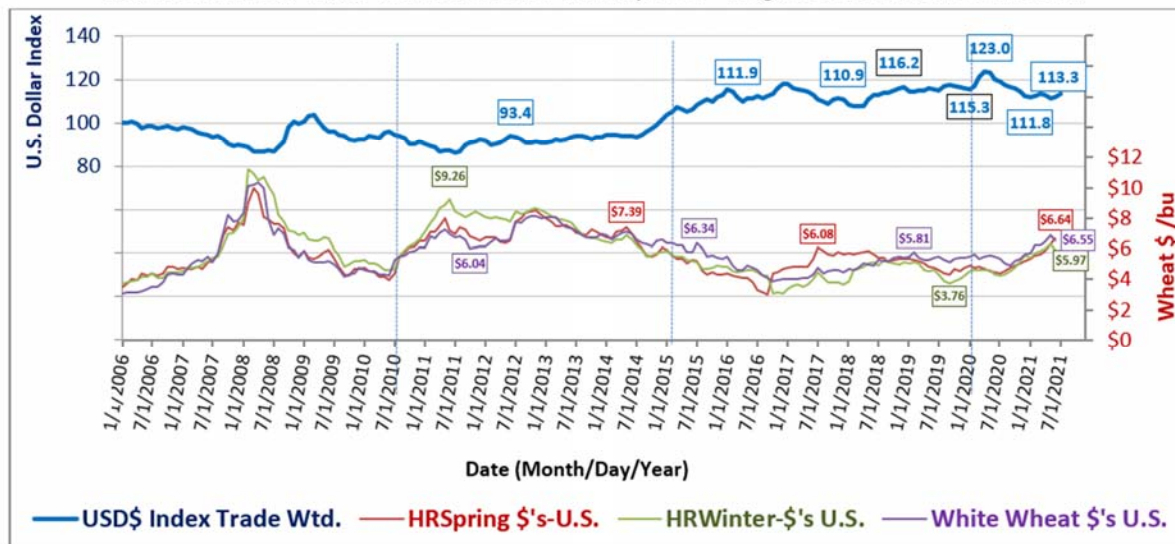
Continuous Weekly Wheat Futures Prices - CME Chicago & KC HRW Wheat Futures \$'s + MGEX HRW Wheat Futures: June 2015 through August 16, 2021

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Monthly U.S. Trade Weighted Dollar Index (Major Currencies) vs U.S. Hard Red Spring, Hard Red Winter, White Wheat Prices for January 2006 – August 9, 2021 (St. Louis Fed-FRED & USDA)



2021 U.S. Wheat Quality & Grades 8/13/2021

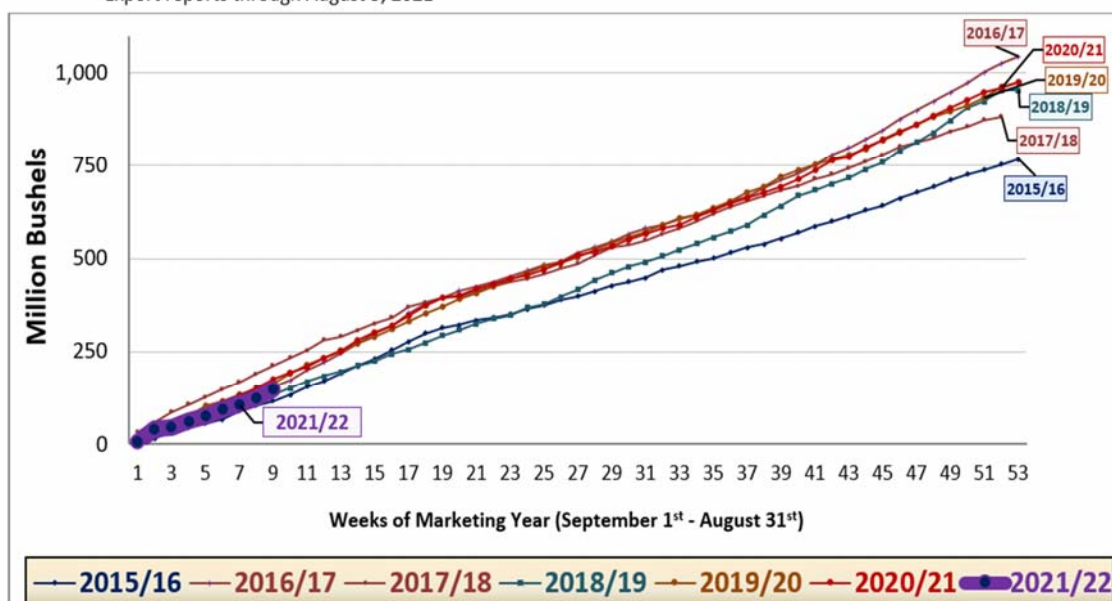


- HRW Wheat ²⁰²¹ ⇒ **11.4% protein**, 60.6 lb test wt., 1.8% defects
 - Versus 5 year average = 11.0% protein, 60.9 lb. test wt., 1.2% defects
- SRW Wheat ²⁰²¹ ⇒ **9.4% protein**, 59.5 lb test wt., 1.2% defects
 - Versus 5 year average = 9.6% protein, 58.2 lb. test wt., 1.5% defects
- Soft White Wheat ²⁰²¹ ⇒ **11.3% protein**, 59.9 lb test wt., 0.9% defects
 - Versus 5 year average = 9.8% protein, 61.4 lb test wt., 0.6% defects
- HRS Wheat ²⁰²¹ ⇒ **15.4% protein**, 62.0 lb test wt., 0.8% defects
 - Versus 5 year average = 14.5% protein, 61.2 lb test wt., 0.9% defects

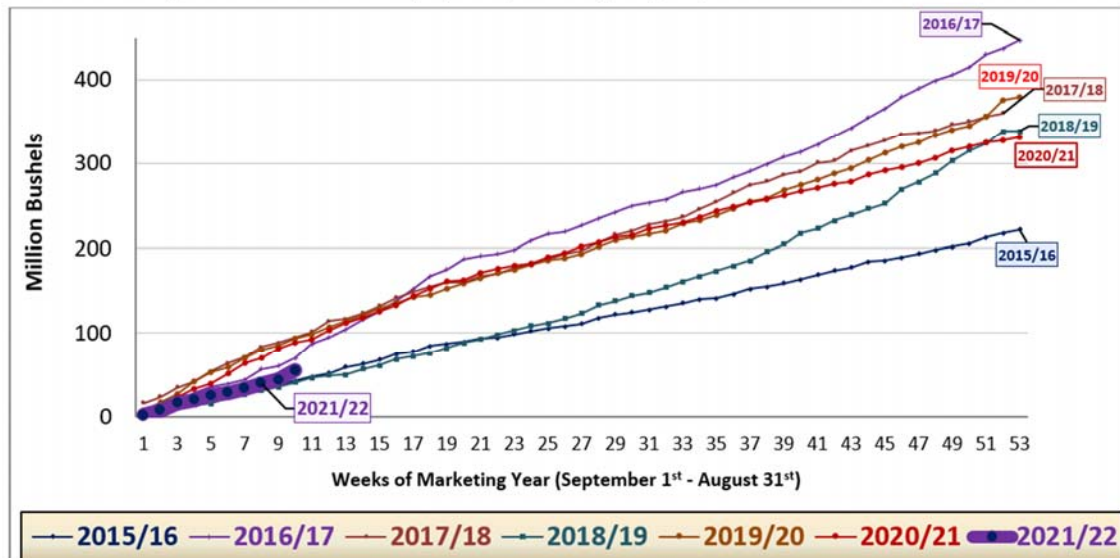
16

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

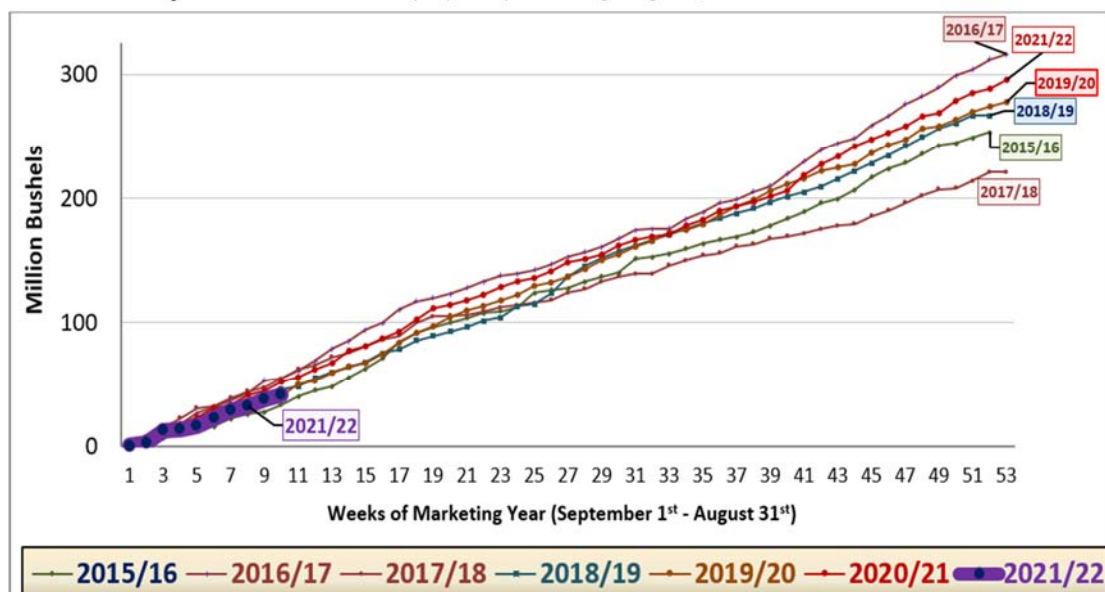
Export reports through August 5, 2021



U.S. Hard Red Winter Wheat Exports for MY 2015/16 thru "New Crop" MY 2021/22 as of USDA FAS Weekly Export reports through August 5, 2021

