

# *Arkansas' Rice Situation and Outlook*

*Presented at 2016 USA National Rice Outlook Conference  
Memphis, Tennessee – December 7-9, 2016*

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**Division of Agriculture**

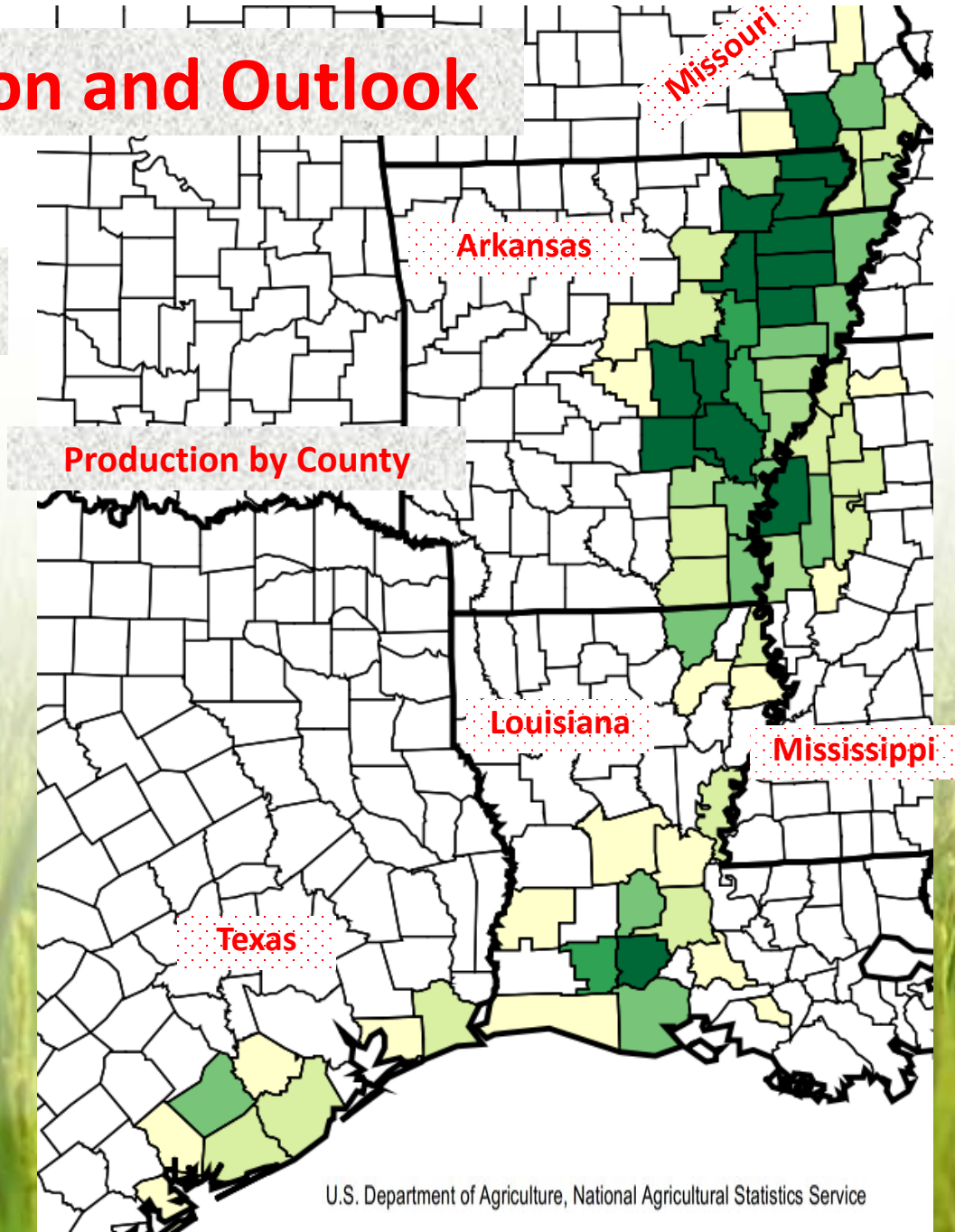
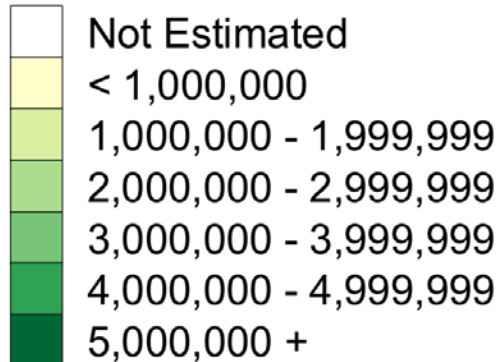
**University of Arkansas System**

12.12.16

# Arkansas' Rice Situation and Outlook

## Arkansas All Rice

### Hundredweight (Cwt.)



Slide 2.

**Production by County  
for Selected States**

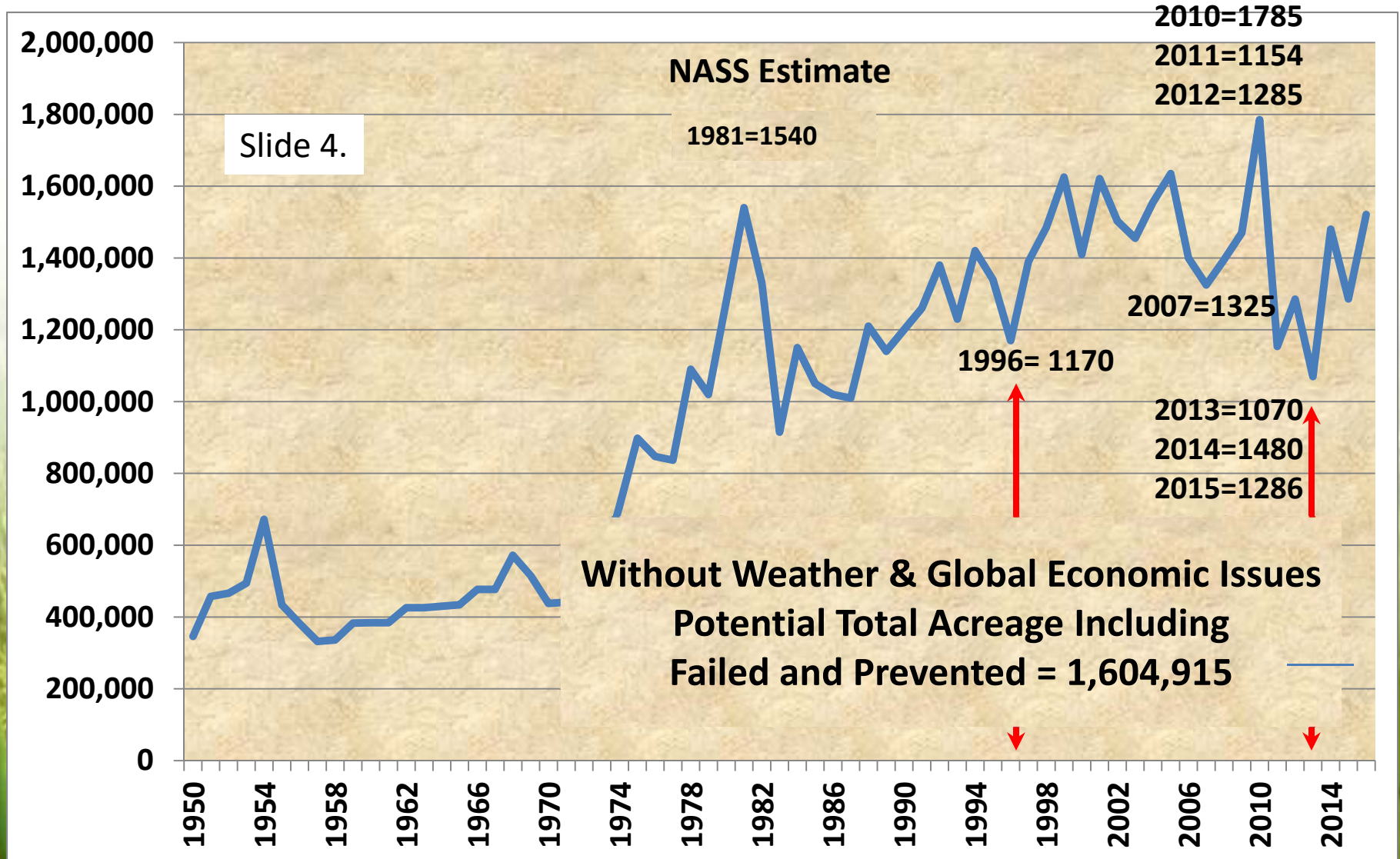
Slide 3.

# 2016 Arkansas

## All Rice Harvested Acreage, Yield and Production

# Arkansas' All Rice Harvested Acres, 1950 to 2016

2016 – 1,521,000 Acres, 18% > 2015, Failed 24,041, Prevented Planted 59,874

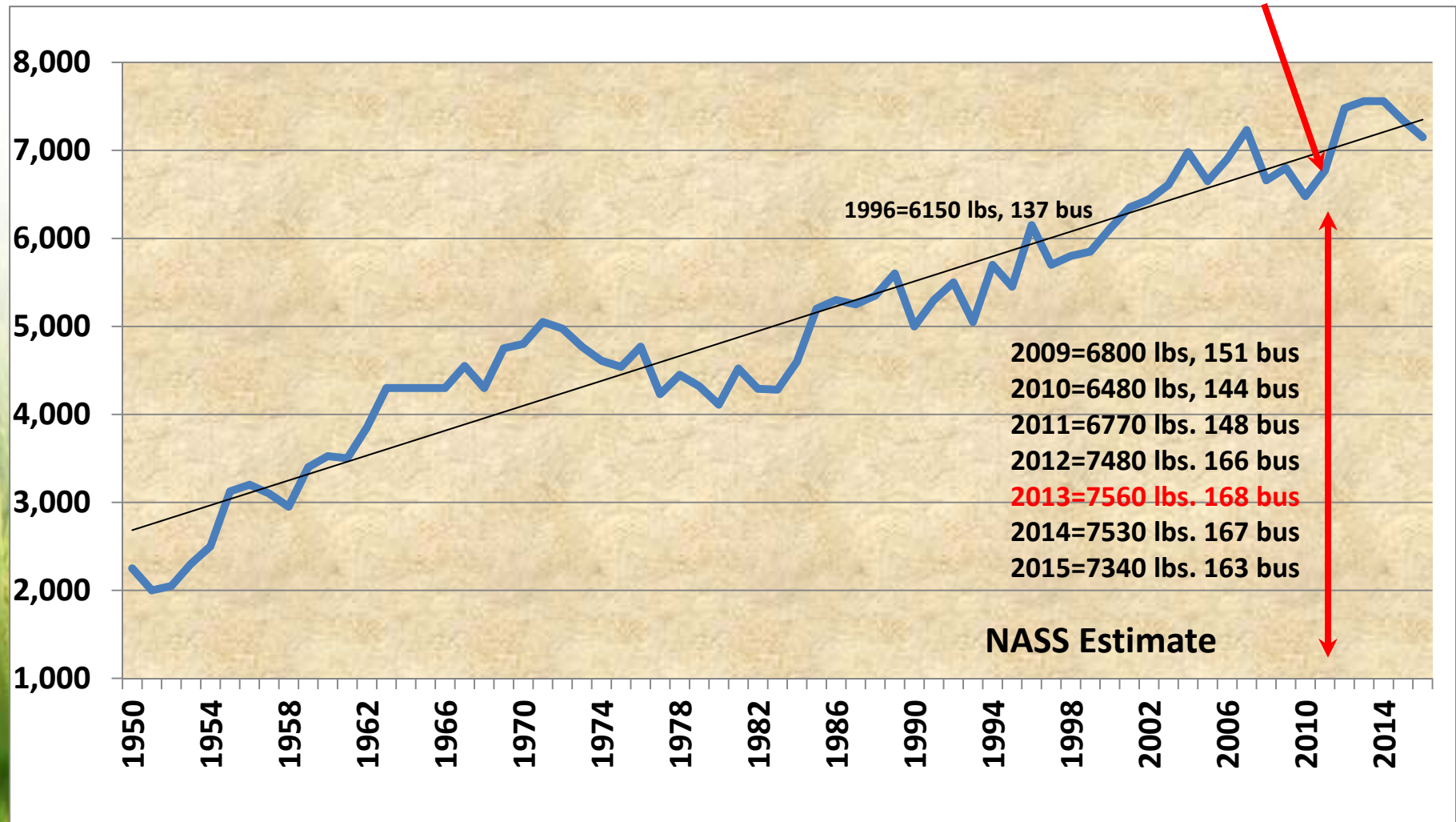


# Arkansas All Rice Yield Per Acre, 1950 to 2016

2016 – 6<sup>th</sup> Highest Yield 7150 lbs. (159 bus.)

Slide 5.

10.4% above 2010's 6480 lbs. (144 bus.)

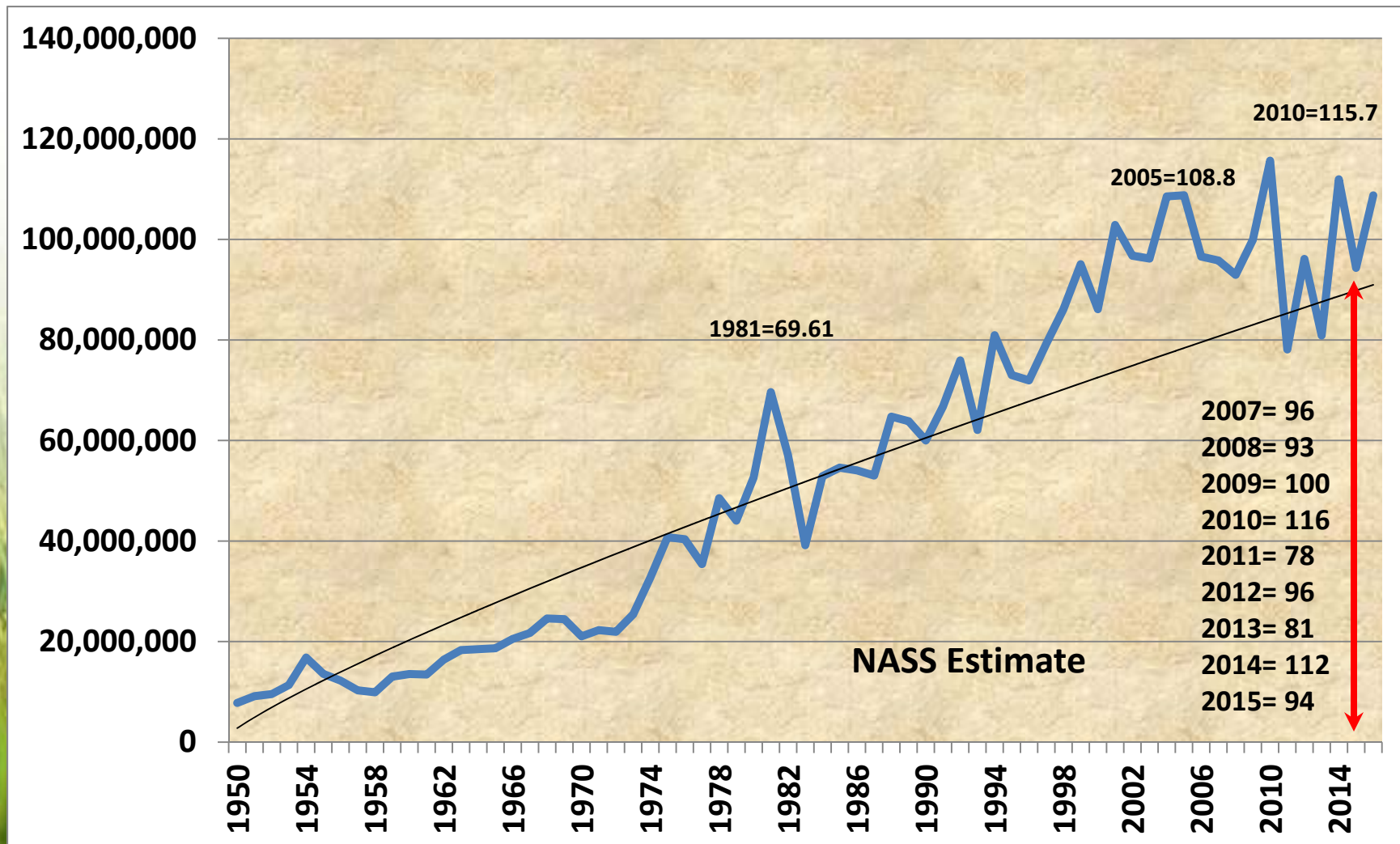


# Arkansas All Rice Production, 1950 to 2016

2016's 109 million cwt. – 4<sup>th</sup> largest on record

Slide 6.

Previous 15 year average 98.4 million cwt. —

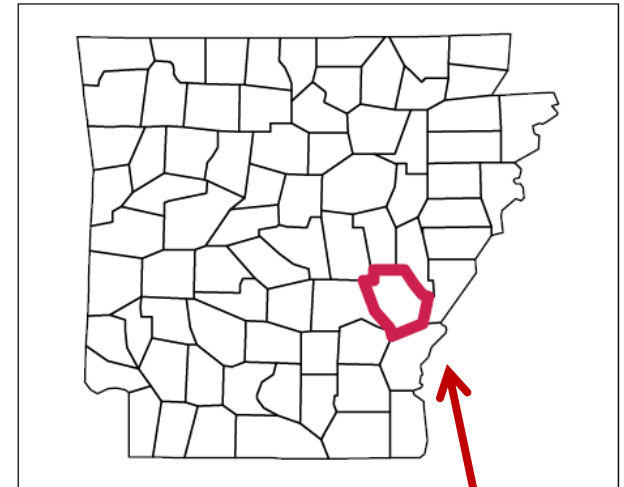
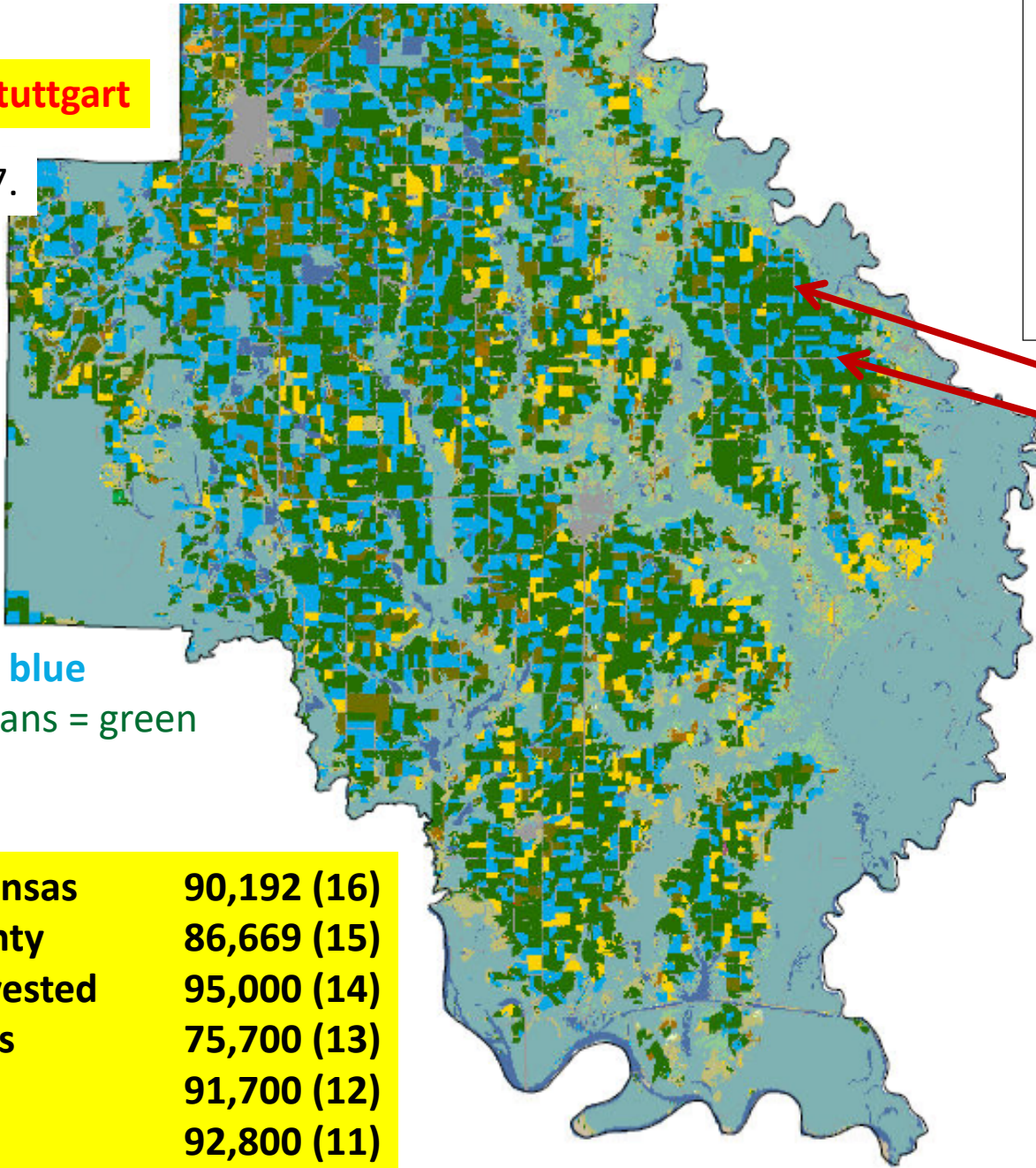




# Arkansas Long Grain Rice

Stuttgart

Slide 7.