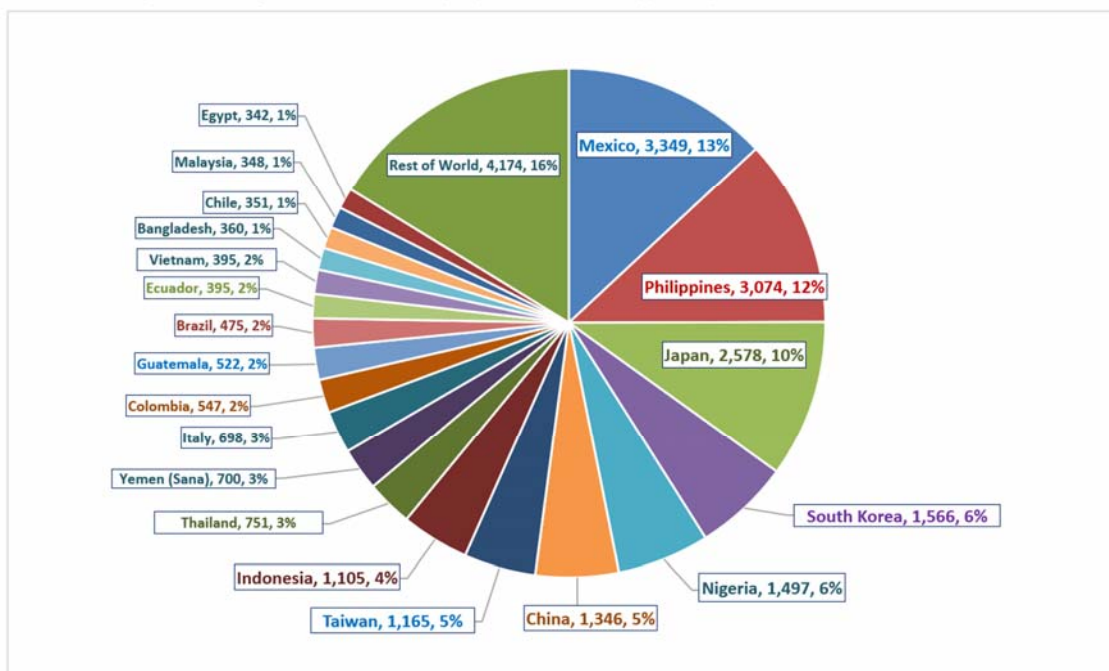


U.S. Hard Red Spring Wheat Exports for MY 2015/16 thru "New Crop" MY 2021/22 as of USDA FAS Weekly Export reports through August 5, 2021



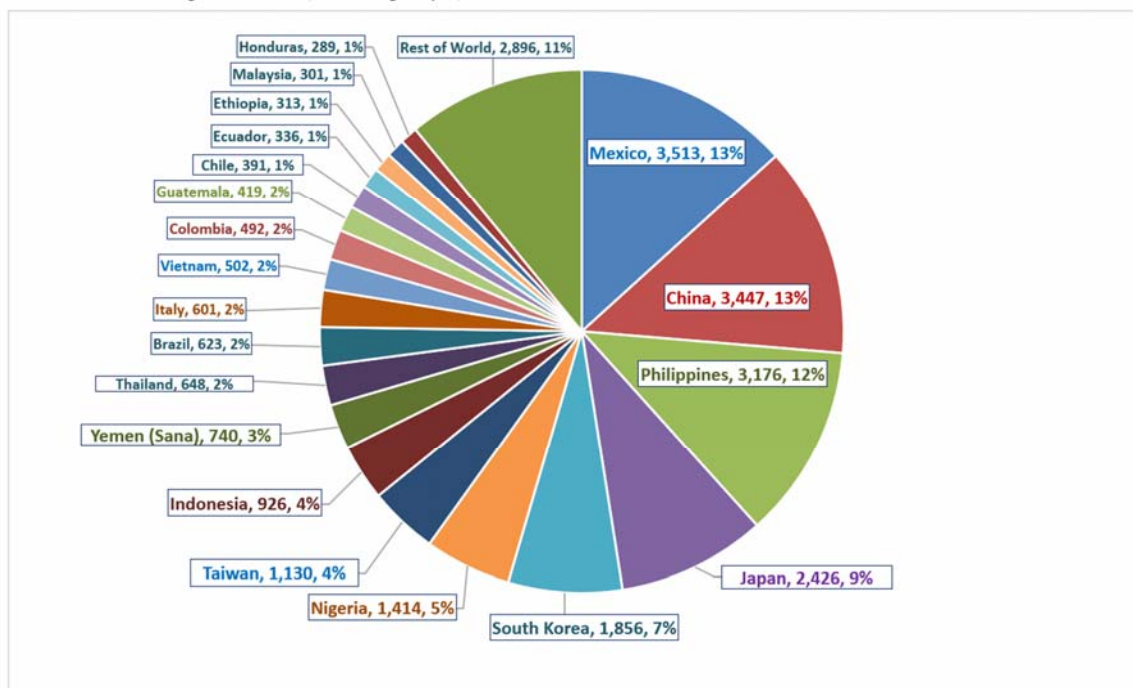
Top 20 U.S. Wheat Export Buyers – Most Recent 3 Year Average: MY 2018/19 through “Old Crop” MY 2020/21 as of the August 5, 2021 USDA WASDE report (via USDA FAS PSD Online) (1,000 mt)

19

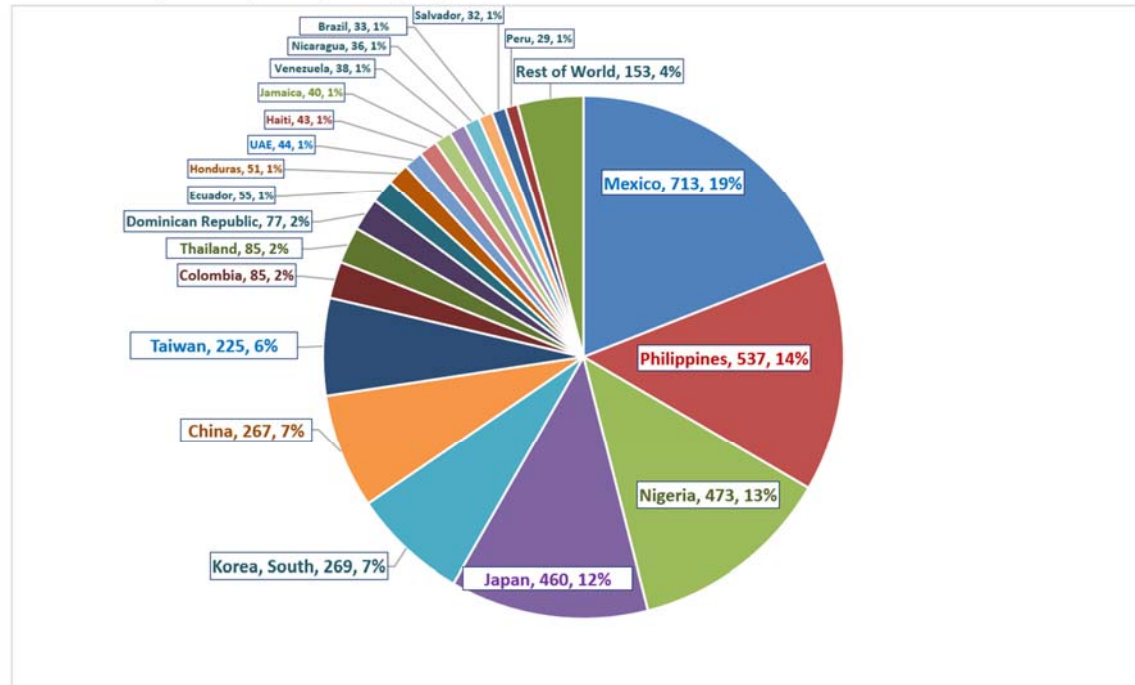


Top 20 U.S. Wheat Export Buyers – “Old Crop” MY 2020/21 as of the August 5, 2021 USDA U.S. Export Shipments (1,000 mt), with Marketing Year from June 1, 2020 through May 31, 2021.

20

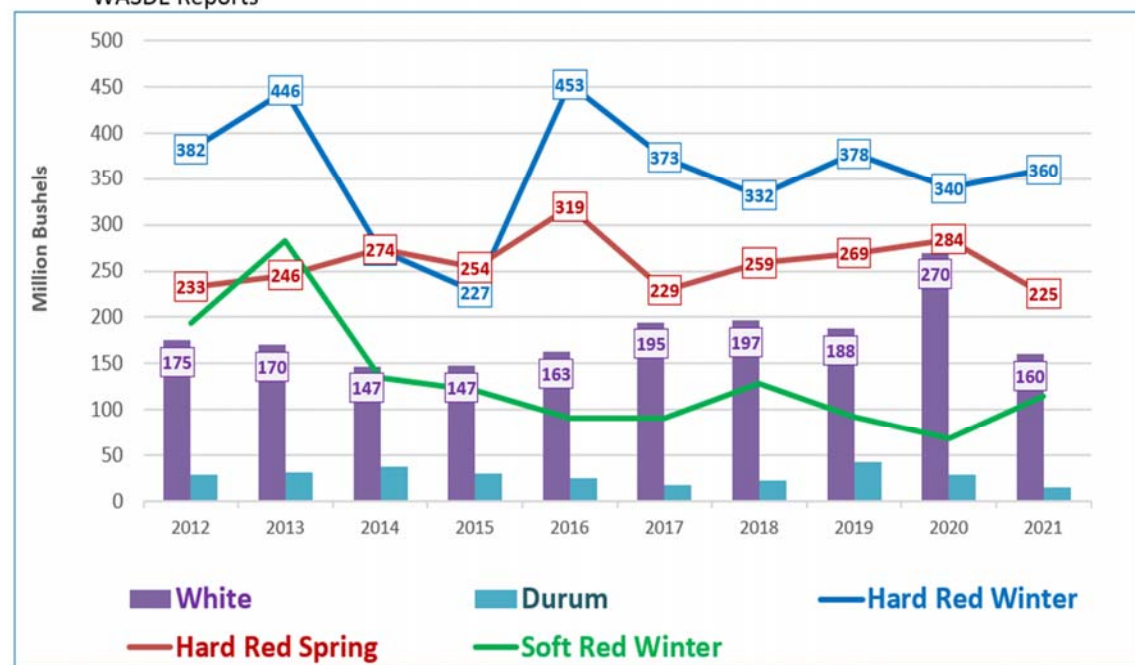


Top U.S. Wheat Export Buyers – “New Crop” MY 2021/22 as of the August 5, 2021 USDA U.S. Export Shipments (1,000 mt), with Marketing Year from September 1, 2021 through August 31, 2022.