## AGRICULTURE

- Pasture/Grass
- Soybeans
- Rice
- Cotton
- Fallow/Idle Cropland
- Corn
- Dbl Crop WinWht/Soybeans
- Winter Wheat
- Sorghum
- Aquaculture
- Pecans

Rice = blue  
Soybeans = green

## Arkansas County

- Oats
- NON-AGRICULTURE**
- Forest
- Wetlands
- Developed
- Water
- Shrubland
- Barren



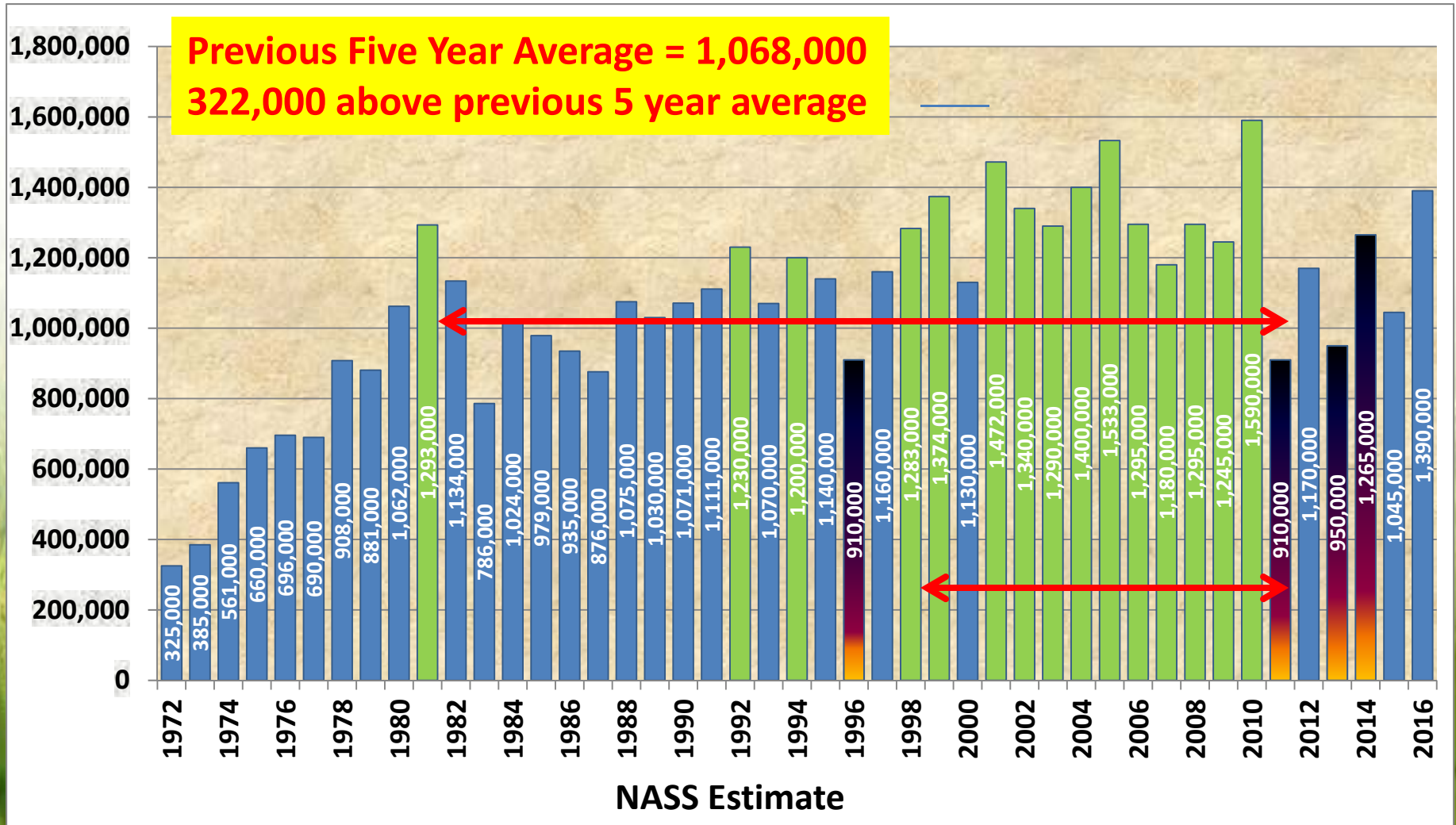
Arkansas	90,192 (16)
County	86,669 (15)
Harvested	95,000 (14)
Acres	75,700 (13)
	91,700 (12)
	92,800 (11)

# Arkansas Long Grain Rice Harvested Acres, 1972 to 2016

**2016: 1,390,000 acres - 345,000 acres (16.6%) above 2015's 1,045,000 acres**

**1981 to 2015 average 1,133,083**

Slide 8.



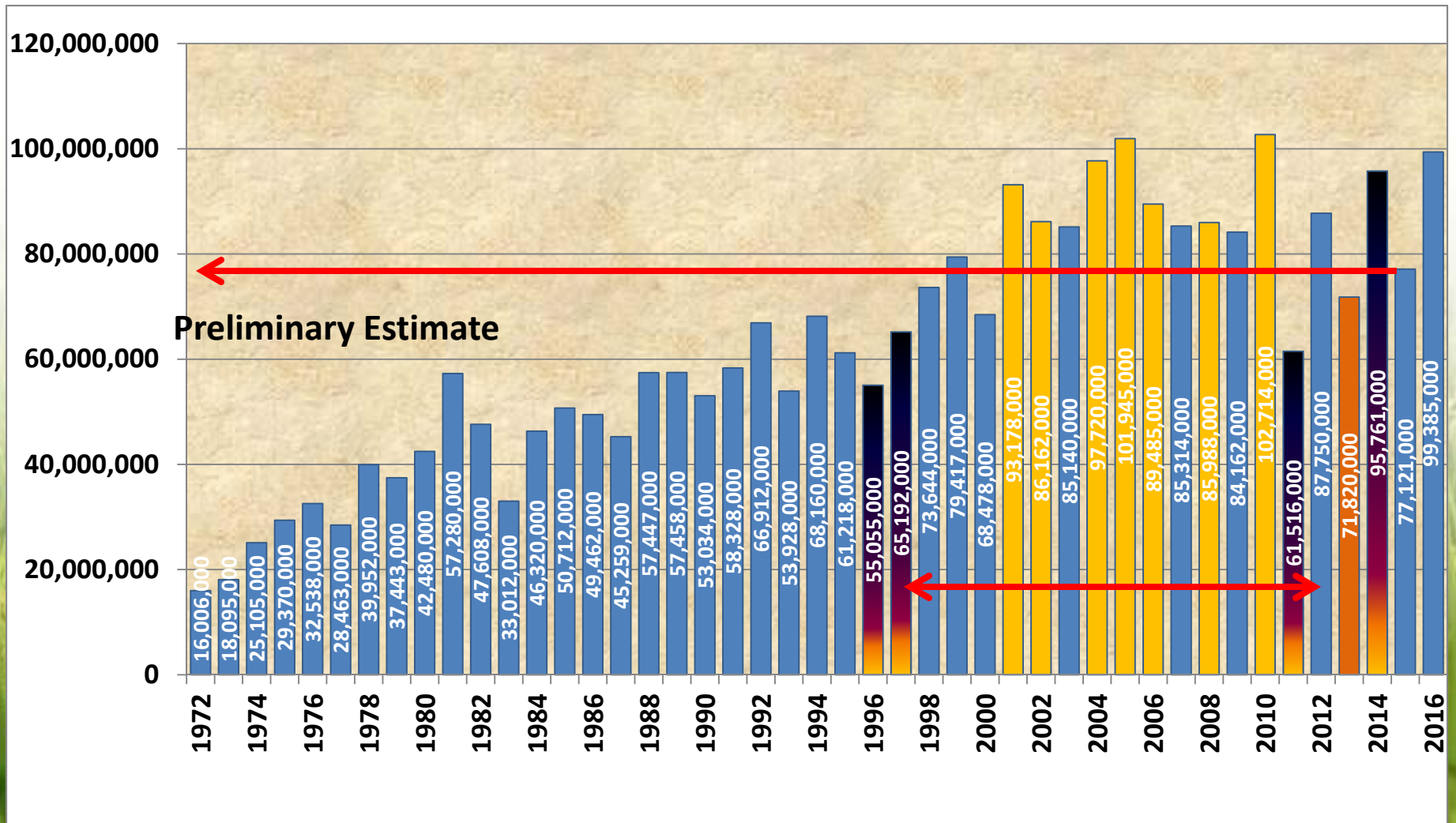


# Arkansas Long Grain Rice Production, 1972 to 2016

## 2016's Preliminary Estimate 99.4 million cwt.

3<sup>rd</sup> Highest on Record

Slide 9.



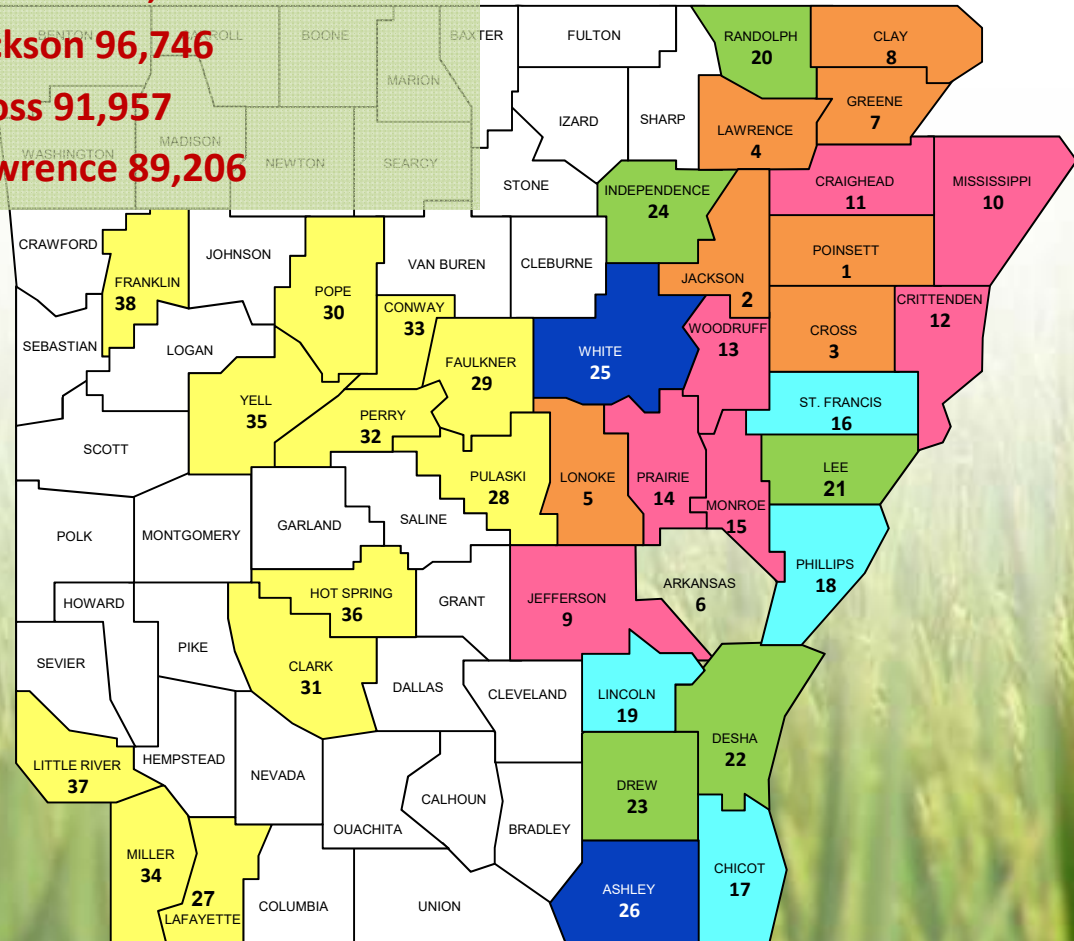
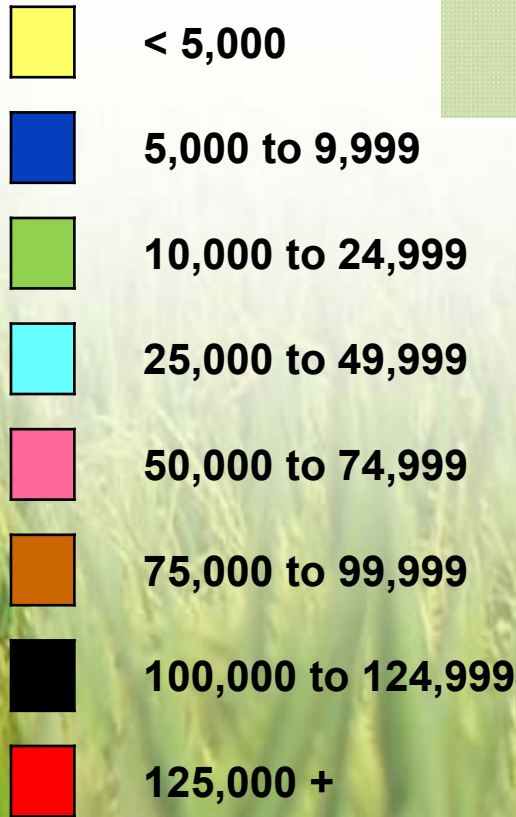
# Ranking 2016 Arkansas Long Grain Rice Producing Counties

## Top 4 AR Long Grain Rice Counties by Harvested Acreage

Slide 10.

- Top 4 Long Grain Counties

- Poinsett 98,595
- Jackson 96,746
- Cross 91,957
- Lawrence 89,206



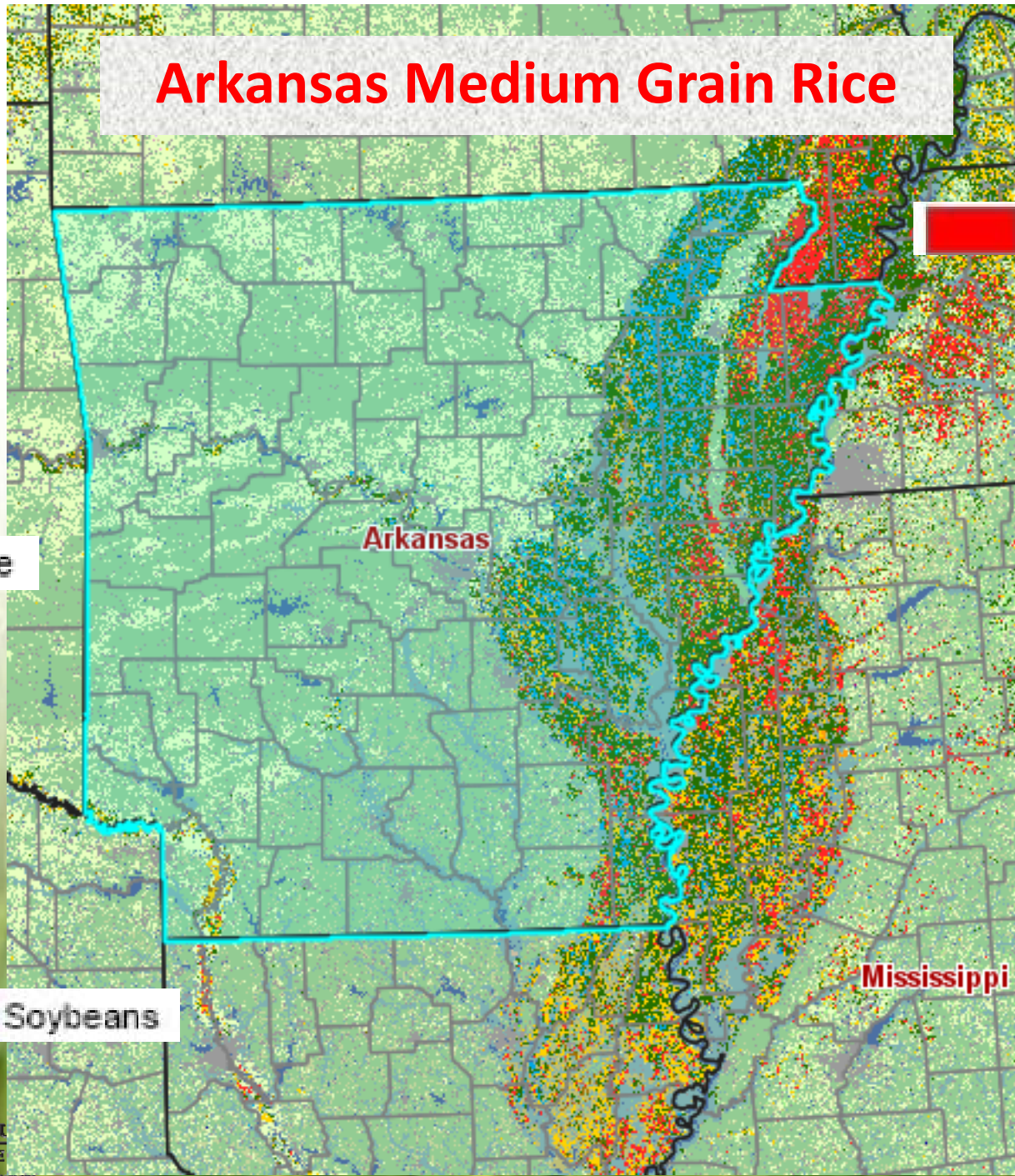
# Arkansas Medium Grain Rice

Slide 11.

Rice

Cotton

Soybeans

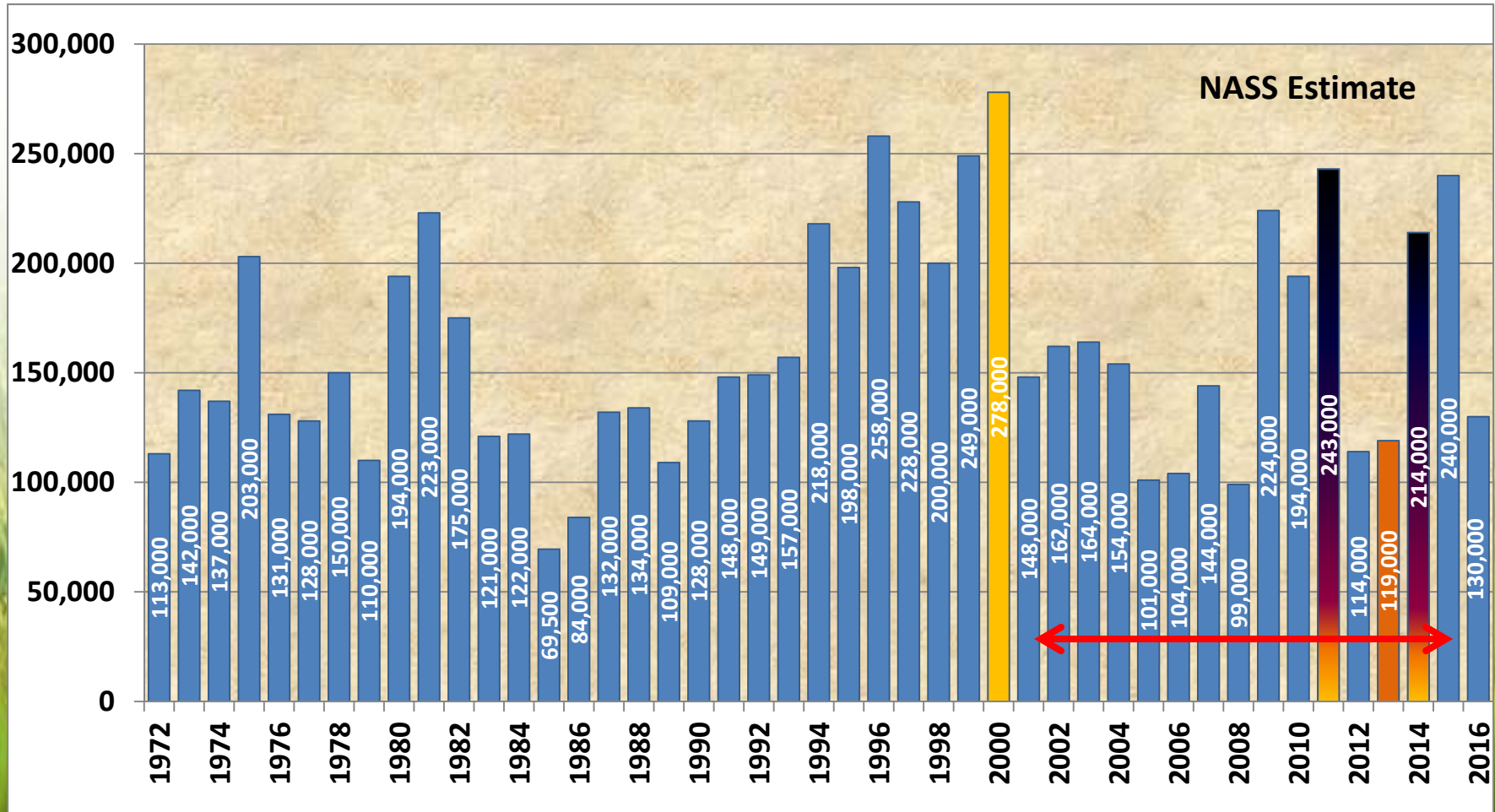


# Arkansas Medium Grain Rice Harvested Acres, 1972 to 2015

## 2016 - 130,000 acres

Slide 12.

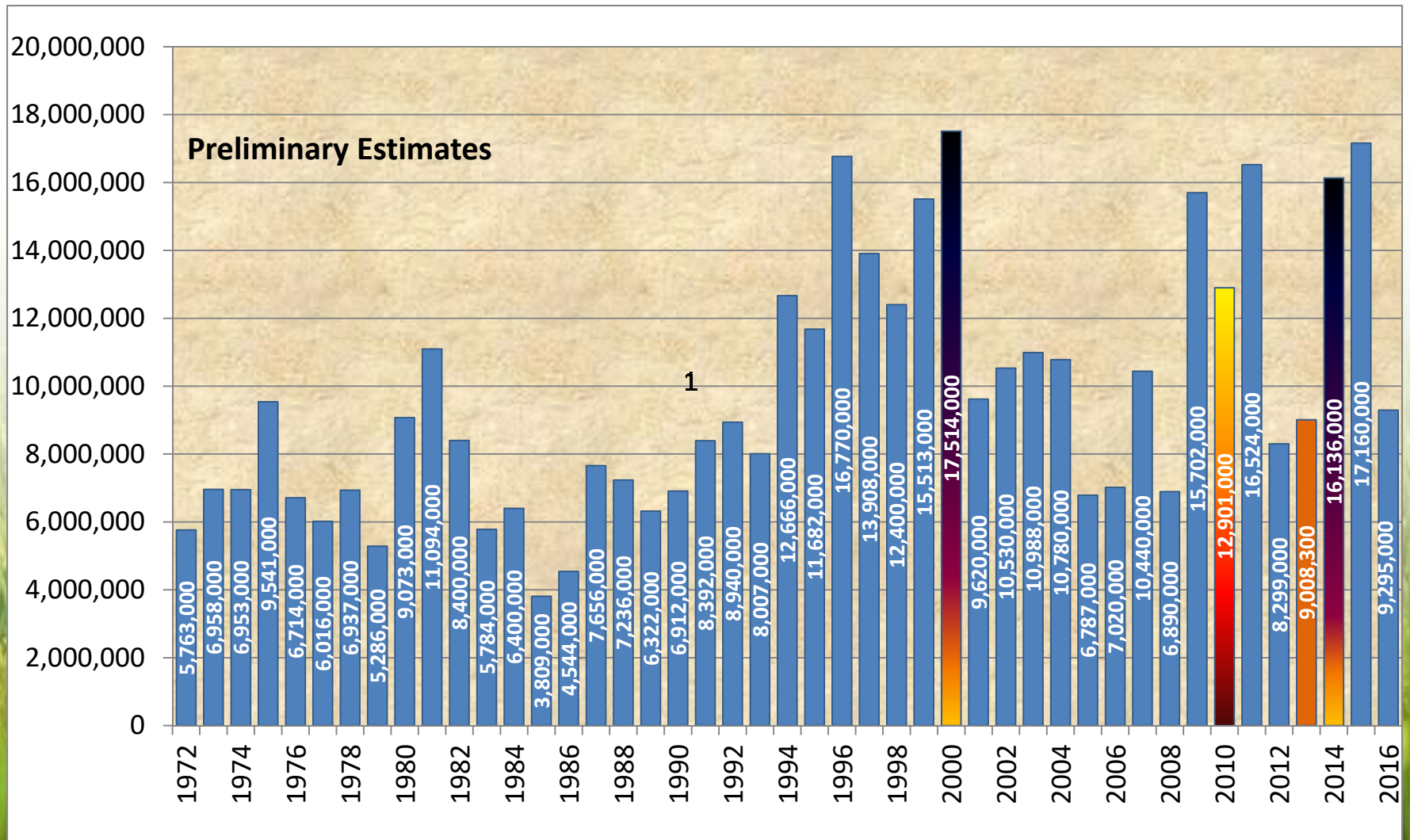
Previous 14 year average 163,000 —



# Arkansas Medium Grain Rice Production, 1972 to 2016

## 2016 – 9.3 Million cwt.

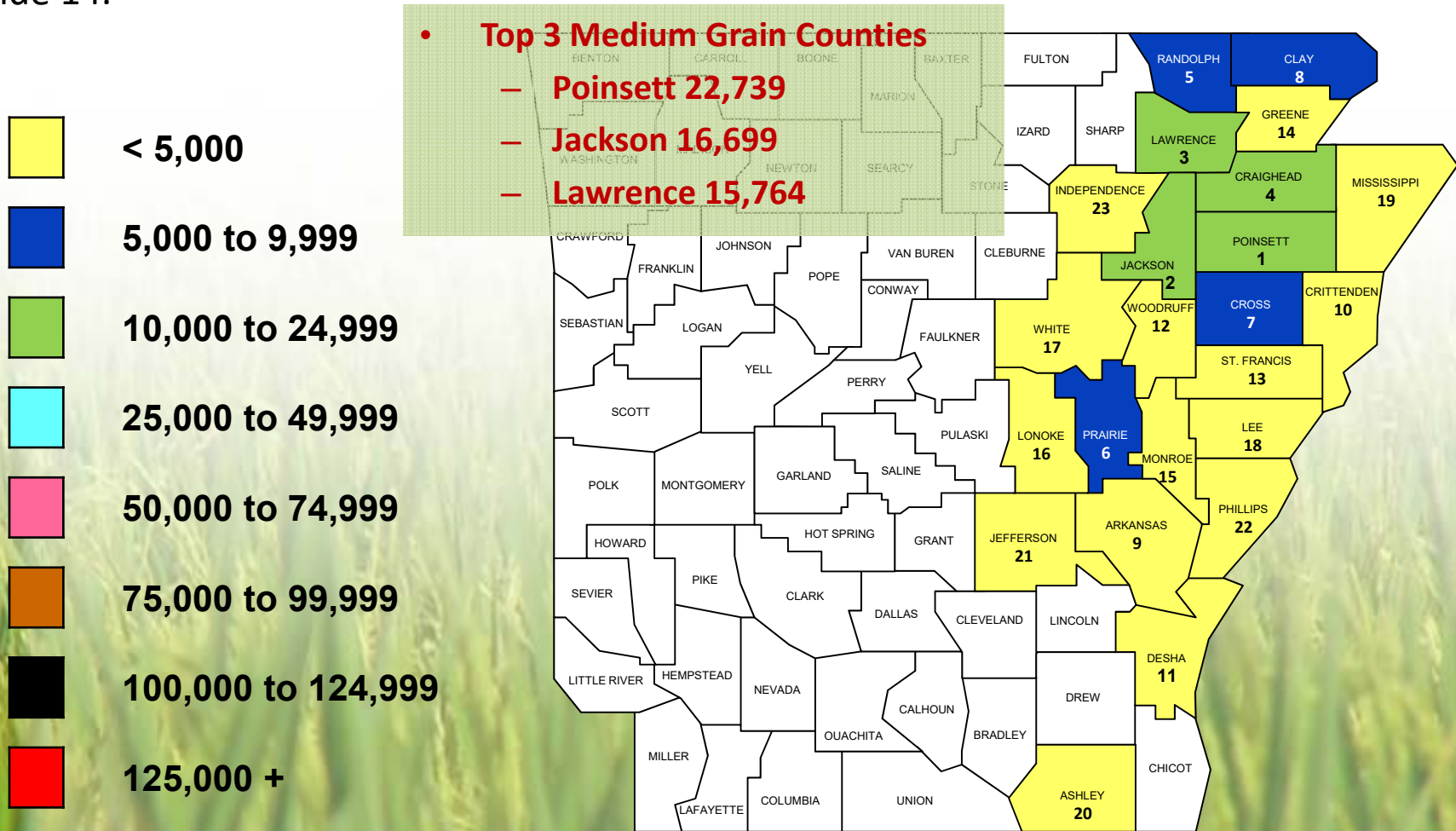
Slide 13.



# Ranking 2016 Arkansas Medium Grain Rice Producing Counties

## Top 3 AR Medium Grain Rice Counties by Harvested Acreage

Slide 14.

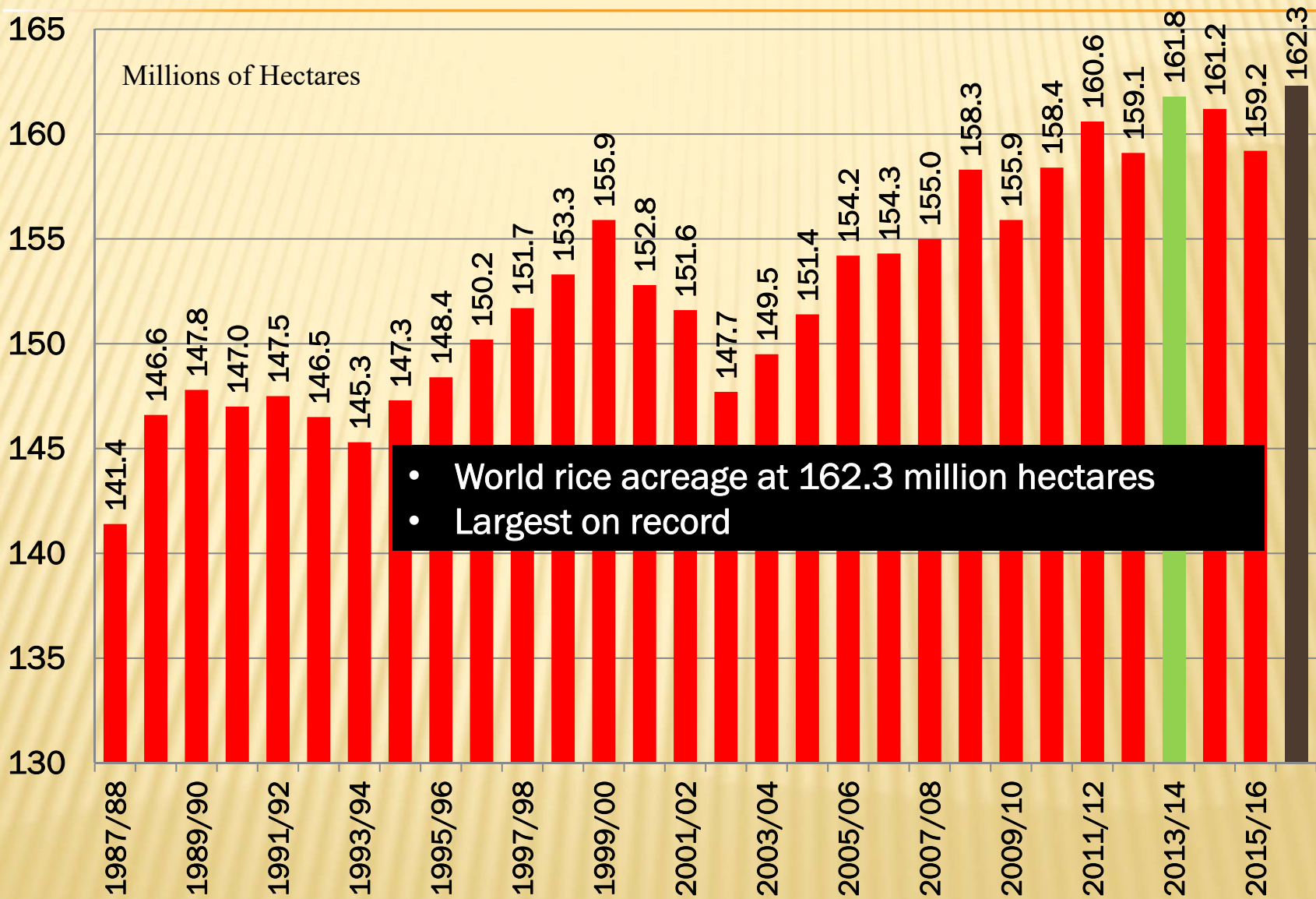


Slide 15.

# **WORLD RICE SUPPLY AND DEMAND ESTIMATES**

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# WORLD RICE AREA HARVESTED 1987/88-2016/17