U.S. Wheat Exports by Class Since 2012 as of the August 12, 2021 USDA Crop Production & WASDE Reports

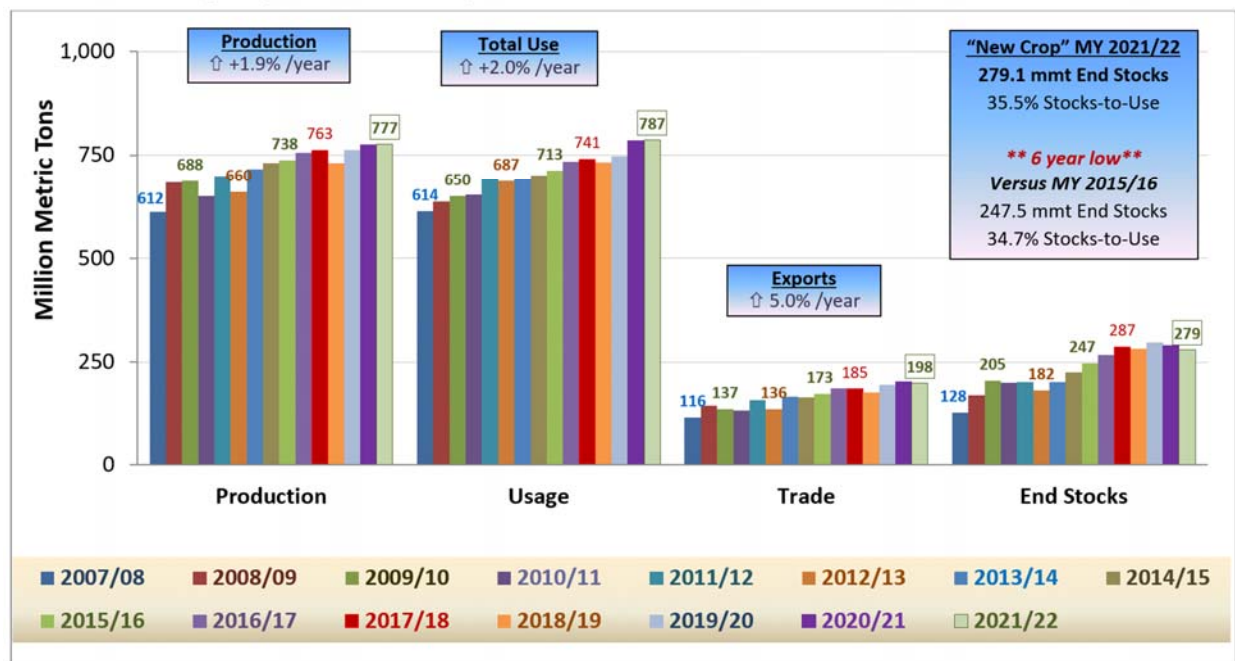
22



World Wheat Usage & Ending Stocks: MY 2007/08 - "New Crop" MY 2021/22

as of the August 12, 2021 USDA WASDE Report

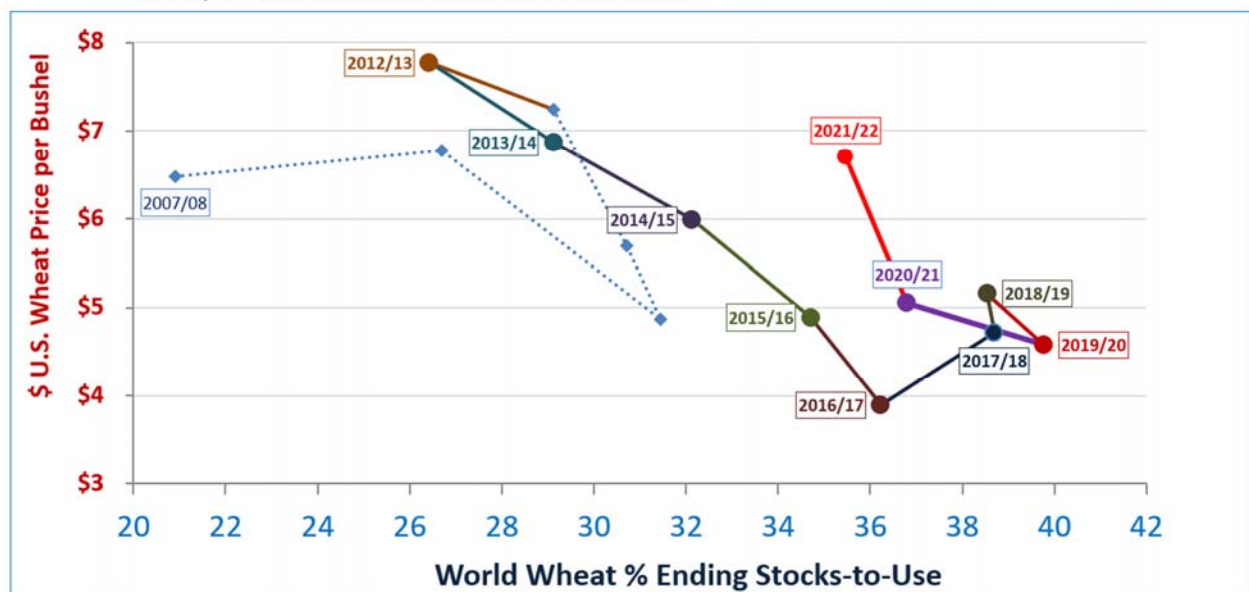
23



U.S. Wheat Price vs World % Stocks-to-Use: MY 2007/08 through "New Crop" MY 2020/21

as of the August 12, 2021 USDA WASDE Report

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World vs "World-Less-China" Ending Stocks & % Stocks-to-Use: MY 2007/08 through "New Crop"

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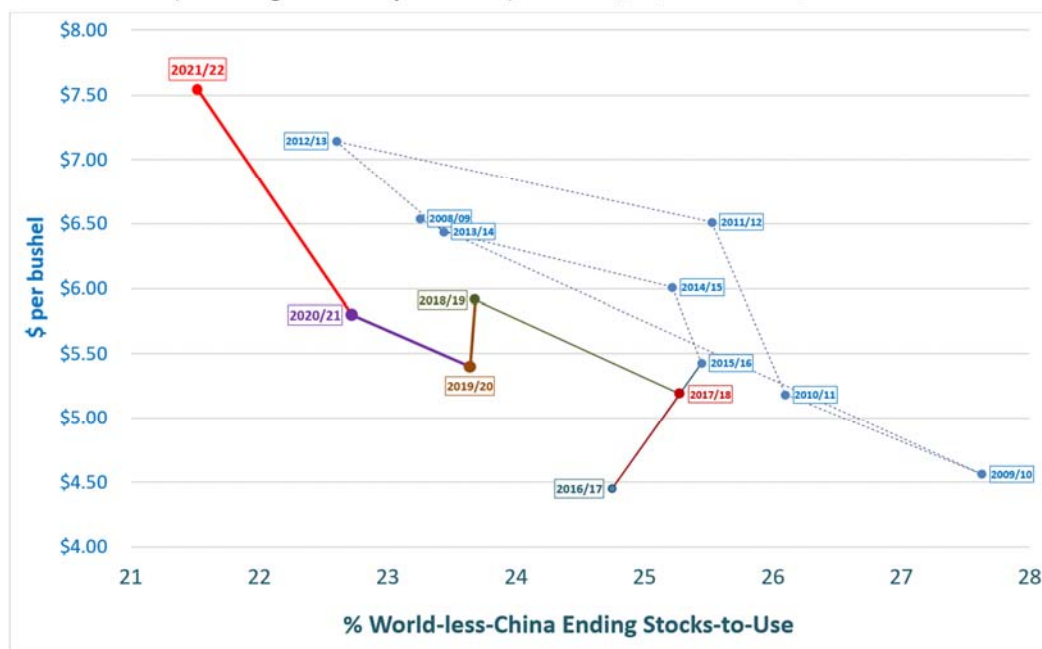
MY 2021/22 as of the August 12, 2021 USDA WASDE report



U.S. Wheat Price (Adj. by Trade Weighted U.S. Dollar) vs "World-Less-China" % Stocks-to-Use:

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MY 2008/09 through "New Crop" MY 2020/21 as of the August 12, 2021 USDA WASDE report