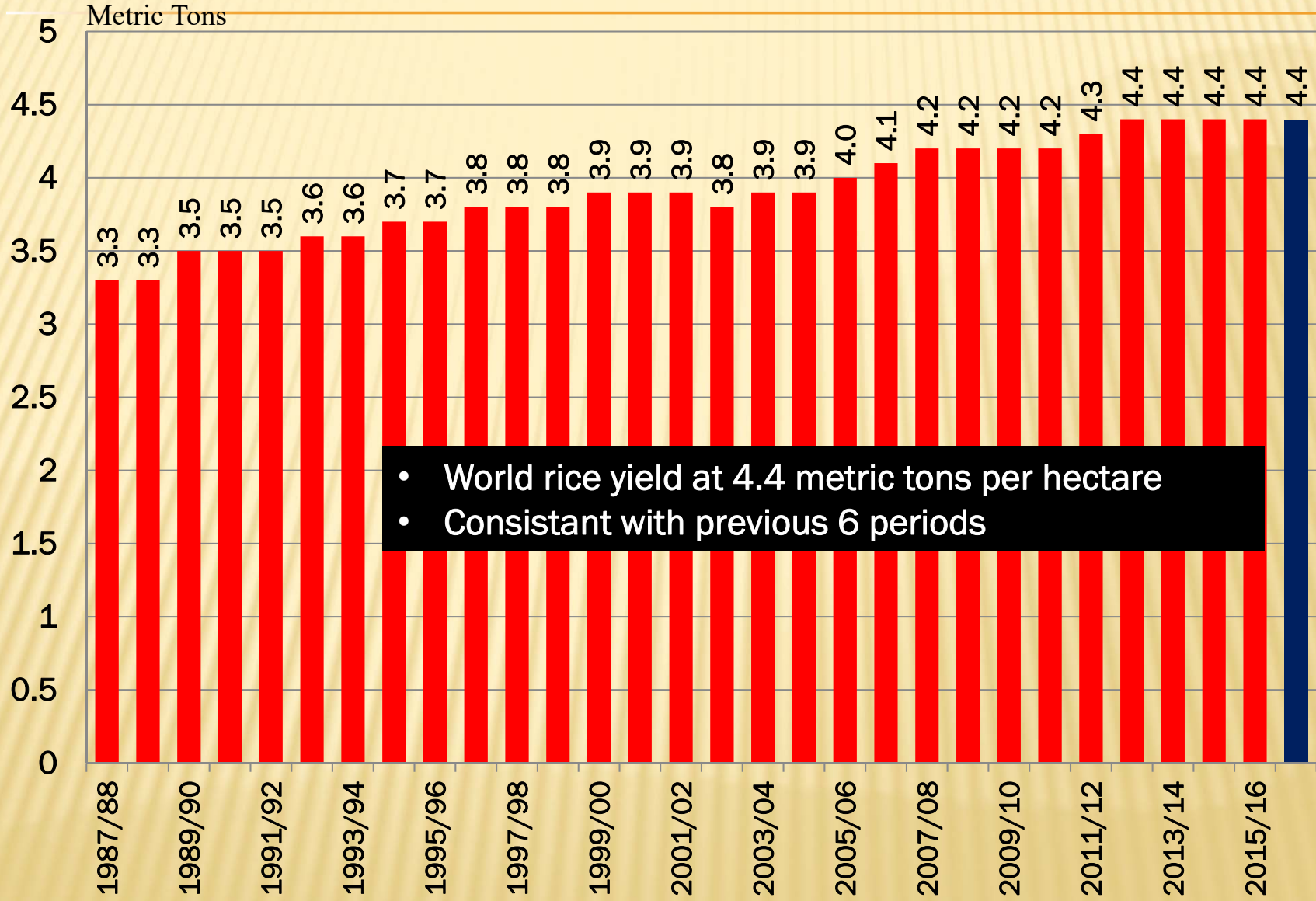


- World rice acreage at 162.3 million hectares
- Largest on record

Source: USDA



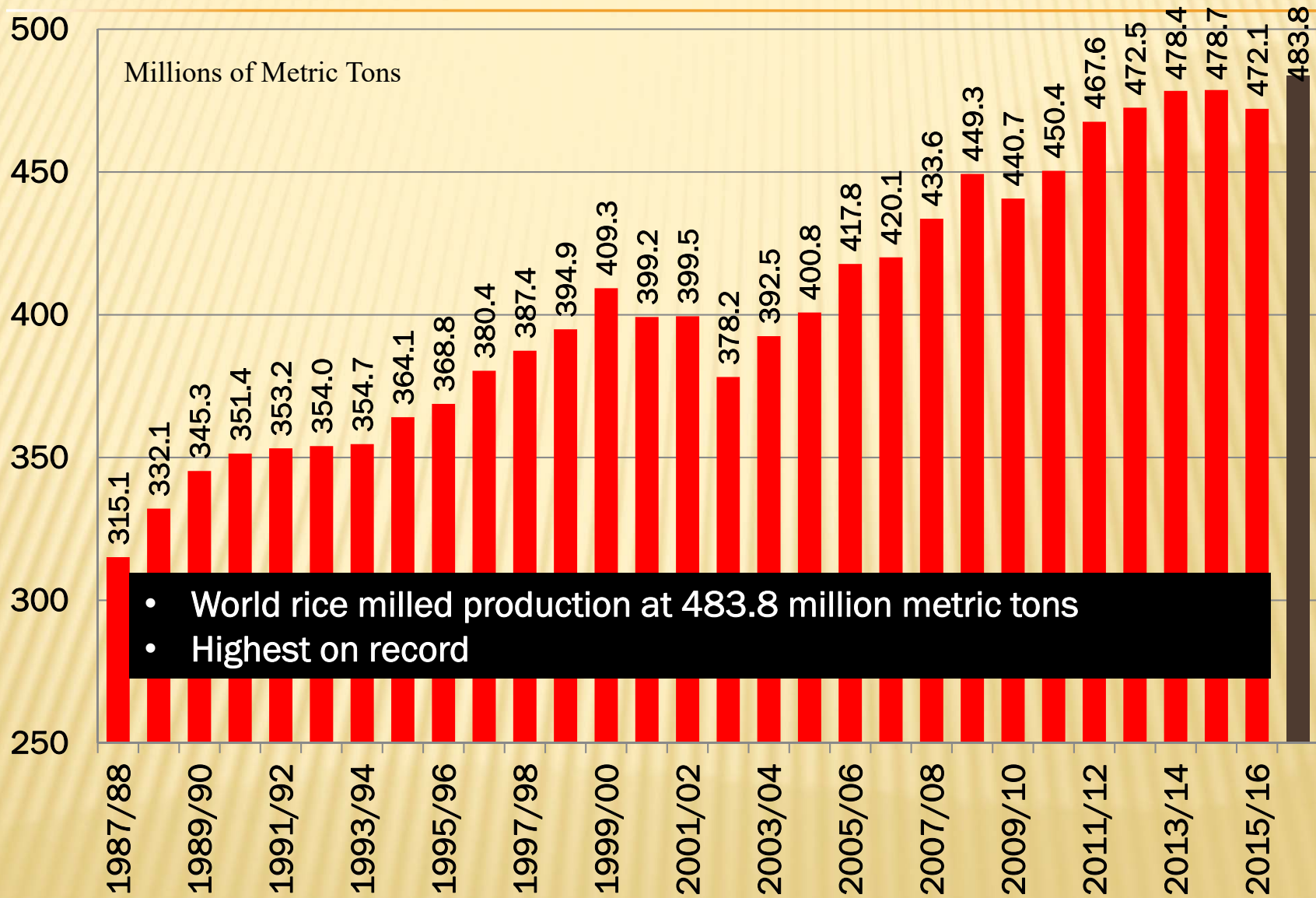
# WORLD RICE YIELD (ROUGH) 1987/88-2016/17



- World rice yield at 4.4 metric tons per hectare
- Consistant with previous 6 periods

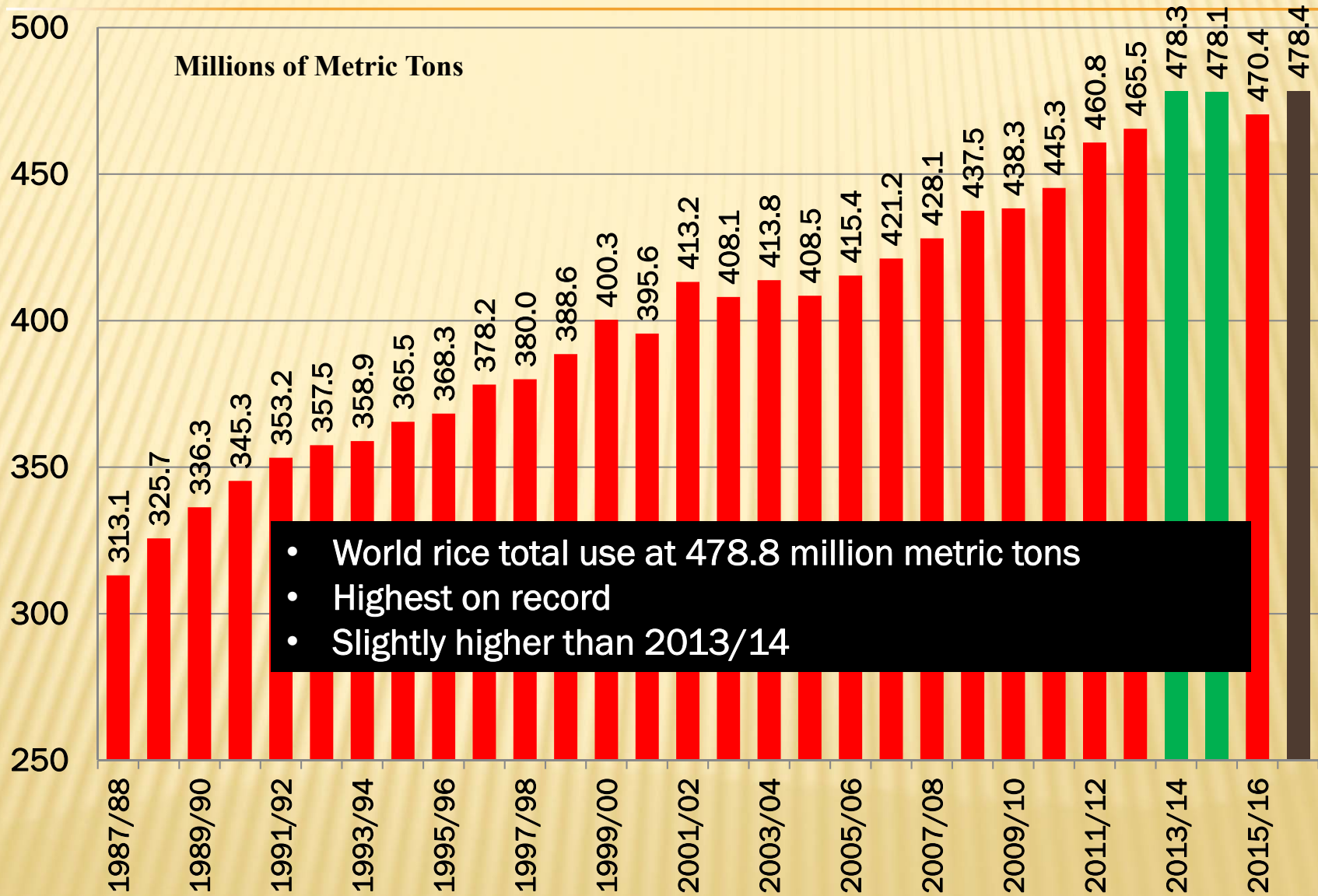
Source: USDA

## WORLD RICE MILLED PRODUCTION 1987/88-2016/17



Source: USDA

# WORLD RICE TOTAL USE 1987/88-2016/17

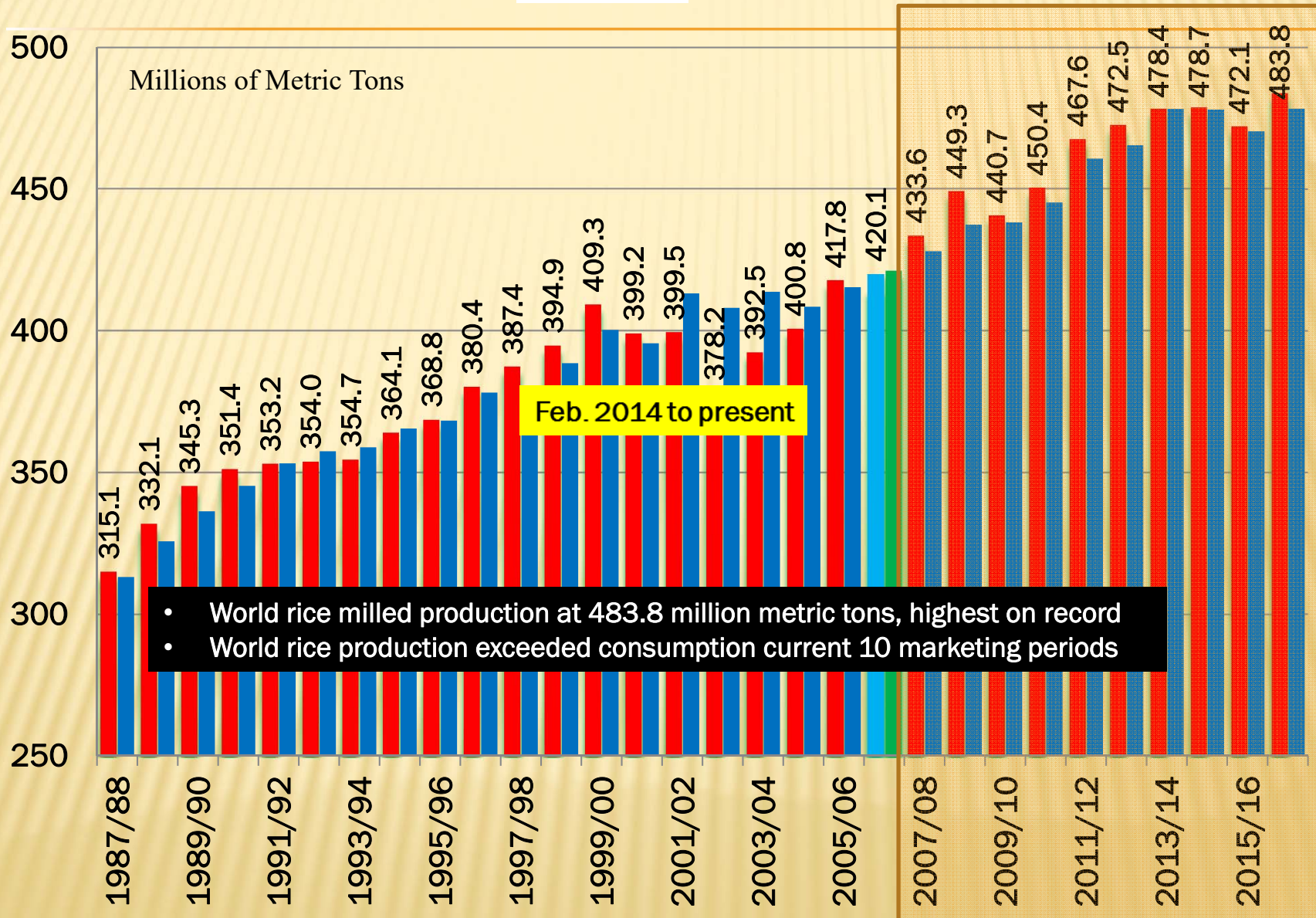


- World rice total use at 478.8 million metric tons
- Highest on record
- Slightly higher than 2013/14

Source: USDA

# WORLD RICE MILLED PRODUCTION & CONSUMPTION 1987/88-2016/17

Slide 20.

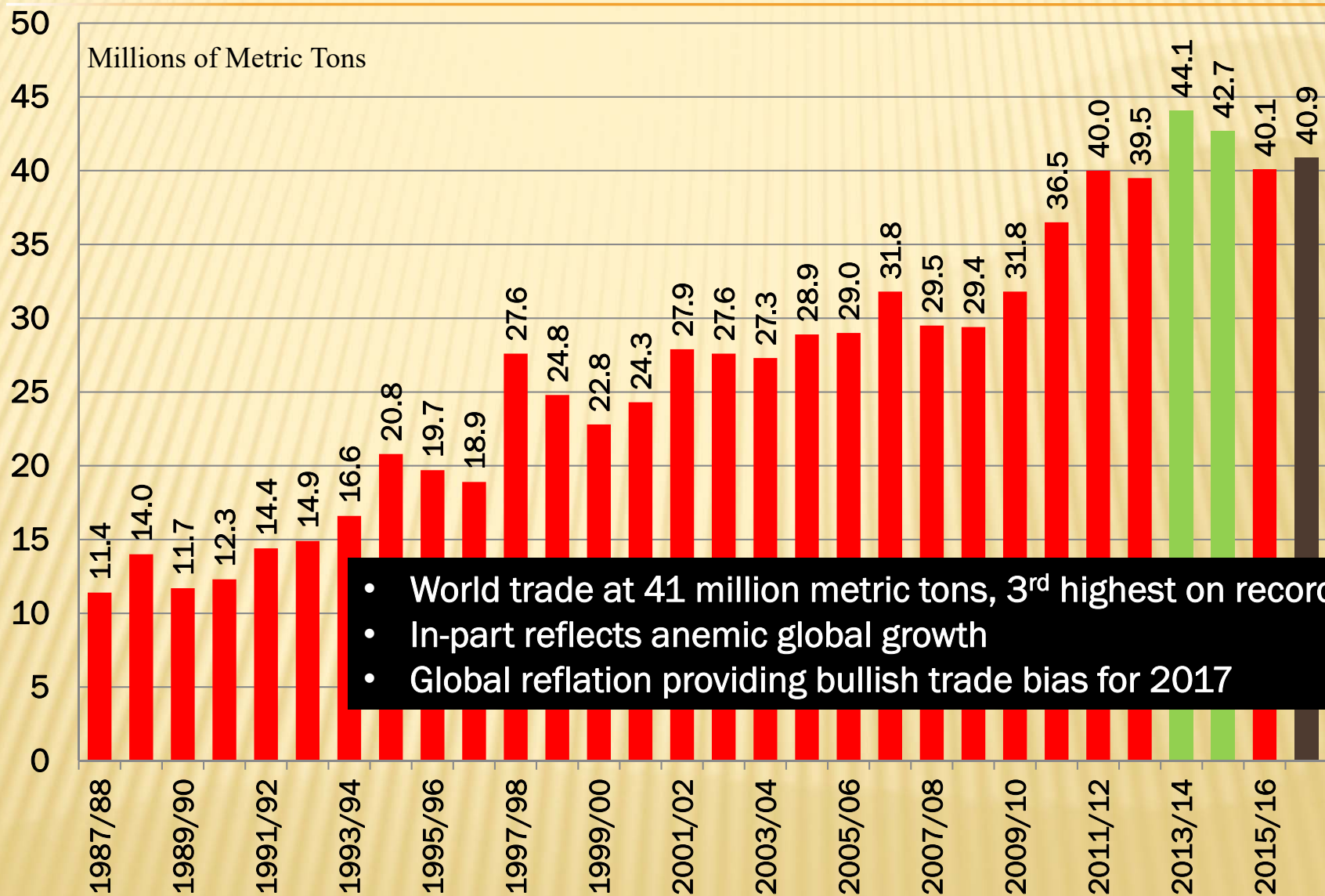


Source: USDA

# WORLD RICE TRADE YEAR EXPORTS CALENDAR

Slide 21.

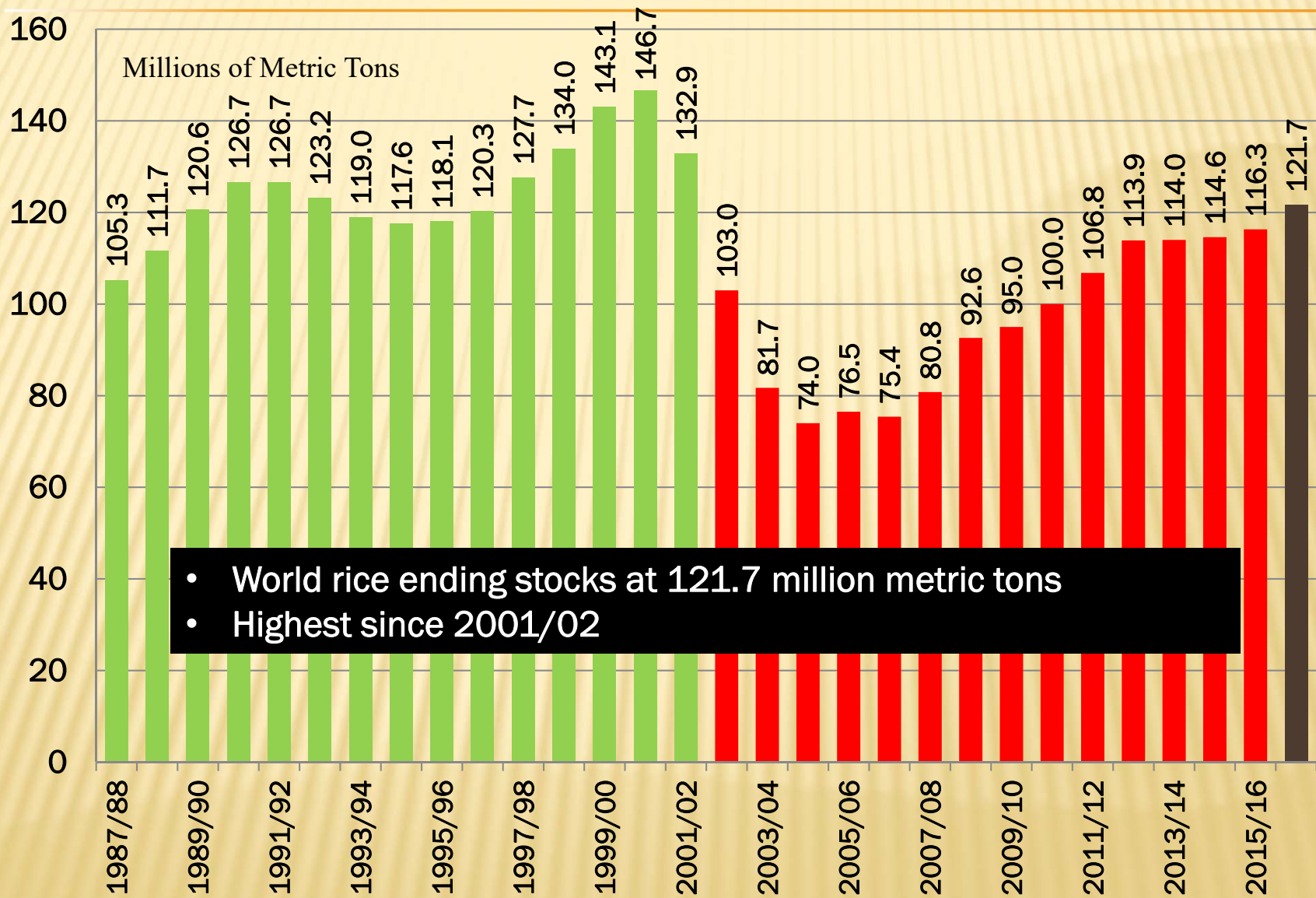
## 1987/88-2016/17



- World trade at 41 million metric tons, 3<sup>rd</sup> highest on record
- In-part reflects anemic global growth
- Global reflation providing bullish trade bias for 2017

Source: USDA

# WORLD RICE ENDING STOCKS 1987/88-2016/17



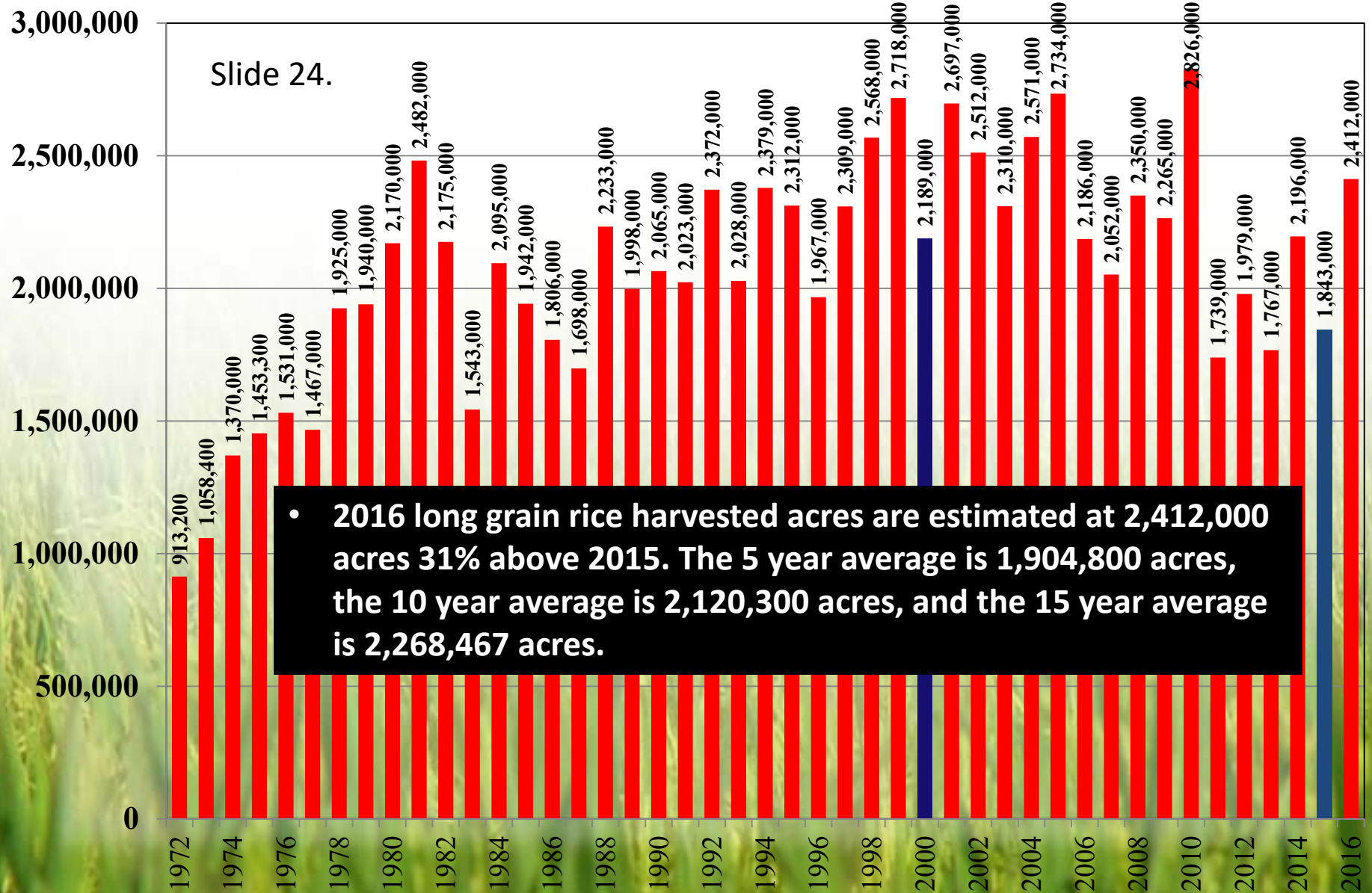
- World rice ending stocks at 121.7 million metric tons
- Highest since 2001/02

Source: USDA

Slide 23.

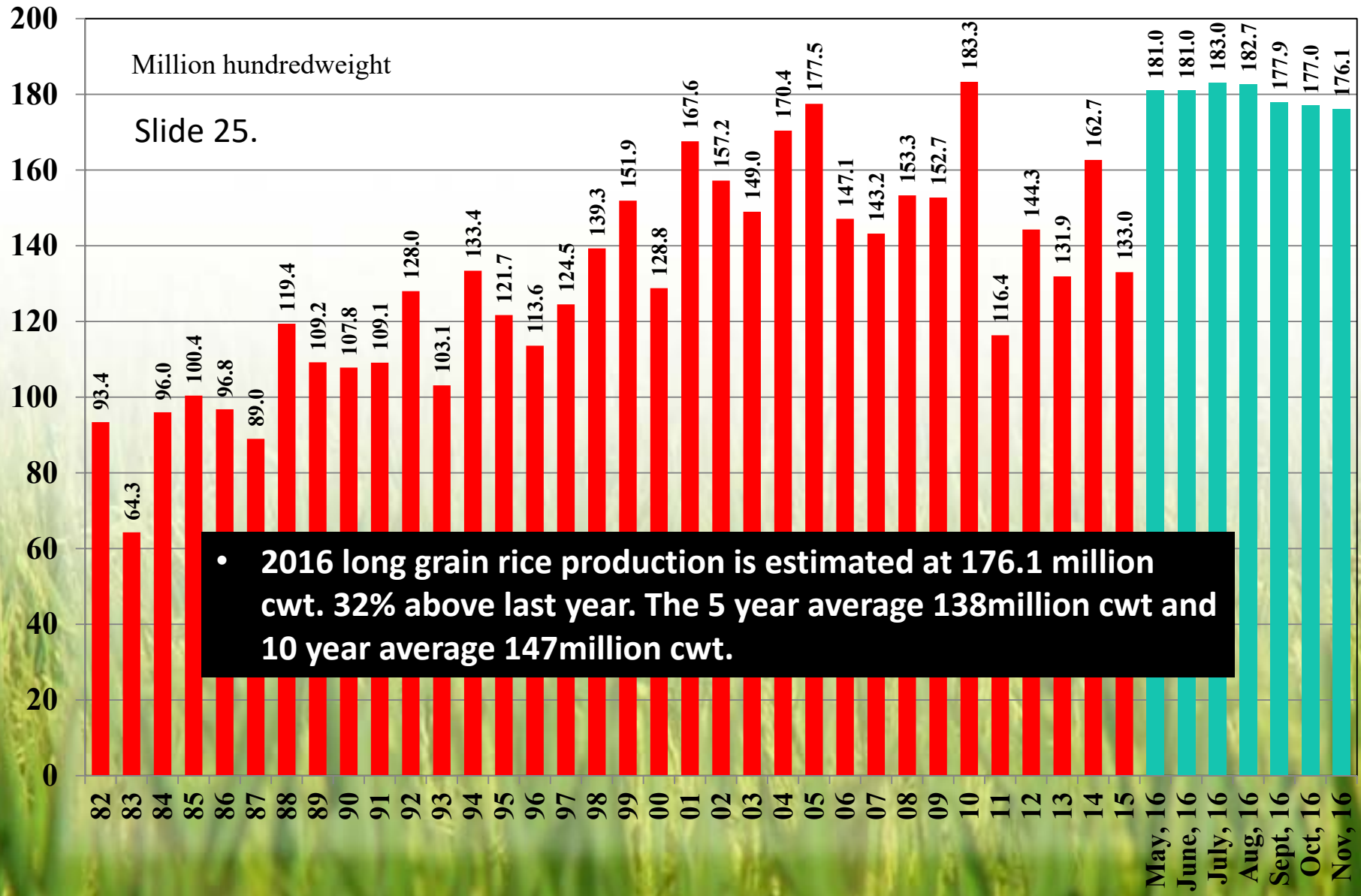
# U.S. Long-Grain Rice Supply and Demand Estimates

# U.S. Long Grain Rice Harvested Acres 1972/73 – 2015/16

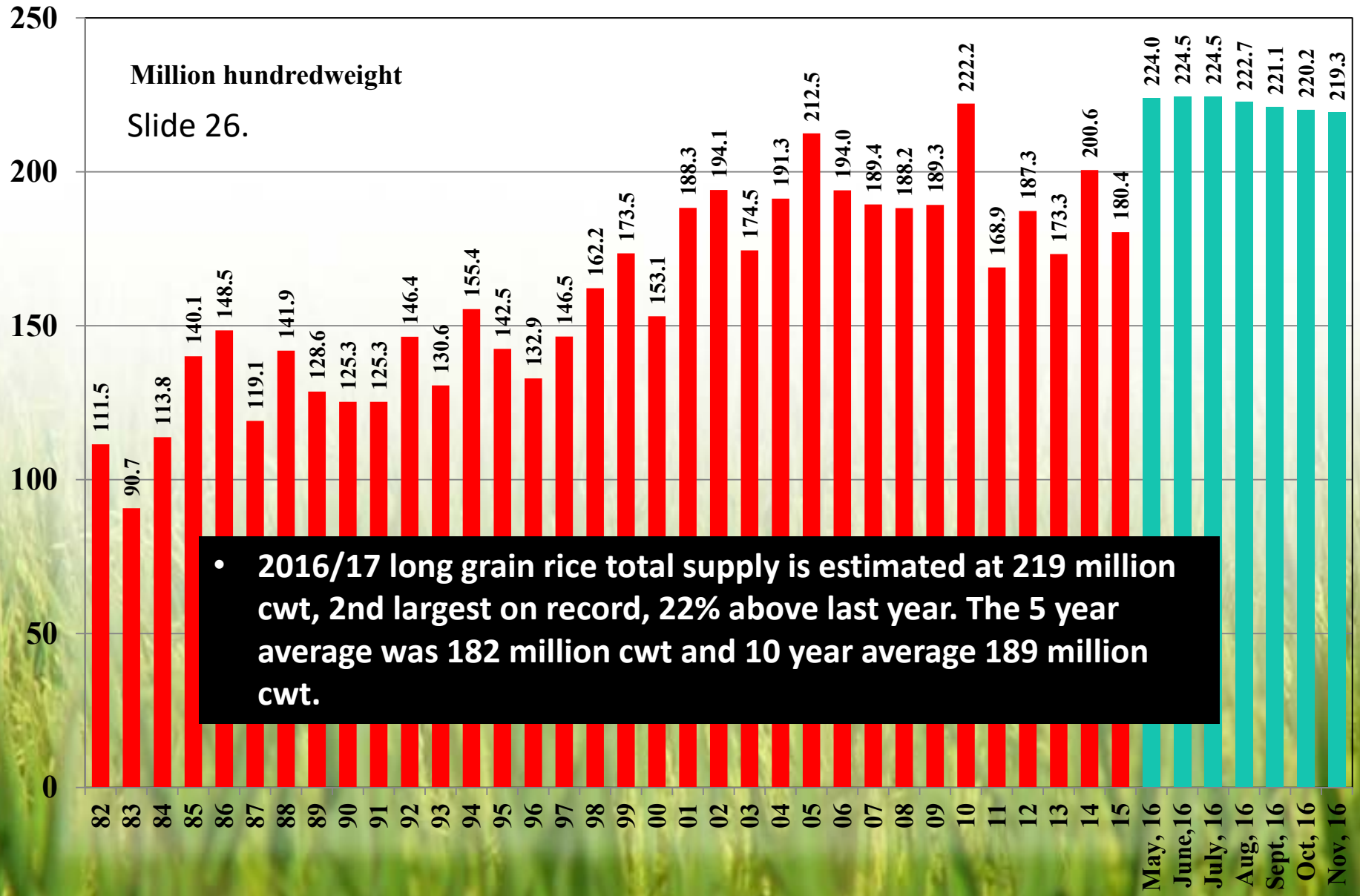




# U.S. Long Grain Rice Production 1982/83 – 2016/17

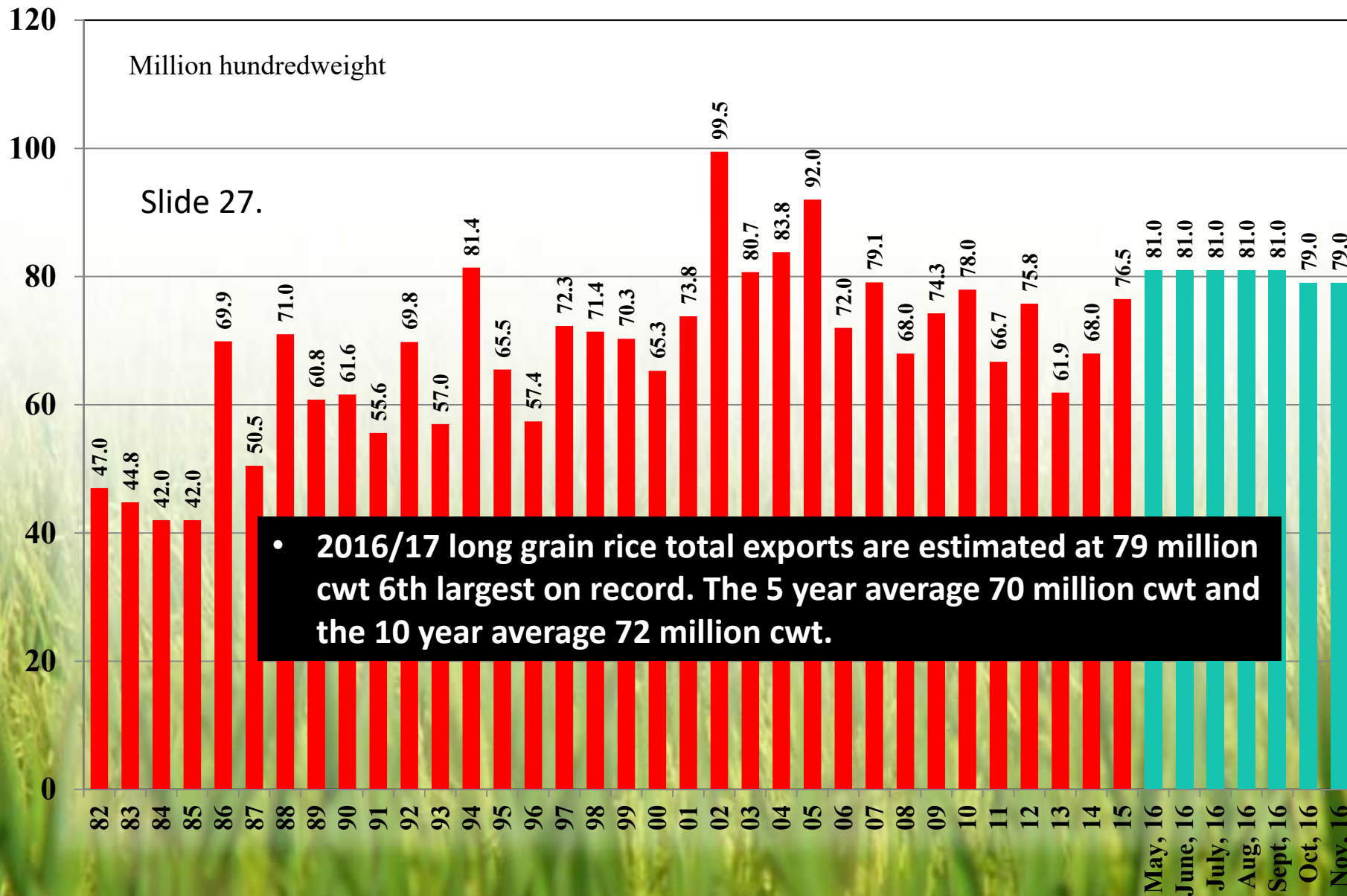


# U.S. Long Grain Rice Total Supply 1982/83 – 2016/17



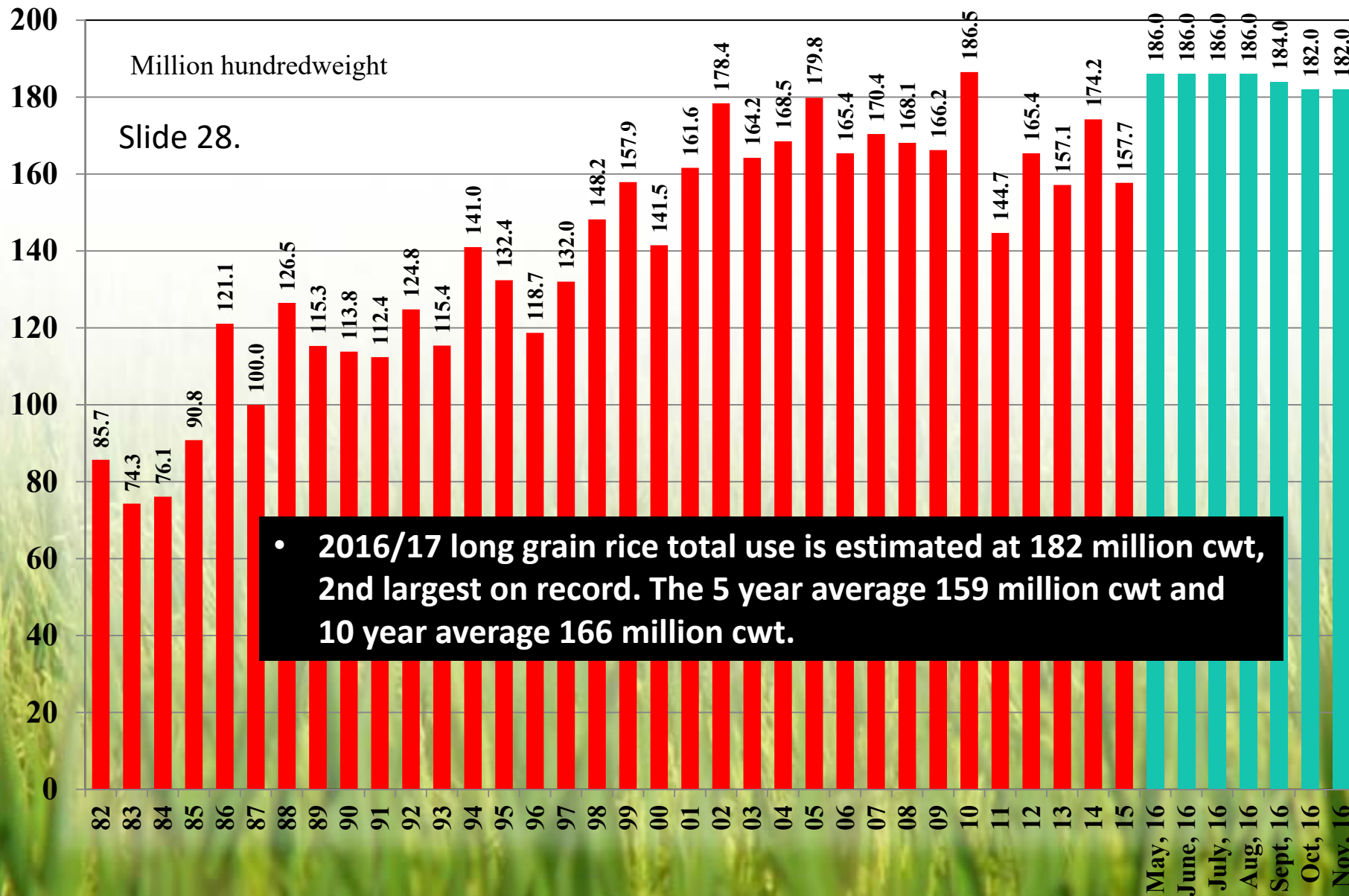
- 2016/17 long grain rice total supply is estimated at 219 million cwt, 2nd largest on record, 22% above last year. The 5 year average was 182 million cwt and 10 year average 189 million cwt.