Factors in 2021 International Grain Markets²⁷

□ Tightening Wheat % End Stocks-to-Use: World Markets

- Wheat “New Crop” MY 2021/22

- World Wheat Market – from a “*World-Less-China*” perspective

- ⇒ Tightest “% Ending Stocks-to-Use” since MY 2007/08 = 21.5% S/U

- ⇒ Record high U.S. Trade Weighted Dollar adjusted price = \$7.54 /bu

Corn Markets International

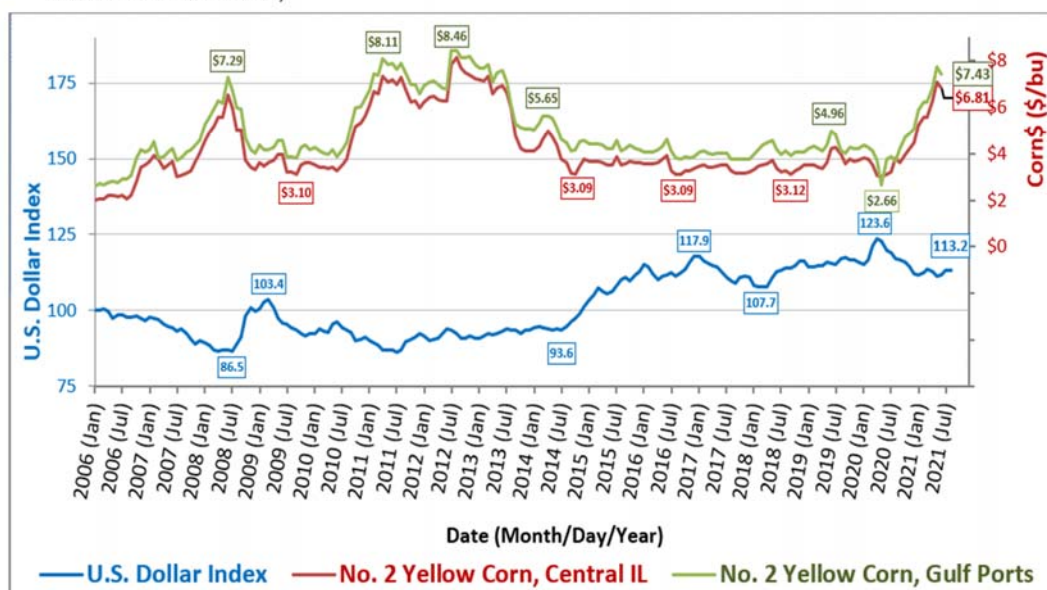
28



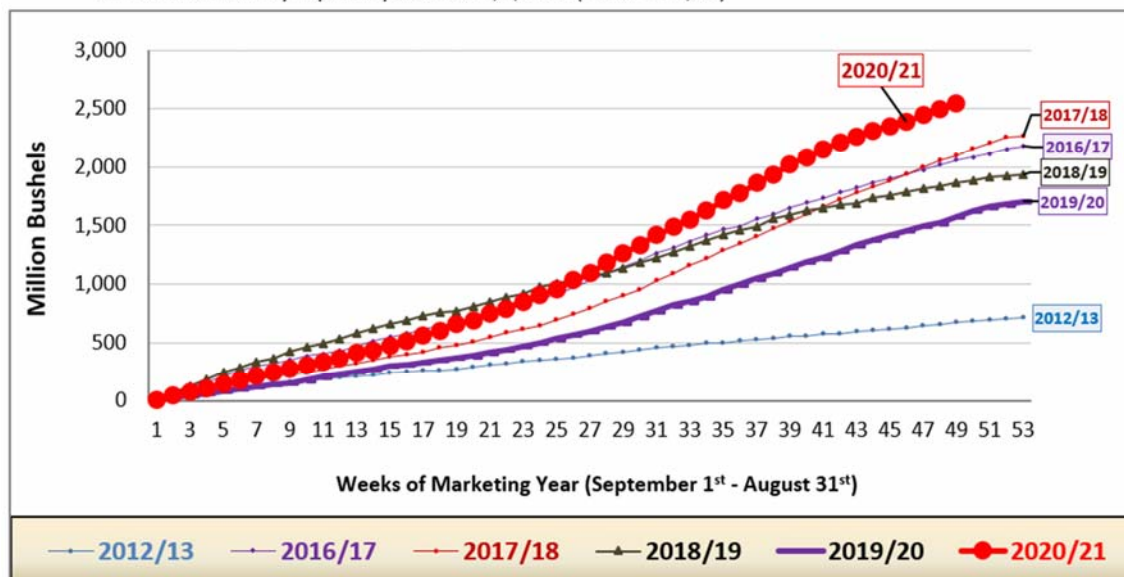
Monthly U.S. Trade Weighted Dollar Index vs U.S. Cash Corn Prices (Central Illinois & U.S. Gulf Ports) January 2006 through August 6, 2021

(St. Louis Federal Reserve Bank, FRED & USDA ERS, U.S. Dollar

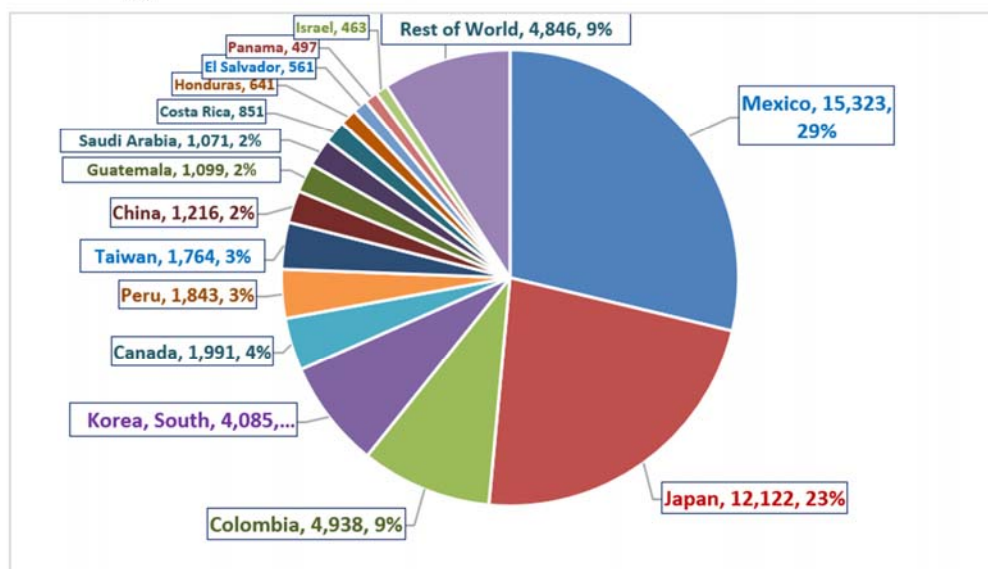
Broad Index of Goods & Services)



U.S. Corn Exports for MY 2012/13 & 2016/17 - “Old Crop” MY 2020/21 based on USDA FAS Weekly Export reports thru 8/5/2021 (EOMY on 8/31)

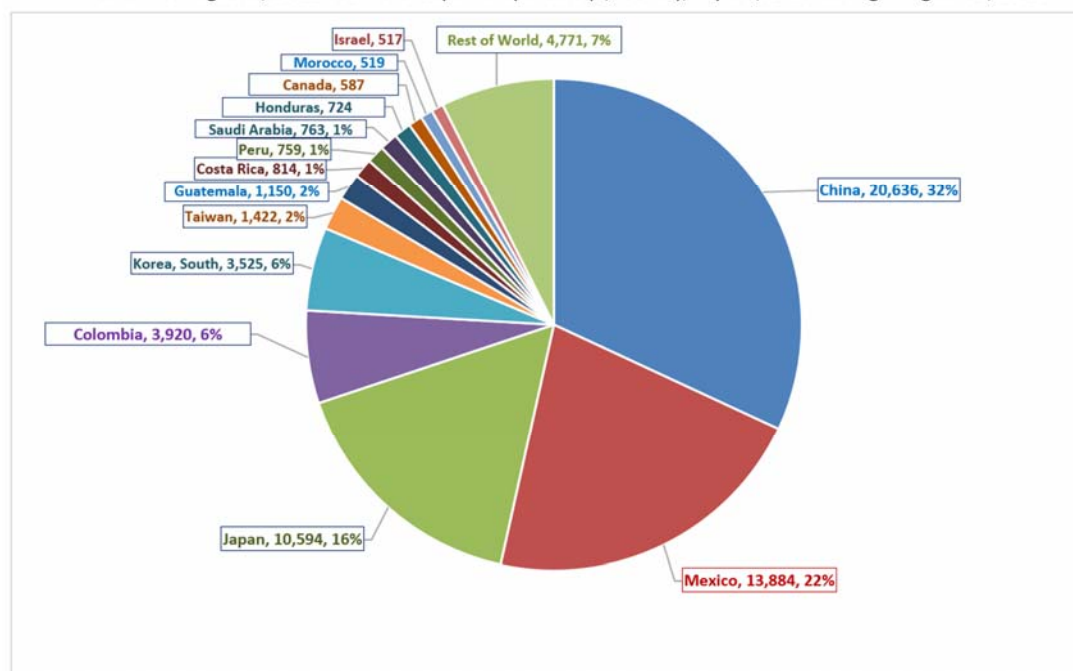


Top 15 U.S. Corn Export Buyers – Three Year Average: MY 2017/18 through “Old Crop” MY 2019/20: as of the August 5, 2021 USDA WASDE report (via USDA FAS PSD Online) (1,000 mt)



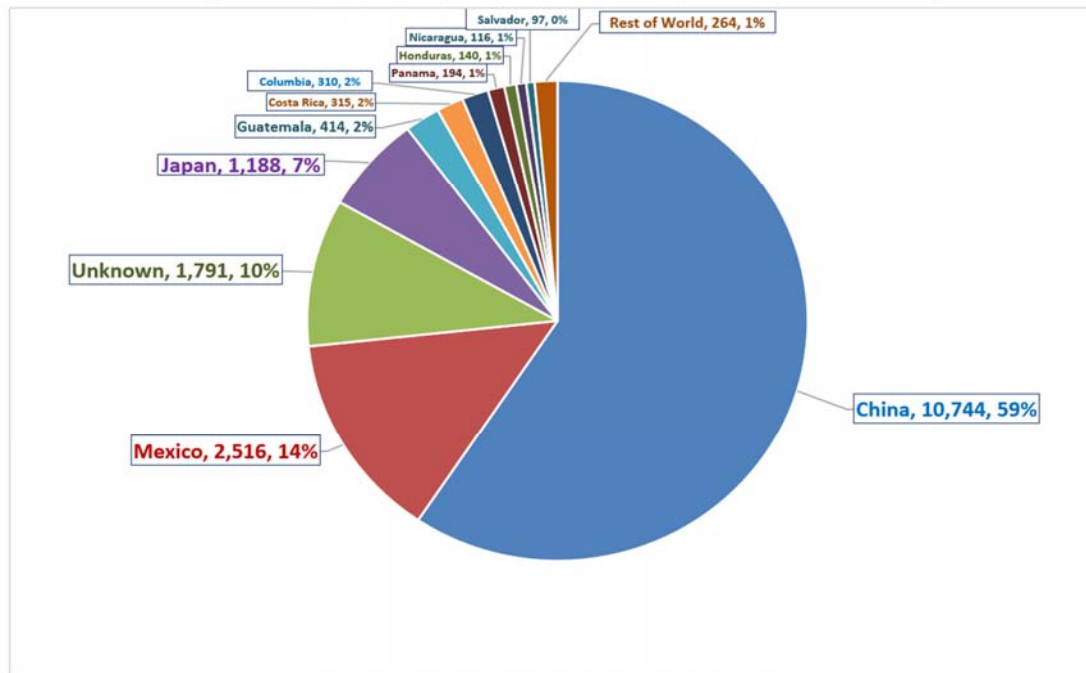
Top 15 U.S. Corn Export Buyers – “Old Crop” MY 2020/21

as of the August 5, 2021 USDA U.S. Export Shipments (1,000 mt); Sept. 1, 2020 through August 31, 2021.