# U.S. Long Grain Rice Total Exports 1982/83 – 2016/17



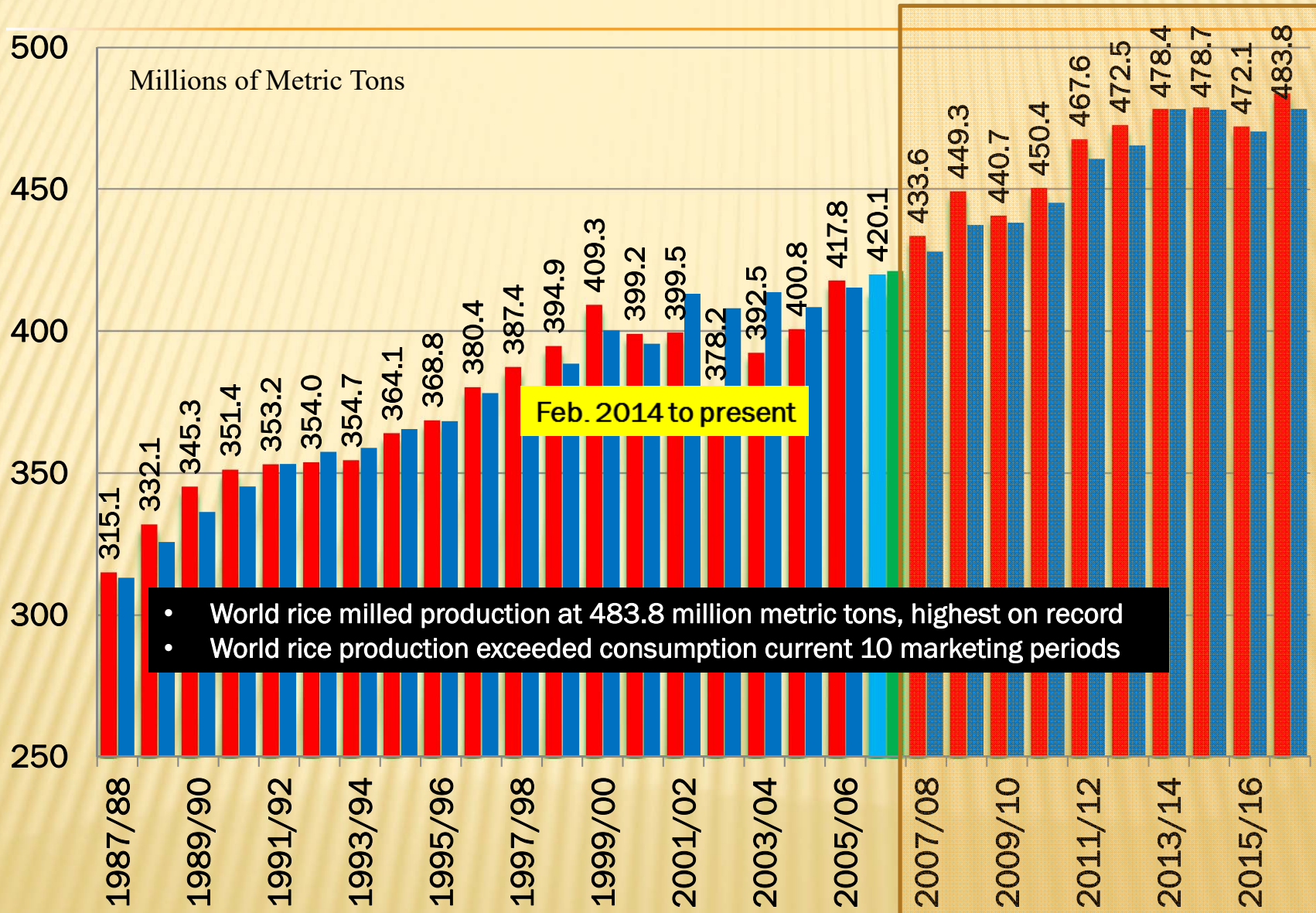
- 2016/17 long grain rice total exports are estimated at 79 million cwt 6th largest on record. The 5 year average 70 million cwt and the 10 year average 72 million cwt.

# U.S. Long Grain Rice Total Use 1982/83 – 2016/17



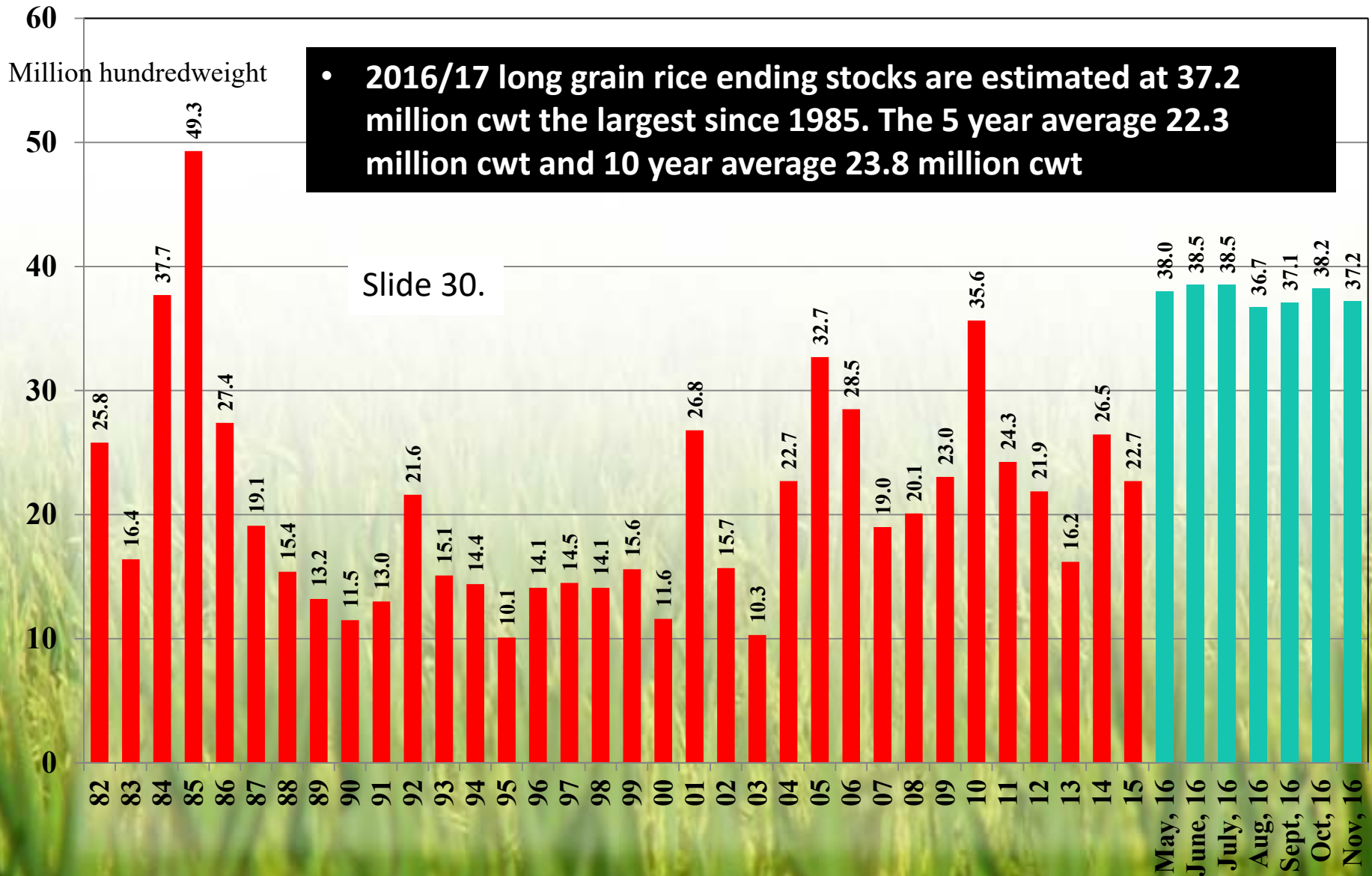
# WORLD RICE MILLED PRODUCTION & CONSUMPTION 1987/88-2016/17

Slide 29.



Source: USDA

# U.S. Long Grain Rice **Ending Stocks** 1982/83 – 2016/17



# The Year Ahead

## Build a Foundation for 2017

### Rice Price and Acreage Outlook

Slide 31.



Slide 32.

# **Macro Issues**

## **Key Driver of Market Activity**



## **Present**

# **Governments and Central Banks**

## **Intervention Strategy**

- **Present policy inadequate to overcome:**
  - **Chronic global slow growth**
  - **Low to negative interest rates**
  - **Building debt**
- **Continuation of current policy**
  - **“At Best” domestic and global deflationary forces remain problematic**
    - **Impact: Chronic price weakness likely for equity, commodity, etc. prices**

Slide 34.

## **“Transitional Reflationary Policy”**

### **Governments and Central Banks Intervention**

- **Global Economic Transition Underway Throughout 2016**
  - **Objective:**
    - **“Reflating” – Domestic and Global Economies**
  - **Catalyst: Elevated levels of Government stimulus and Central Bank intervention**
  - **Bearish bonds, utilities, etc.**
  - **Increasingly bullish many hard assets like stocks, commodities, land, etc.**
  - **Bonds topped**
  - **Equities will topped**
  - **Commodities, land, fine arts, etc. new highs**

Slide 35.

**“Reflation” One Driver  
Lifting  
Global Markets  
And Commodity Prices**

**Strength or weakness in the following markets is  
positive for future rice, cotton and grain prices**

# 10 Year US Treasury Yield, Daily Chart, May 2016 to present - Bearish Bonds Yields have risen from the July low 1.34 to 2.45

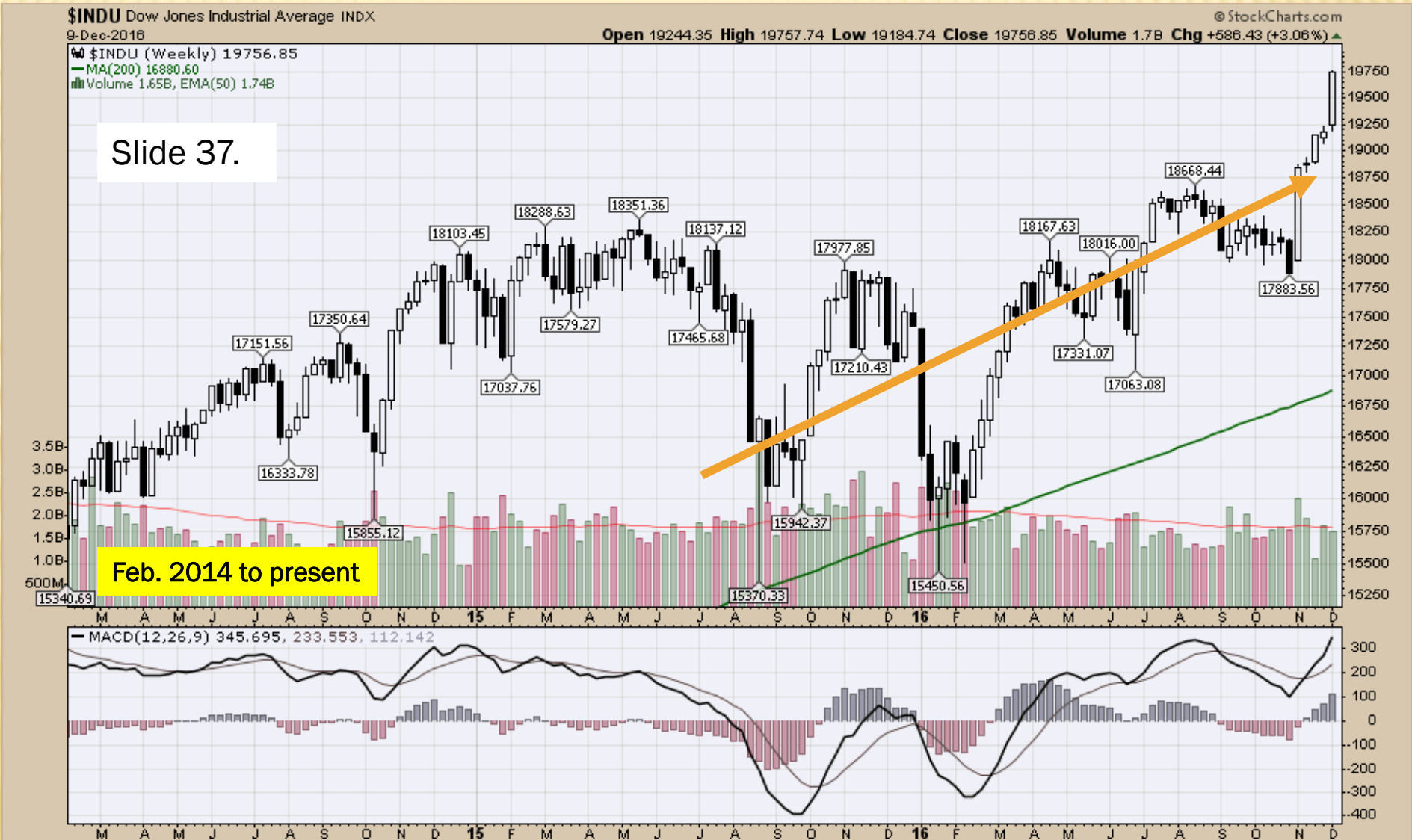
Near term low in place

Slide 36.



# Dow Jones Industrial Average, Weekly Chart, February 2014 to present

## 2017 expect more price strength than weakness



# EFA Global Equities – excluding U.S. and Canada, Weekly Chart Feb. 2014 to present Slowly building economic momentum

Slide 38.



# EEM Emerging Markets, Weekly Chart, Feb. 2014 to present

Slide 39.

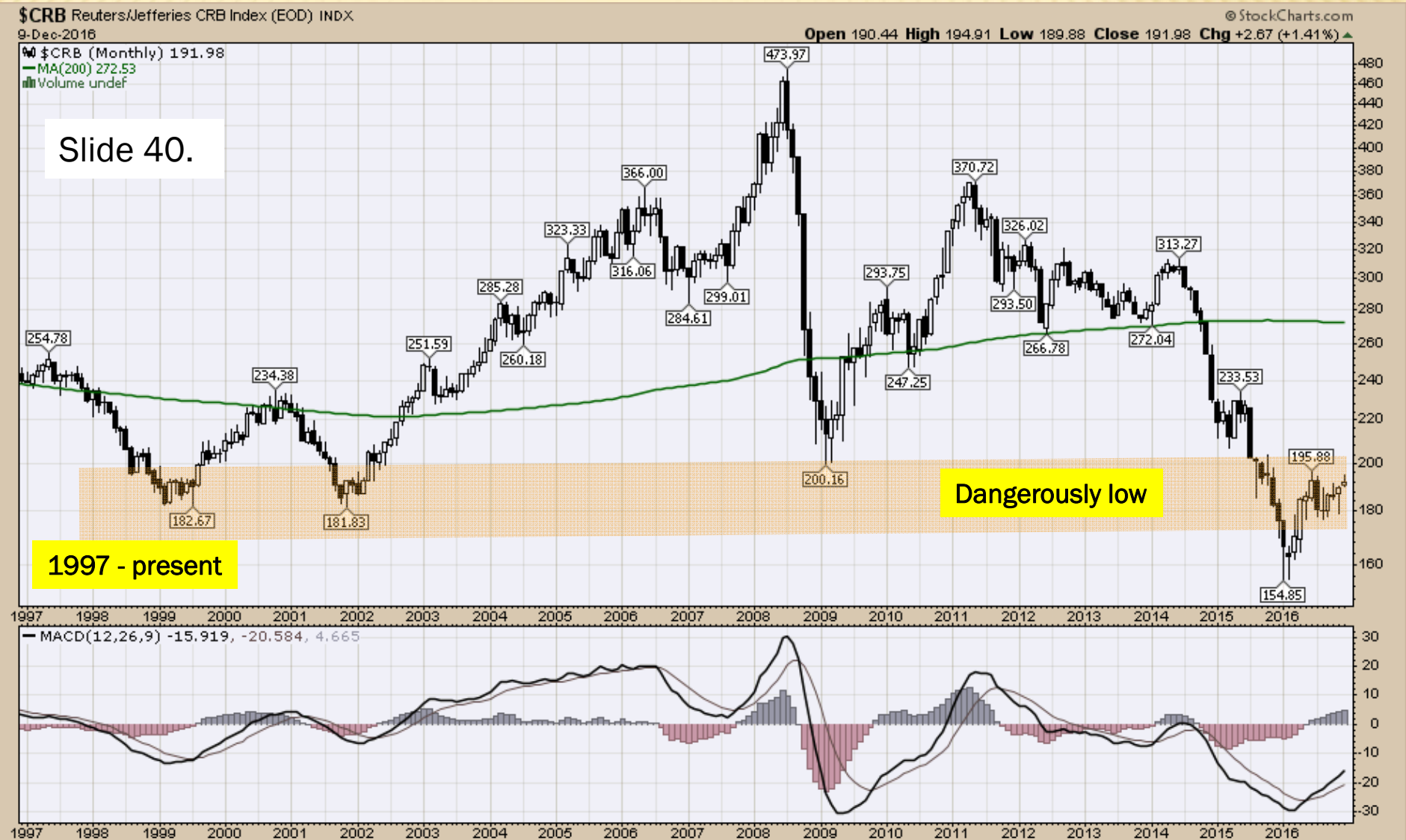
More strength than weakness since Jan. 2016

Building momentum critically important for healthy commodity prices



# \$CRB Index, Commodity Index, Weekly Chart, 1997 to present

Chronic slow economic growth & over production produced anemic commodity prices  
Globally – Aggressive Government and Central Bank intervention required to  
elevate economic activity and commodity prices in the aggregate





# \$WTIC Light Crude Oil – Continuous Weekly Contract, Feb. 2014 to present

## Light crude above 52.50 can move significantly higher

Slide 41.



# \$USD US Dollar Index - Cash Settle, Monthly Chart, 1997 to present

- Without major global 2017 reflation efforts
- Dollar could surprise to the upside

Slide 42.



# \$SOYB – Soybeans, Continuous Contract, 2014 to present – Geopolitical uncertainty a factor contributing to lift in some commodity prices

Slide 43.



# \$Corn - Corn - Continuous Contract, Weekly Chart, 2014 to present

Geopolitical uncertainty a factor contributing to some commodity price support

Slide 44.



# \$Wheat - Wheat - Continuous Contract, 2014 to present

Slide 45.



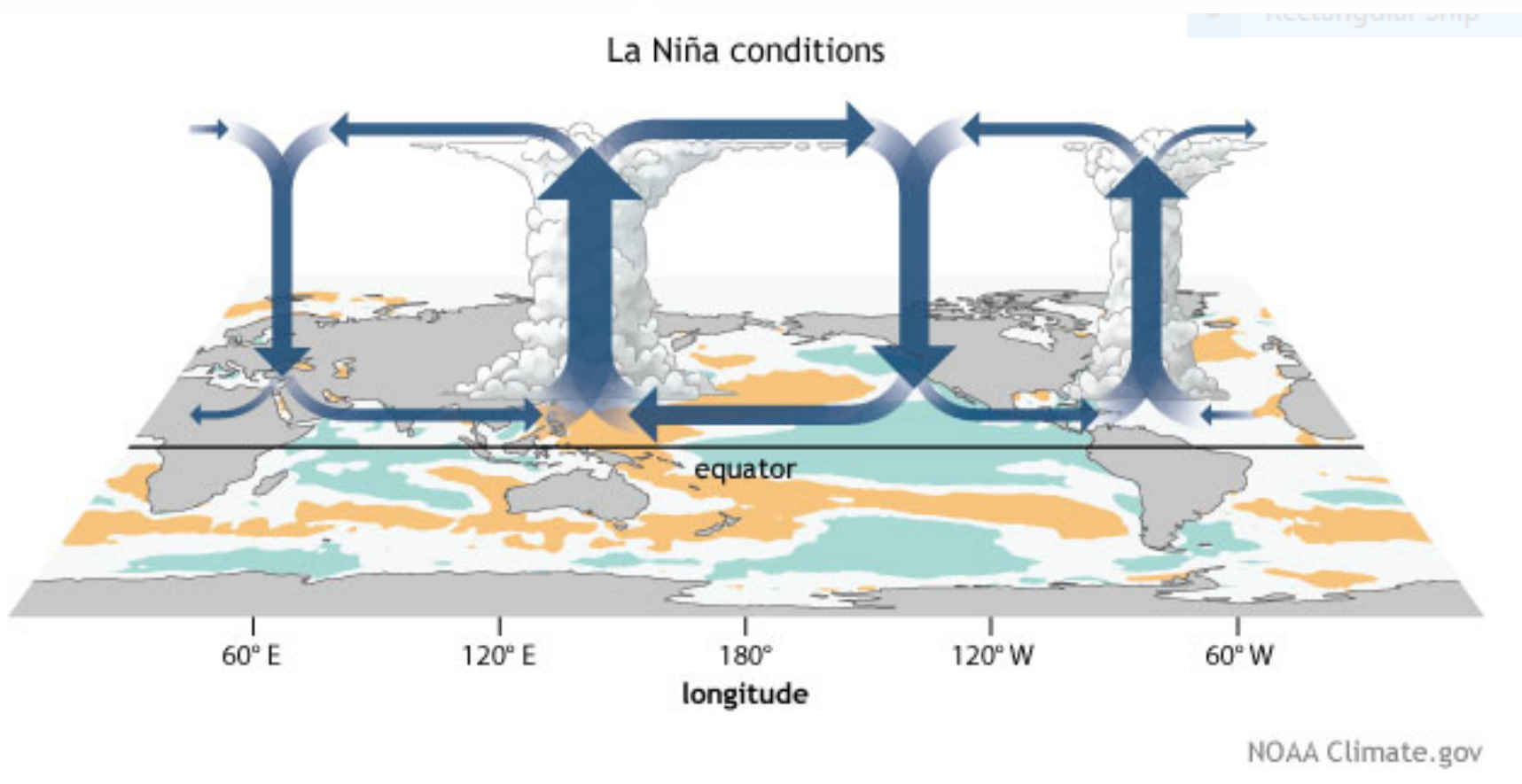
Rough Rice - Jan 17 (ZRF17), Monthly, 2006 to present  
Global slow growth have countries — food security conscious  
Contributing to excess production and price weakness

Slide 46.



# Unknowns: In 2017 What Are the Global Impacts of La Nina / Other Possible Weather Anomaly?

Slide 47.



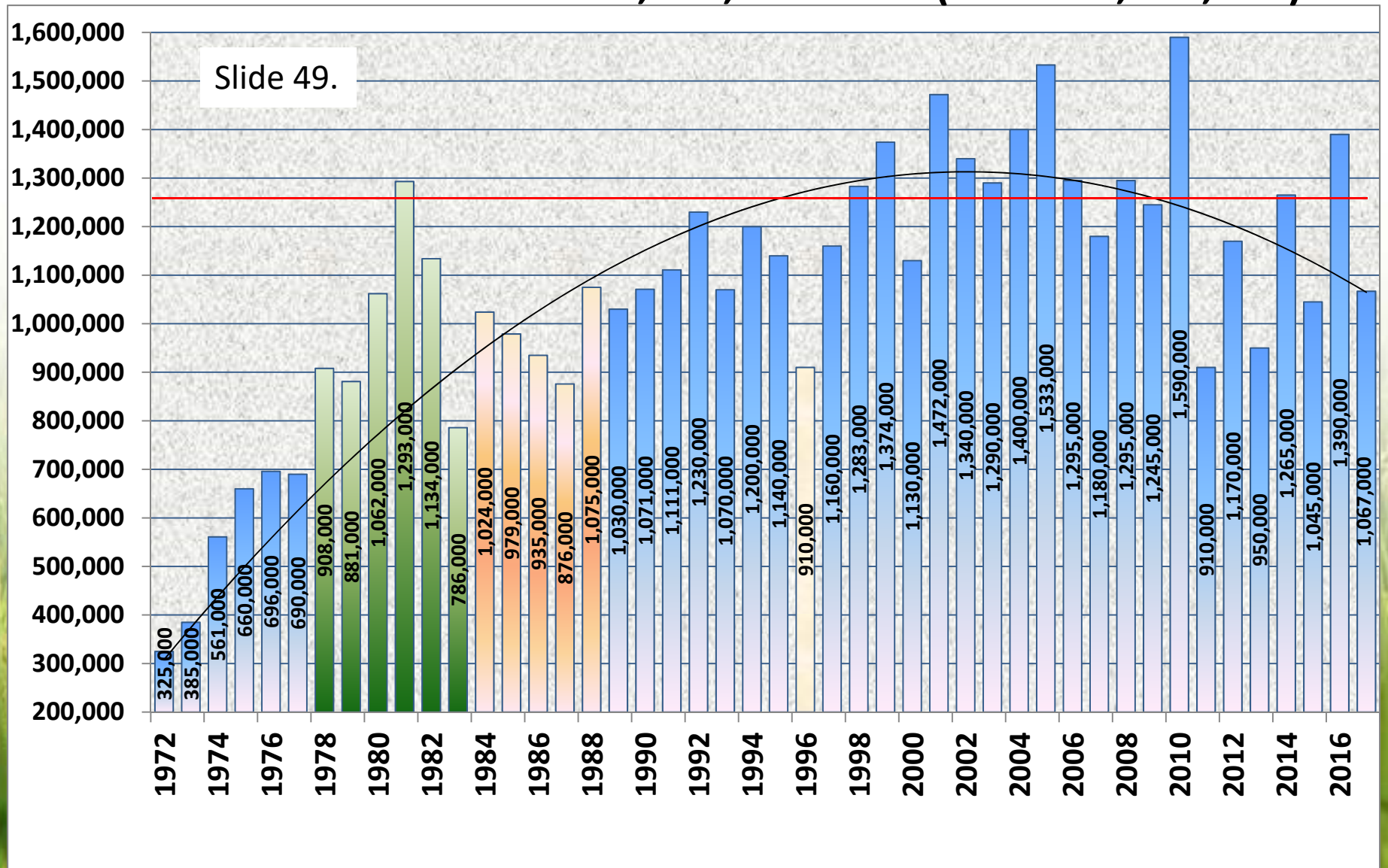
Slide 48.

# 2017 Arkansas Long Grain Rice Harvested Acreage Expectation



# 2017 Arkansas Long Grain Rice Harvested Acreage Expectation

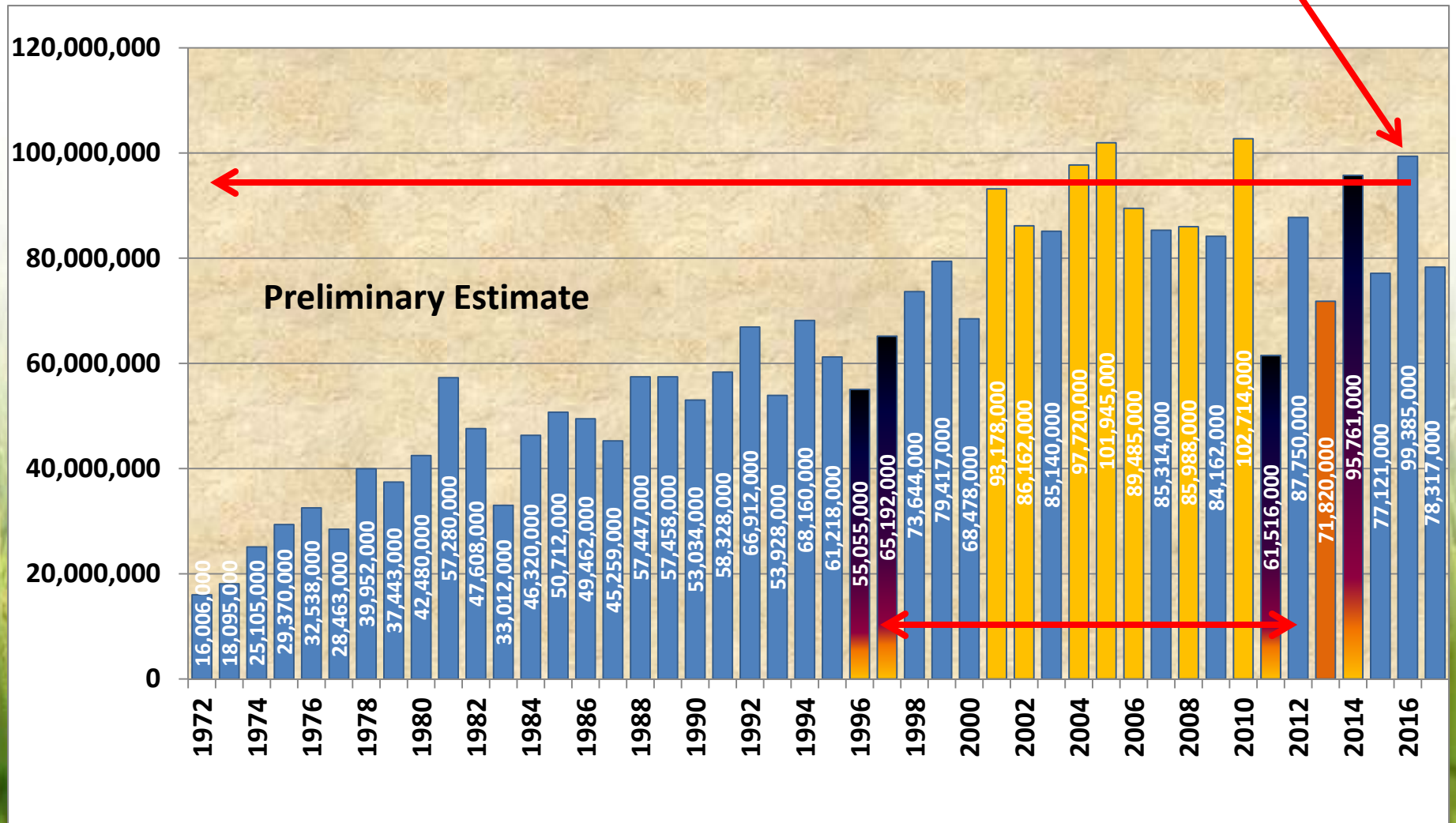
## Given Previous Discussion 1,067,000 acres (2016 = 1,390,000)



# Arkansas Long Grain Rice Production, 1972 to 2016

Slide 50.

**2017's Preliminary Estimate of 78 million cwt.**



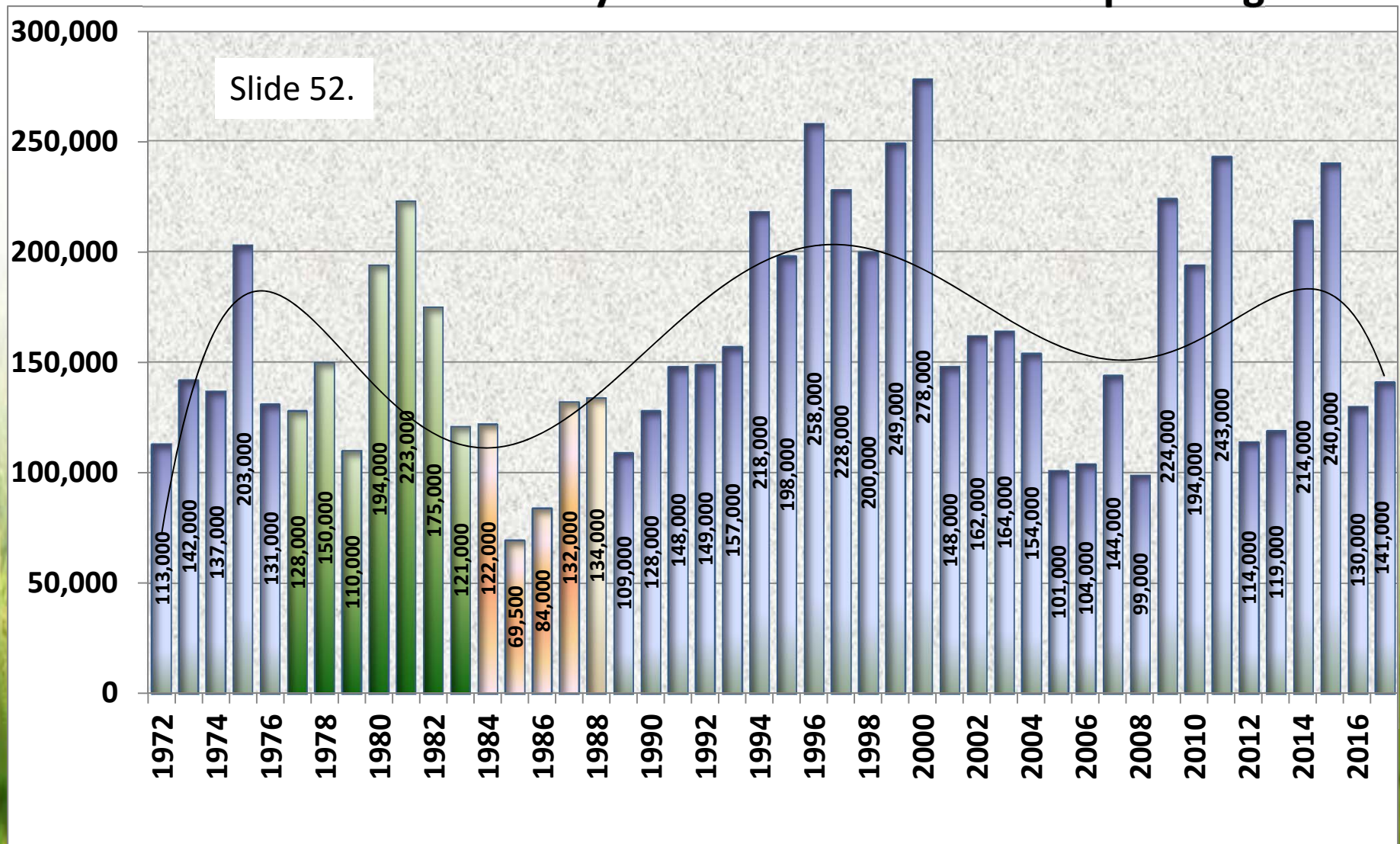
Slide 51.

# 2017 Arkansas Medium Grain Rice Harvested Acreage Expectation

# 2017 Arkansas Medium Grain Rice Harvested Acreage

## Expectation 141,000 Acres

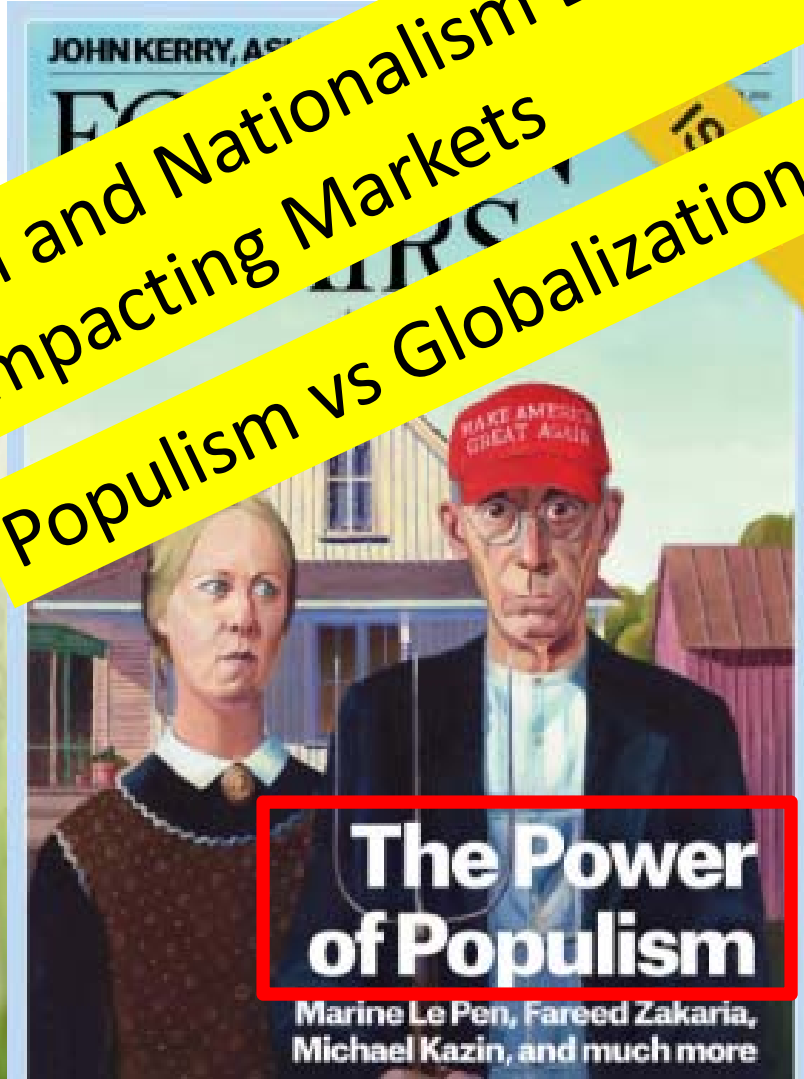
### Producers should study demand for MG before planting



Slide 53.