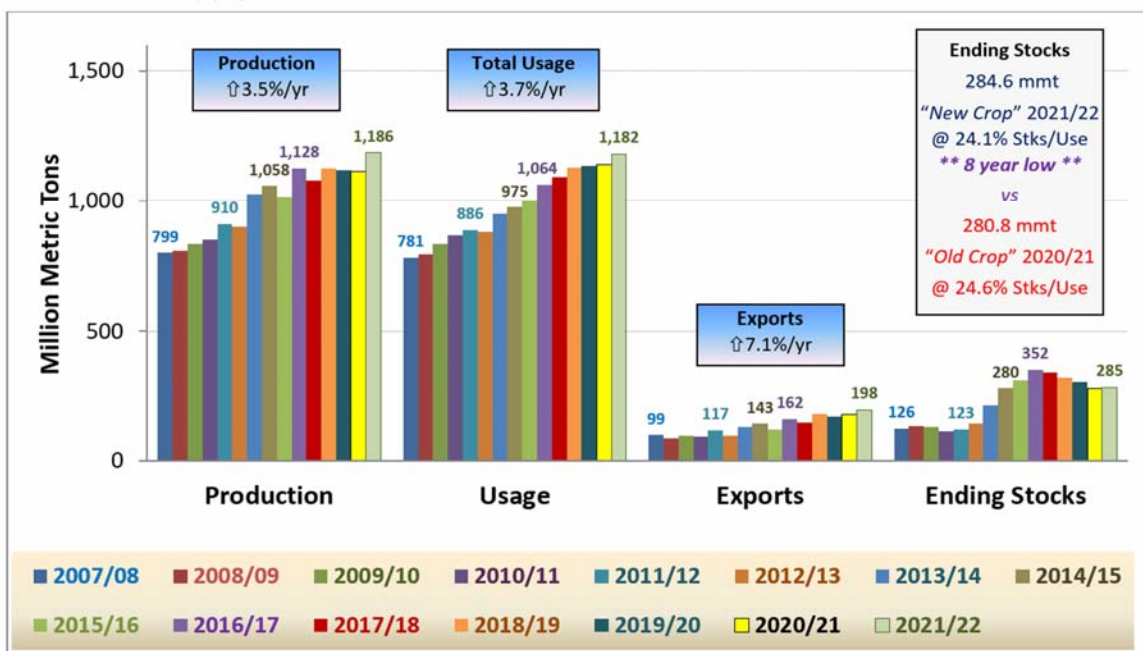
Top U.S. Corn Export Buyers – “New Crop” MY 2021/22

as of the August 5, 2021 USDA U.S. Export Forward Purchases (1,000 mt); 9/1/2021 through 8/31/2022.



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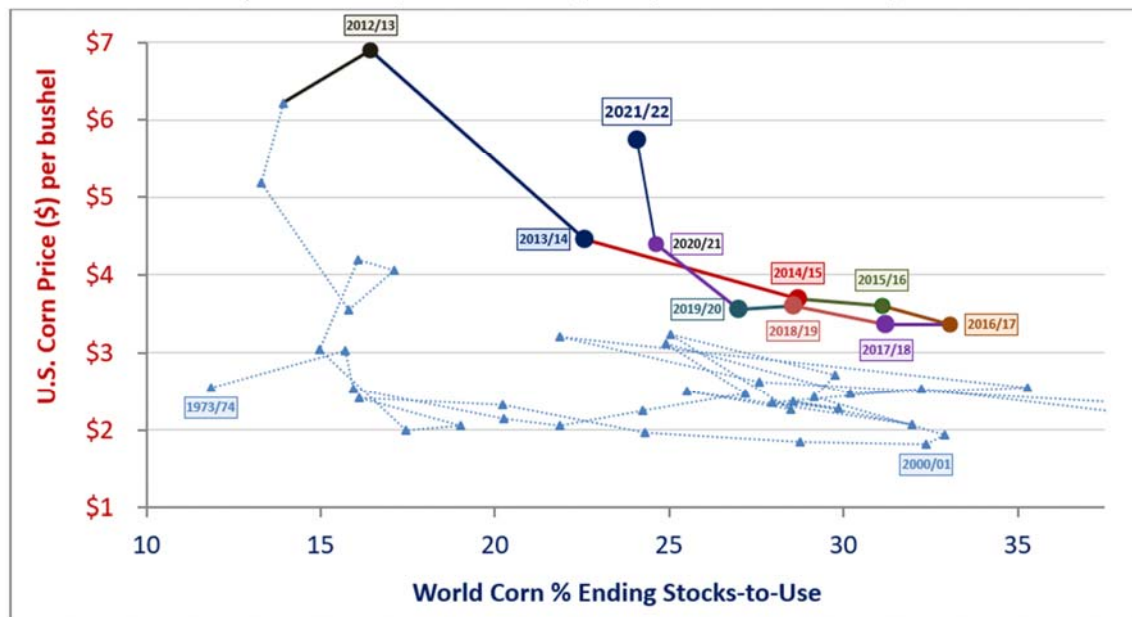
World Corn Supply-Demand: MY 2007/08 -“New Crop” MY 2021/22 as of the August 12, 2021 USDA WASDE report



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U.S. Corn Price vs % World Corn Stocks-to-Use: MY 1973/74 through "New Crop" MY 2021/22 as of the August 12, 2021 USDA WASDE report

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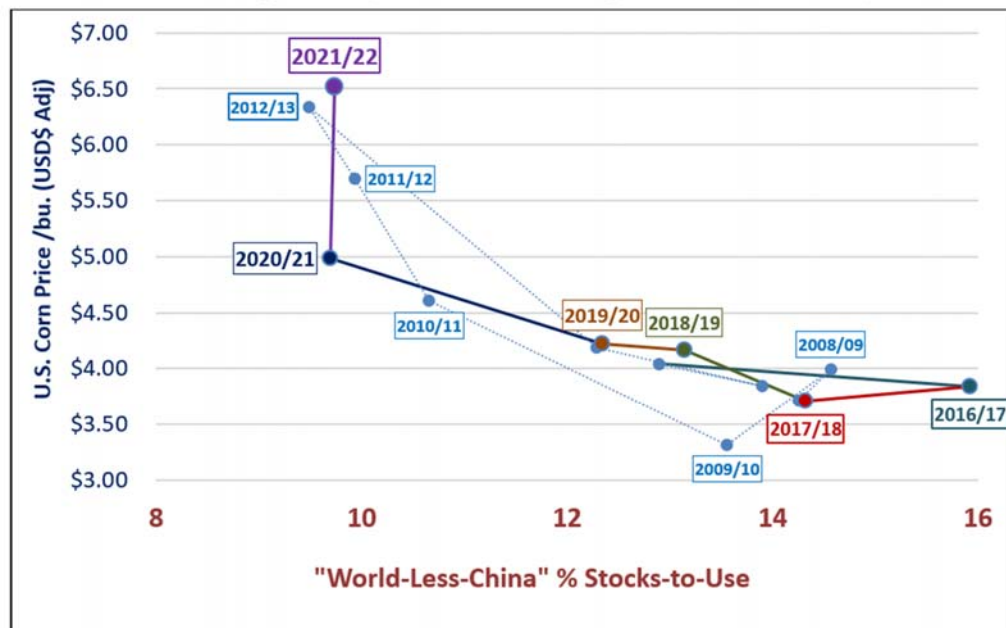
World vs "World-Less-China" % Corn Stocks-to-Use: MY 2007/08 through "New Crop" MY 2021/22, as of the August 12, 2021 USDA WASDE report.

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U.S. Corn Price (USD\$ Adj.) vs % "World-Less-China" Corn Stocks-to-Use:

MY 2007/08 through "New Crop" MY 2020/21, as of the August 12, 2021 USDA WASDE report.



Factors in International Corn Markets²⁰²¹

□ Tightening Corn % End Stocks-to-Use: U.S. & World...

• Corn "New Crop" MY 2021/22

○ U.S. Corn Market

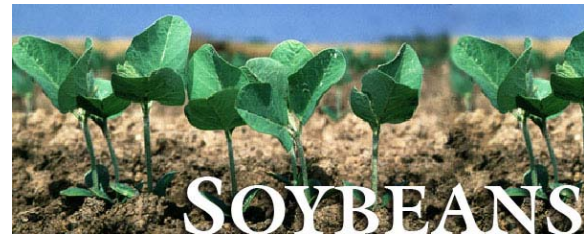
- ⇒ *2nd Tightest* "% Ending Stocks-to-Use" since MY 2012/13 = 8.65% S/U
- ⇒ *Highest* U.S. Average Wheat farm price since MY 2012/13 = \$5.75 /bu

○ World Corn Market – from a "World-Less-China" perspective

- ⇒ *Tightest tied* "% Ending Stocks-to-Use" since MY 2012/13 = 9.7% S/U
- ⇒ *Record high* U.S. Trade Weighted Dollar adjusted price = \$6.51 /bu

Soybean Markets International

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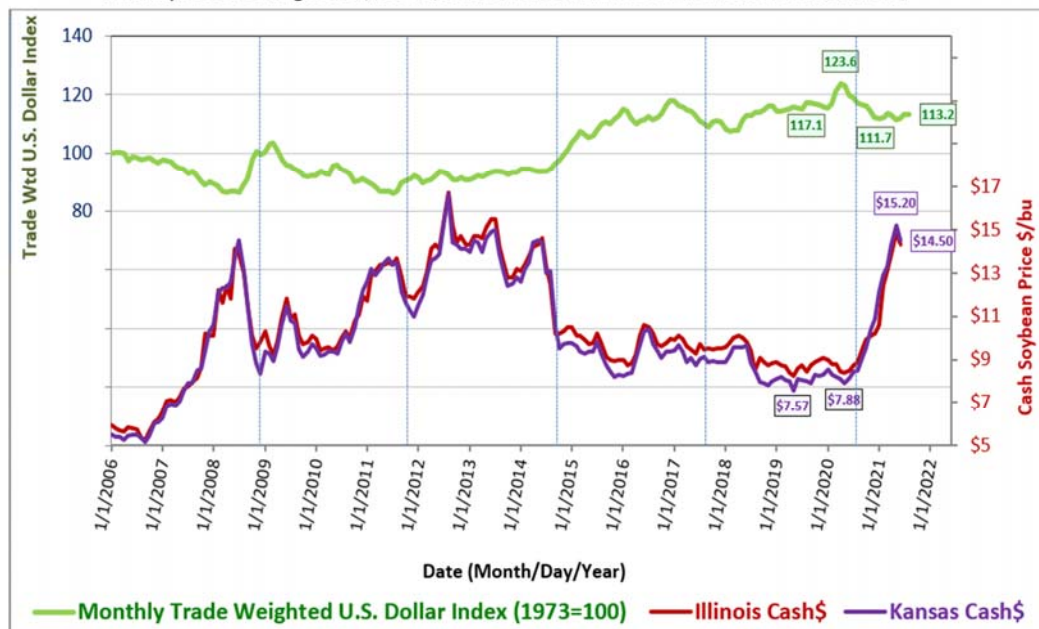


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Monthly U.S. Trade Weighted Dollar Index vs U.S. Cash Soybean \$'s Illinois & Kansas
January 2006 to August 10, 2021 (Source: St. Louis Federal Reserve Bank, FRED & USDA NASS QuickStats)

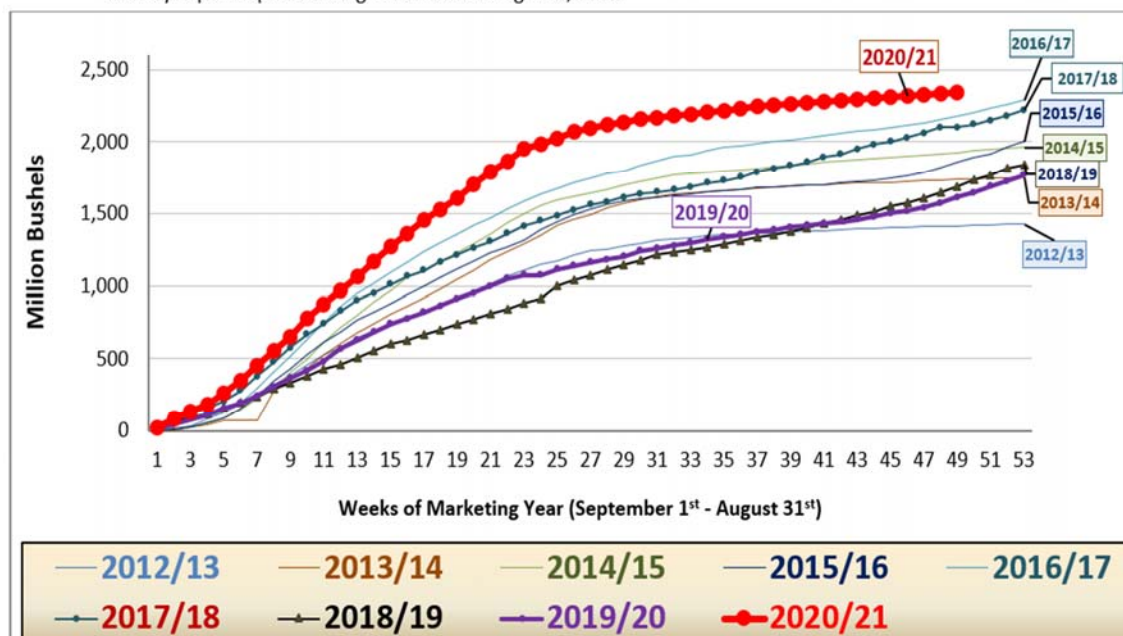


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U.S. Soybean Exports: for MY 2012/13 through “Old Crop” MY 2020/21 as of recent USDA FAS

Weekly Export reports through the week of August 5, 2021

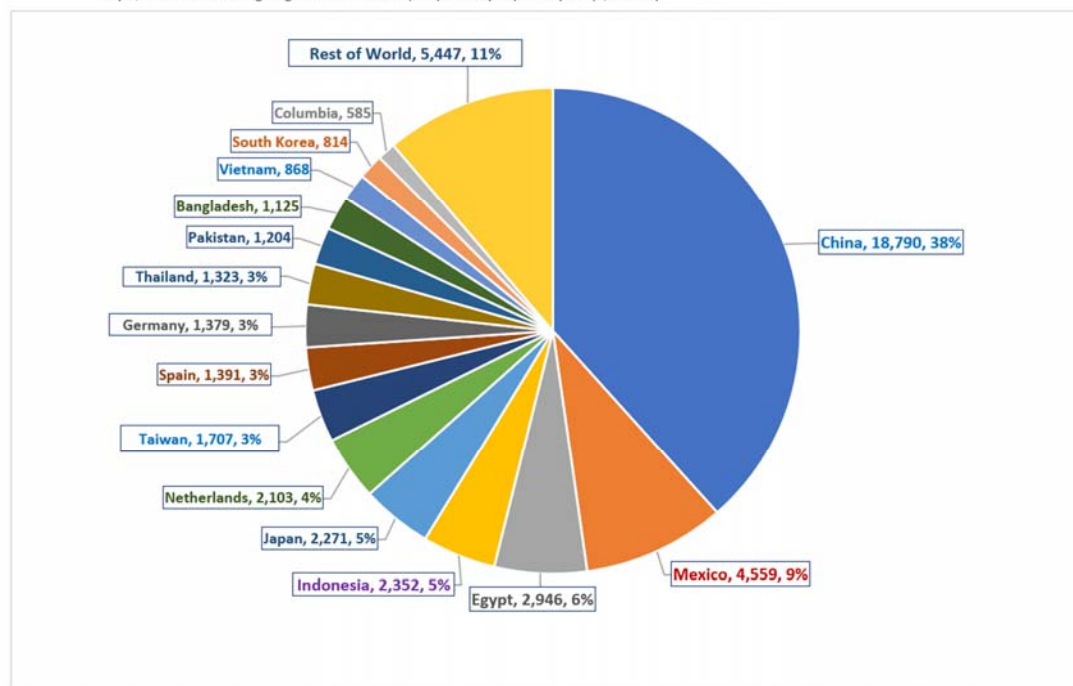
41



Top 15 U.S. Soybean Export Buyers – Three Year Average: MY 2017/18 thru “Old Crop” MY 2019/20: as of the

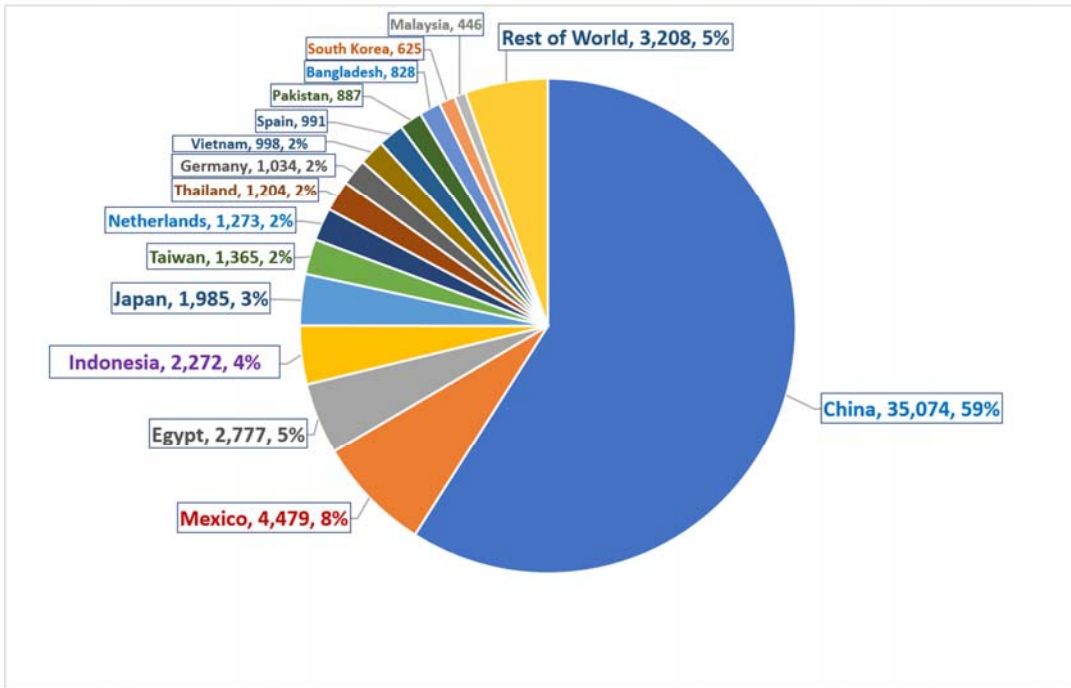
July 8, 2021 USDA Foreign Agricultural Service (FAS) Weekly Export report (1,000 mt)

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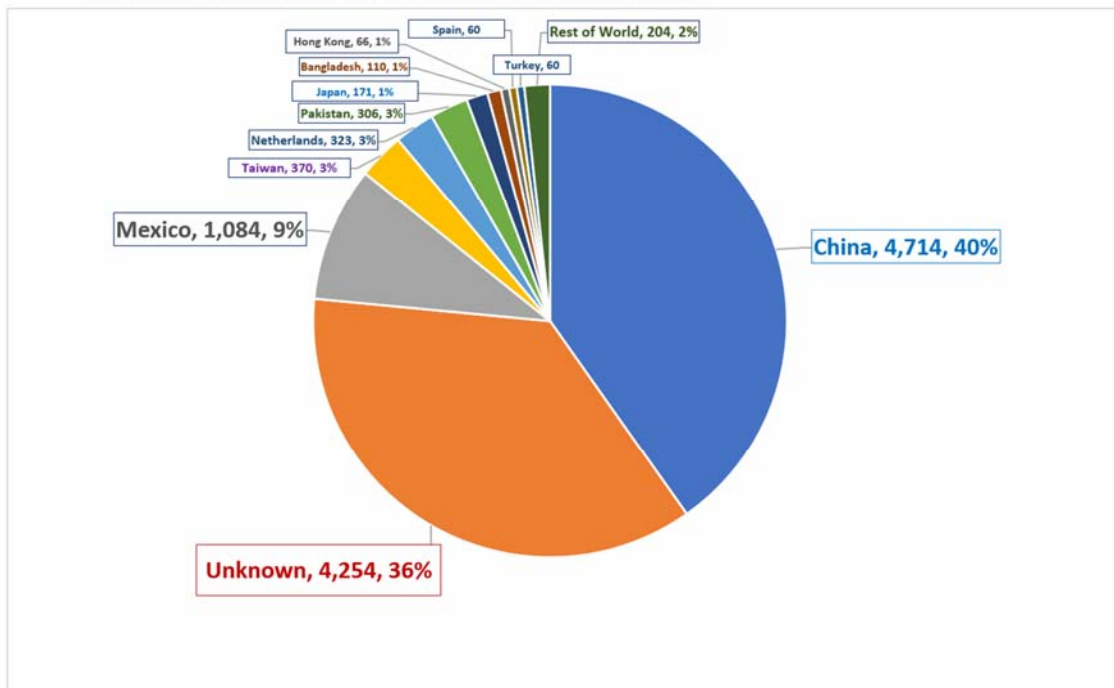
Top 15 U.S. Soybean Export Buyers: "Old Crop" MY 2020/21 through August 3, 2021 – source: USDA U.S. Export Shipments data (1,000 mt), with Marketing Year from September 1, 2021 through August 31, 2022 (1,000 metric tons).

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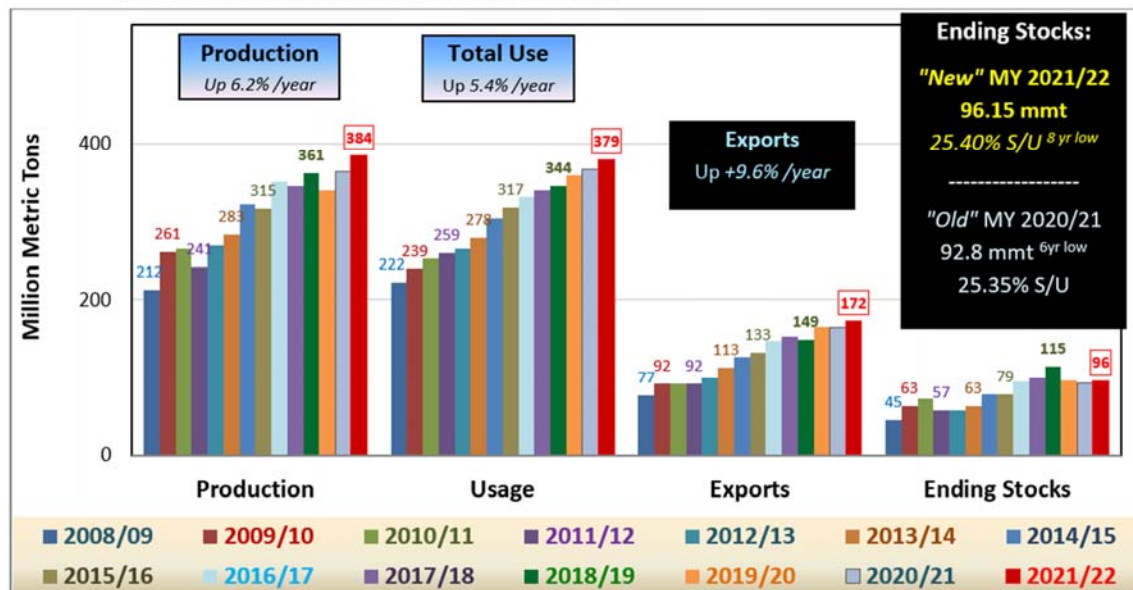


Top U.S. Soybean Export Buyers: "New Crop" MY 2021/22 through August 3, 2021 – source: USDA U.S. Export Shipments data (1,000 mt), with Marketing Year from September 1, 2021 through August 31, 2022 (1,000 metric tons).

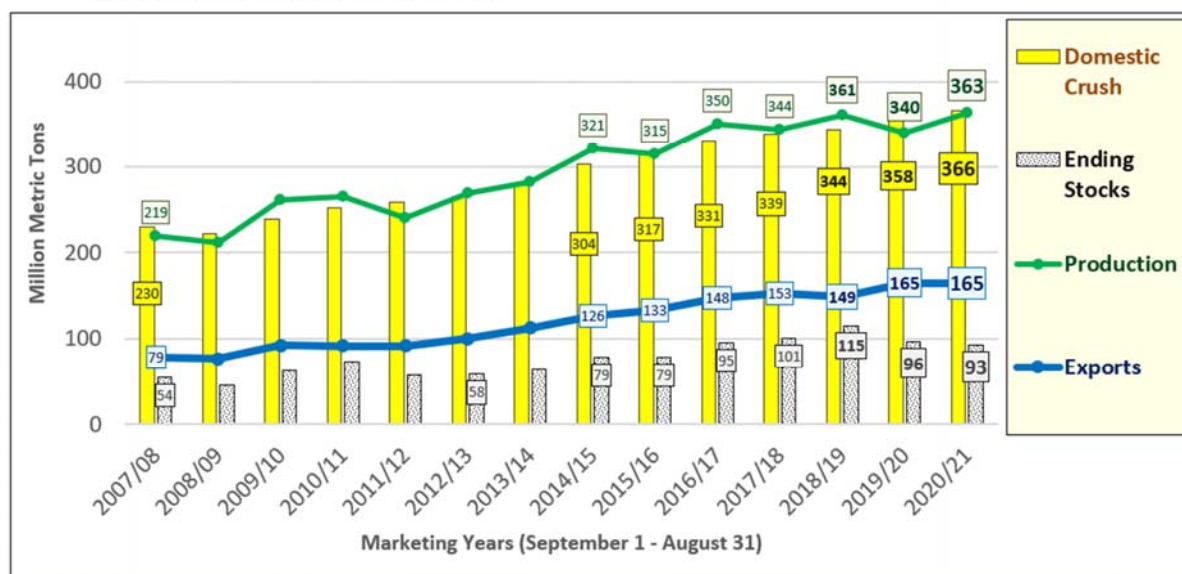
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World Soybean Usage & Ending Stocks: MY 2008/09 through "New Crop" MY 2021/22 as of the August 12, 2021 WASDE Report



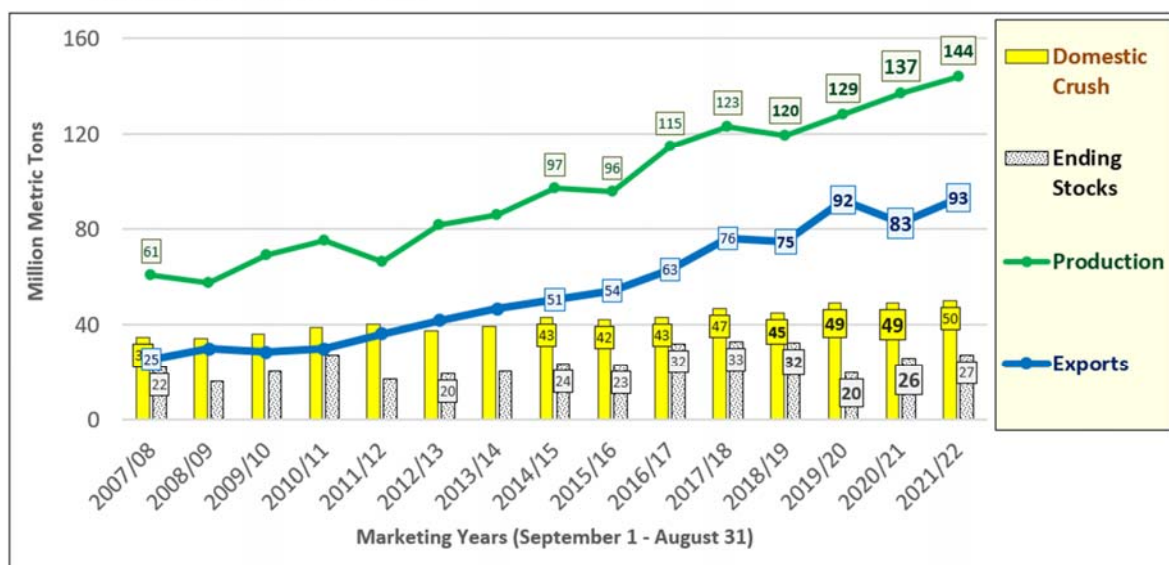
World Soybean Supply-Demand Trends: MY 2007/08 – "New" MY 2021/22 as of the August 12, 2021 USDA WASDE Report



South America Soybean Supply-Demand Trends: MY 2007/08 – “New” MY 2021/22 as of the August 12, 2021 USDA WASDE Report

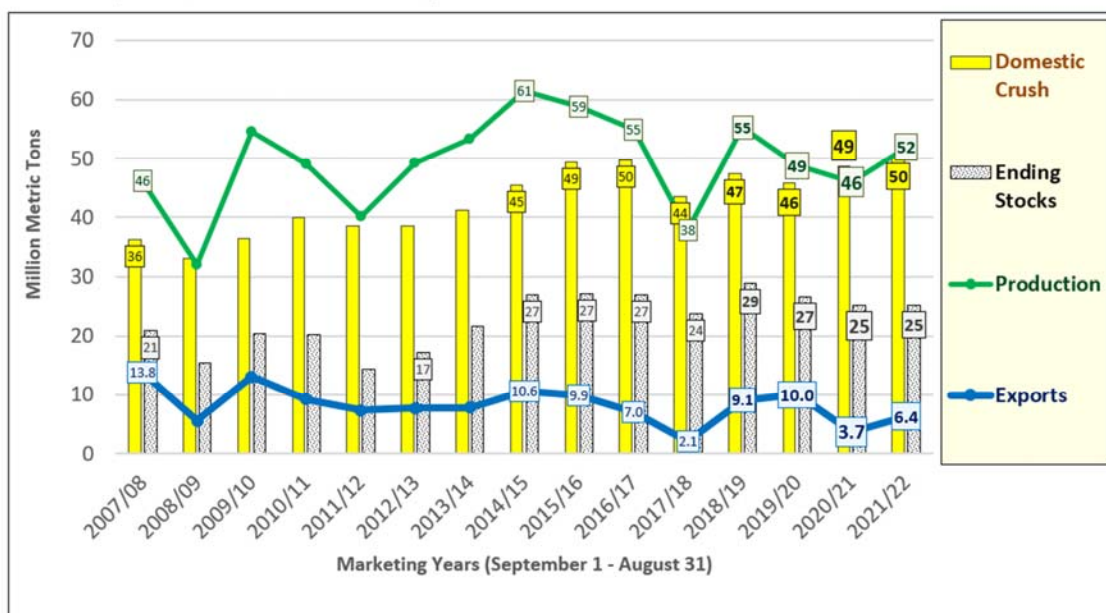


Brazil Soybean Supply-Demand Trends: MY 2007/08 – “New” MY 2021/22 as of the August 12, 2021 USDA WASDE Report



Argentina Soybean Supply-Demand Trends: MY 2007/08 – “New” MY 2021/22 as of the August 12, 2021 USDA WASDE Report

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China Soybean Supply-Demand Trends: MY 2007/08 – “New Crop” MY 2021/22 as of the August 12, 2021 USDA WASDE Report

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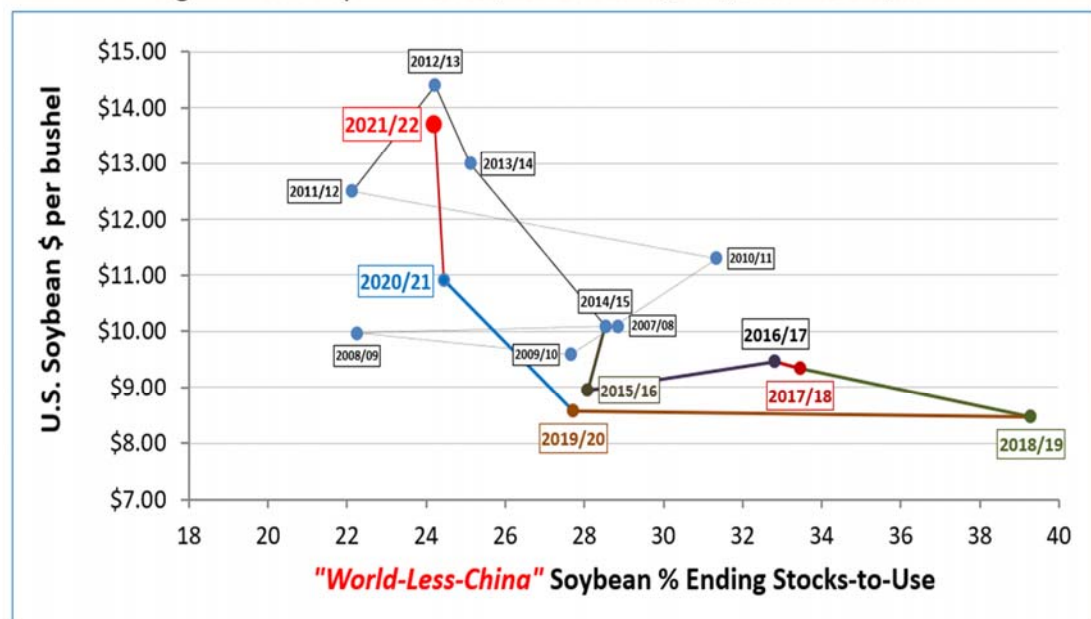
World vs % "World-Less-China" Soybean Stocks-to-Use: MY 2007/08 through "New Crop" MY 2021/22, as of the August 12, 2021 USDA WASDE report.

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U.S. Soybean Price vs "World-Less-China" % Stocks-to-Use: MY 2007/08 through "New Crop" MY 2021/22 as of the August 12, 2021 WASDE Report

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Factors in 2021 International Soybeans 53

□ Tight Soybean % End Stocks-to-Use: U.S. & World

- Soybeans “New Crop” MY 2021/22

- U.S. Soybean Market

- ⇒ 2nd Tightest *tied* “% Ending Stocks-to-Use” since MY 2013/14 = 3.54% S/U

- ⇒ 2nd Highest U.S. Average Soybean farm price since MY 2012/13 = \$13.70 /bu

- World Soybean Market – from a “World-Less-China” perspective

- ⇒ 3^d Tightest *tied* “% Ending Stocks-to-Use” since MY 2011/12 = 24.2% S/U

- ⇒ U.S. Trade Weighted Dollar adj. price = \$15.52 /bu

Sorghum Markets

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Driving Factors in Sorghum Markets²⁰²¹...55

❑ Tight Sorghum % End S/U: U.S. & China demand (?)

• Grain Sorghum “New Crop” MY 2021/22

◦ U.S. Sorghum Market

⇒ *2nd Tightest* *tied* “% Ending Stocks-to-Use” since MY 2013/14 = 3.54% S/U

⇒ *2nd Highest* U.S. Average Wheat farm price since MY 2012/13 = \$13.70 /bu

◦ China sorghum imports^{U.S.} started strong in MY 2021/22 – then slowed

⇒ *Still strong NC forward contract bids for Sorghum – especially in mid-Kansas*

⇒ Signals anticipated resurgence of post-harvest China sorghum demand



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Cotton Markets

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Driving Factors in Cotton Markets²⁰²¹... 57

□ Tightening Cotton % Stocks-to-Use – U.S. & World

- Cotton “New Crop” MY 2021/22

- U.S. Cotton Market

- ⇒ “% Ending Stocks-to-Use” down last 3 yrs = 17.1%^{MY 2021/22} vs 41.1%^{MY 2019/20}

- ⇒ U.S. Avg. Cotton farm price up last 3 years = \$0.80 /lb^{MY 2021/22} vs \$0.60 /lb^{MY 2019/20}

- World Cotton Market – from a “*World-Less-China*” perspective

- ⇒ *Falling* “% Ending Stocks-to-Use” last 3 years ⇒ 63.6%^{MY 2021/22} vs 87.8%^{MY 2019/20}

Anticipating: International Grain Market dynamics & directions during Fall 2021 through year 2022



What to anticipate: Fall 2021 – Year 2022

□ USDA Reports ⇒ *Bringing grain market volatility*

- Release dates: Sept. 12th, Oct. 12th, Nov. 12th, & January 2022
 - Risk of further 2021 crop production declines for U.S. corn, soybean & especially HRS wheat from the northern states – yields or abandoned acres (northwest vs south)
 - Would be *supportive-to-bullish* to grains – depending on degree of crop declines

□ “Active” Domestic & Foreign grain purchases @ harvest

- User's looking to secure available “new crop” supplies
- “*Inverted*” futures & strong basis likely during Sep-Nov²⁰²¹ Quarter

What to anticipate: Fall 2021 – Year 2022

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

- Brazil & Argentina Corn & Soybean planting Calendar
 - **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

What to anticipate: Fall 2021 – Year 2022

Q? Are Corn, Soybeans & Wheat futures *at risk* to fall sharply in the last ½ of year 2022?

- With “tight” beginning stocks across these crops – less risk of declines until at least late spring – early summer
- THEN the *risk* to grain sellers is that grain markets will discount the risk of *“short crops”* in 2022
- ⇒ IF in Summer ²⁰²² U.S. & Foreign crop prospects become *“OK-to-Good”*, THEN grain prices will likely *“slide”* into Fall 2022 (*by traders with no motive to “buy the market”*)

Thoughts on International Grains

□ Threats of financial-geopolitical events effecting grain markets?

- Such “macro-systematic risks” are difficult to manage in commodities
 - Most traders *“wait & see”* what occurs, *but* then either *“scramble to vacate their risky market positions”* when such financial / geopolitical events do happen – *OR* ride it out (& hope for the best).
- H_0^{KSU} : Such “major geopolitical & financial risks” DO exist in grain markets.

Important Questions: How likely are these events to occur? How harmful financially are the consequences if they happen? What is the cost of effectively managing them?
- Key question: *“What grain market risk avoiding strategies can manage such potential geopolitical &/or financial events & do they “pay” financially?”*



Questions?

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KSUGrains on Twitter

www.AgManager.info



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