# Concluding Thoughts

Protectionism and Nationalism Emerging  
Impacting Markets  
Populism vs Globalization



# Governments and Central Banks Positioning

Slide 54.

- Global Economic Transition Underway in 2016 and will accelerate in 2017
  - **Objective:**
  - **“Reflating” – Domestic and Global Economies**
  - **Growth objectives will be achieved, cost is a secondary consideration.** —

# **Governments and Central Bank's Positioning**

Slide 55.

- **Today's Market Landscape is different from yesterday's**
- **A business friendly environment is emerging with lower taxes, deregulation, increased infrastructure and defense spending.**
- **Near term moving from falling interest rates to higher interest rates**
- **From a stable dollar to a higher dollar**
- **From depressed oil prices to higher oil prices**
- **New records will be set in the equities market**

# **Governments and Central Bank's Positioning**

- **Investment and marketing strategies**
  - **Shifting from bonds to equities**
- **From equities to commodities, land, fine arts, etc.**
- **Underestimating geopolitical risks will have consequences**
- **Federal Reserve will raise rates in December 2016 and 2 to 4 times in 2017** —

Slide 56.



Slide 57.

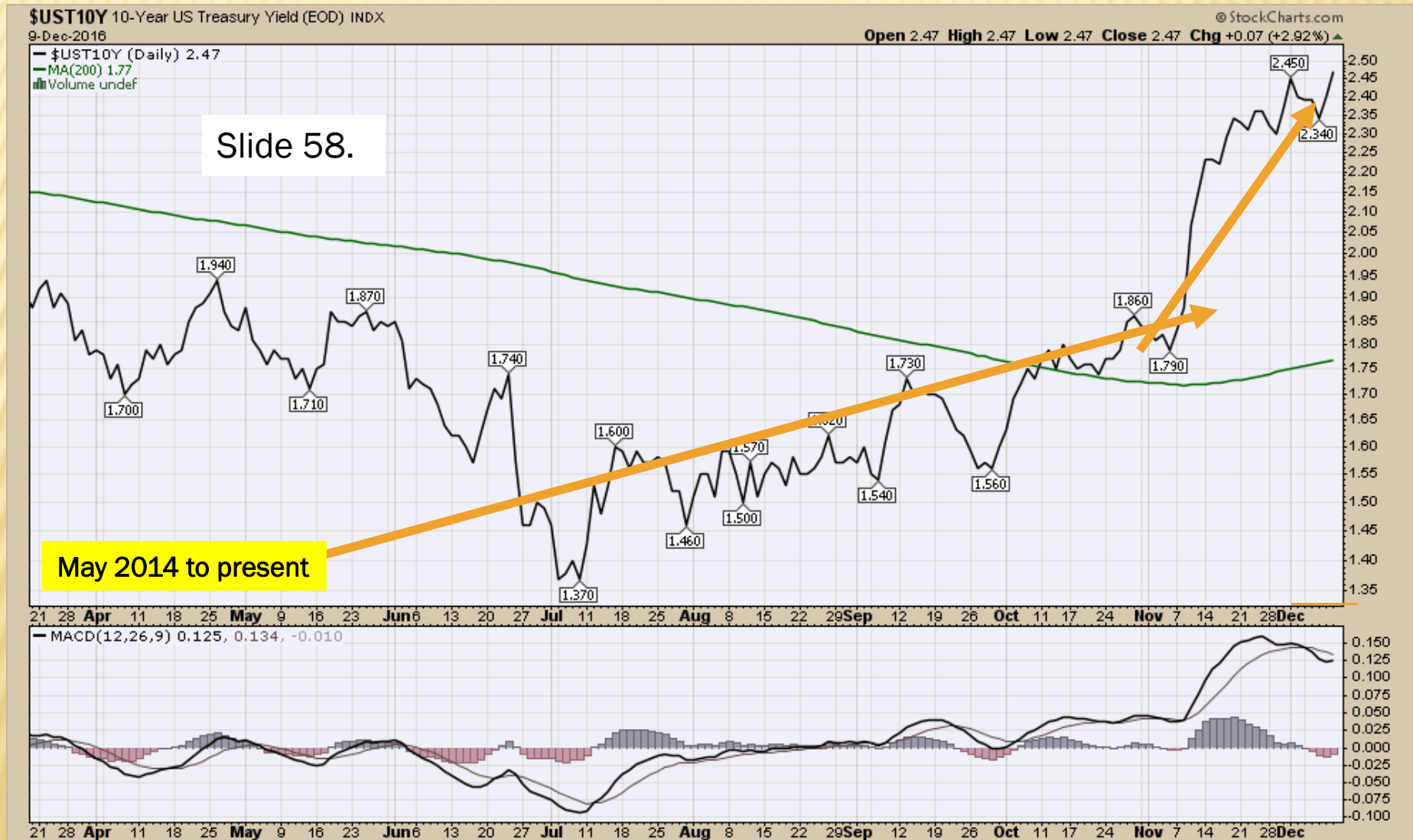
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# **WILDCARD CONSIDERATIONS**

# 10 Year US Treasury Yield, May 2016 to present

Expectation is interest rates remain supportive of economic activity

An accelerated move to the upside would be short lived but highly disruptive



**\$WTIC Light Crude Oil – Continuous Contract, Feb. 2014 to present**  
**Oil will breakout to possibly 60-plus area – Trading range likely 40 to 60**  
**Oil price shock would be highly disruptive to global economic recovery**



# \$USD US Dollar Index - Cash Settle, Monthly 1997 to present

- Expect a reasonably managed dollar in 2017
- Dollar could surprise to the upside



Slide 61.

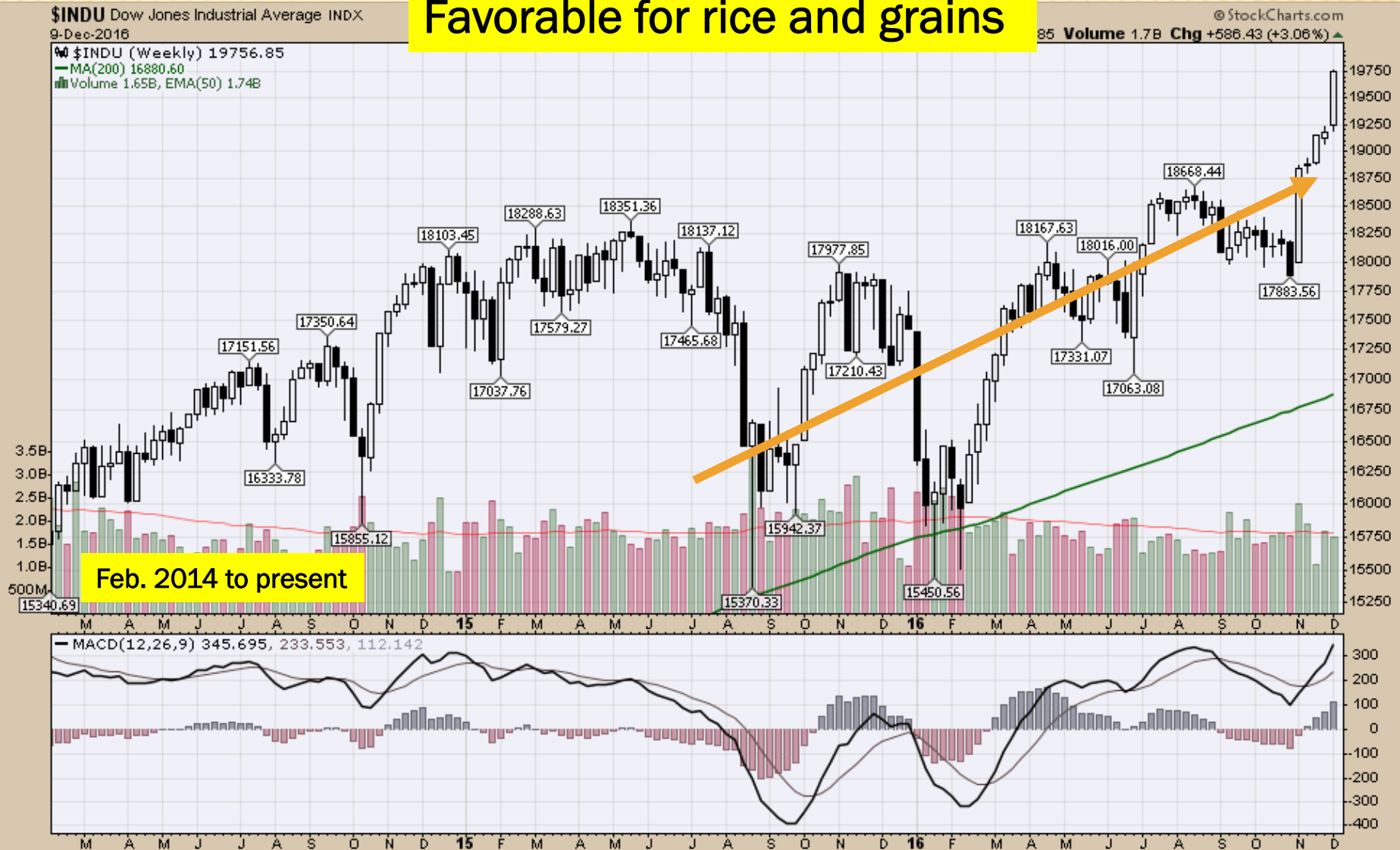
# President-Elect Donald Trump Markets are moving plus or minus on a “TWEET”



# Dow Jones Industrial Average, February 2014 to present

Slide 62.

**U.S. equities price strength  
Favorable for rice and grains**



# EFA Global Equities – excluding U.S. and Canada, Feb. 2014 to present

Slide 63.

**Global Equities excluding US and Canada  
Favorable for rice and grains**



# EEM Emerging Markets, Weekly, Feb. 2014 to present

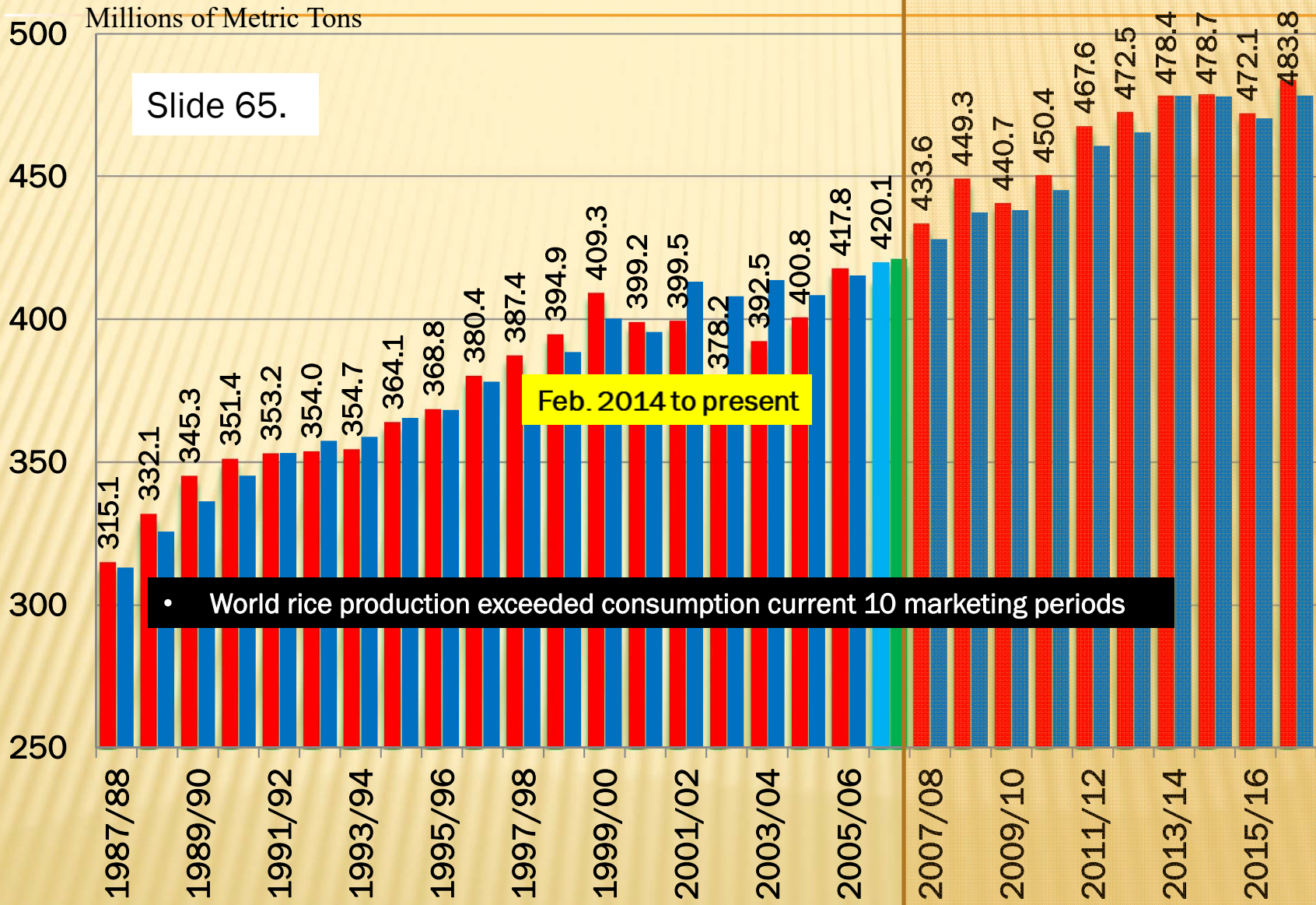
Slide 64.

Emerging Market's price strength  
Favorable for rice and grains





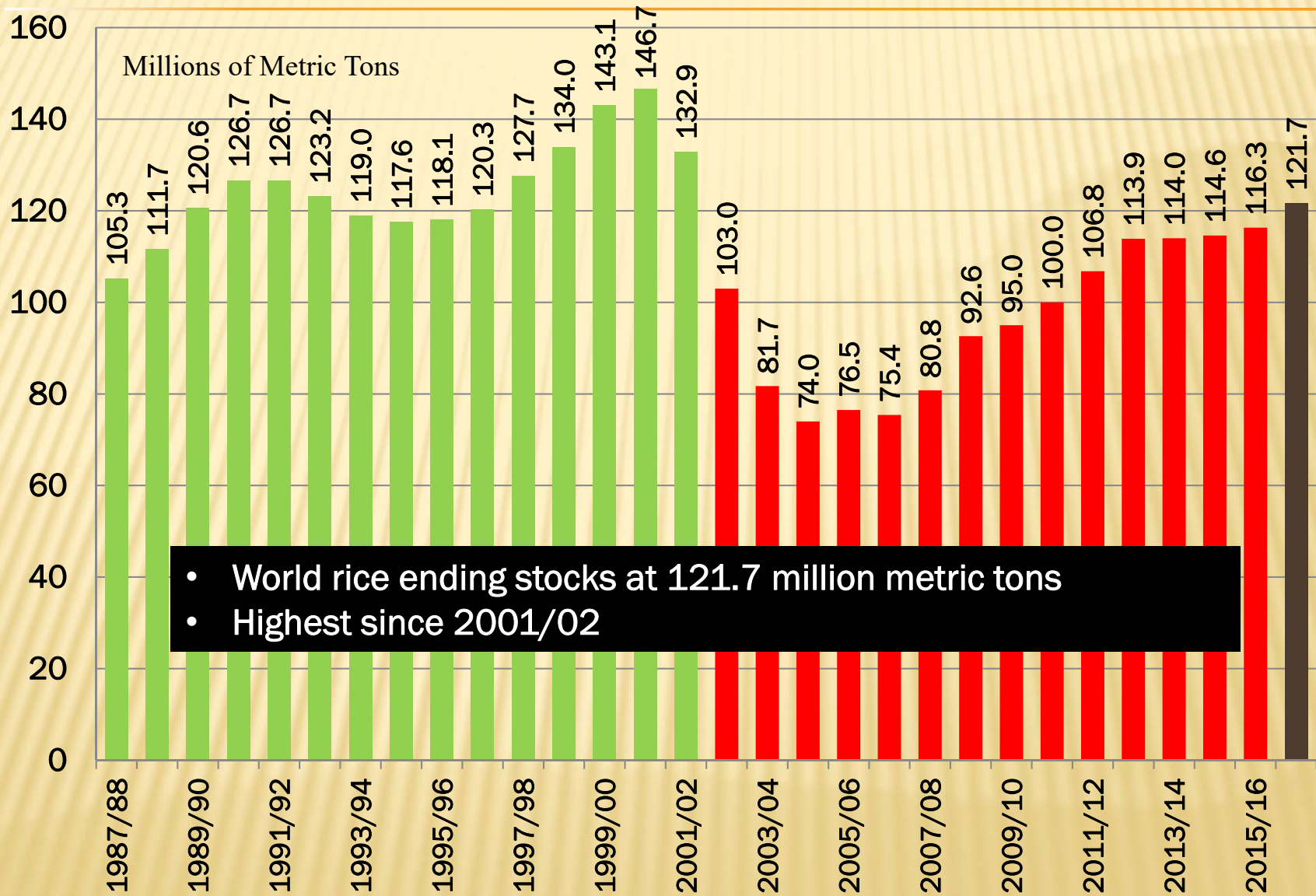
# WORLD RICE MILLED PRODUCTION & CONSUMPTION 1987/88-2016/17



Source: USDA

# WORLD RICE ENDING STOCKS 1987/88-2016/17

Slide 66.



- World rice ending stocks at 121.7 million metric tons
- Highest since 2001/02

Source: USDA

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# 2017 Arkansas

## Per Unit Costs

### Rice, Soybeans and Corn

# Summary of Revenue and Expenses per Acre, Surface Irrigation, 2017

Per Unit Costs	Receipts	Rice		
		Corn	Soybean	(Conv.)
Yield (cotton-lb, peanut-ton, other-bu)		210	60	170
<b>Crop Revenue</b>		<b>551.25</b>	<b>450.00</b>	<b>605.63</b>
<b>Net Operating Expenses</b>		<b>519.94</b>	<b>326.57</b>	<b>495.99</b>
Fixed Costs		84.80	73.52	94.07
<b>Total Specified Expenses</b>		<b>604.74</b>	<b>400.09</b>	<b>590.06</b>
Per Unit Cost Excl. Land, Mgt., Overhead		3.35	7.94	4.11
Per Unit Cost Excluding, Mgt., Overhead		3.75	9.17	4.66

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Cost Estimates provided by Professor Archie Flanders and Breana Watkins, Program Associate - Economics

<sup>1</sup>Gin rebate is set equal to post-harvest expenses.

<sup>2</sup>Cottonseed value (gin rebate) deducted from post-harvest expenses.

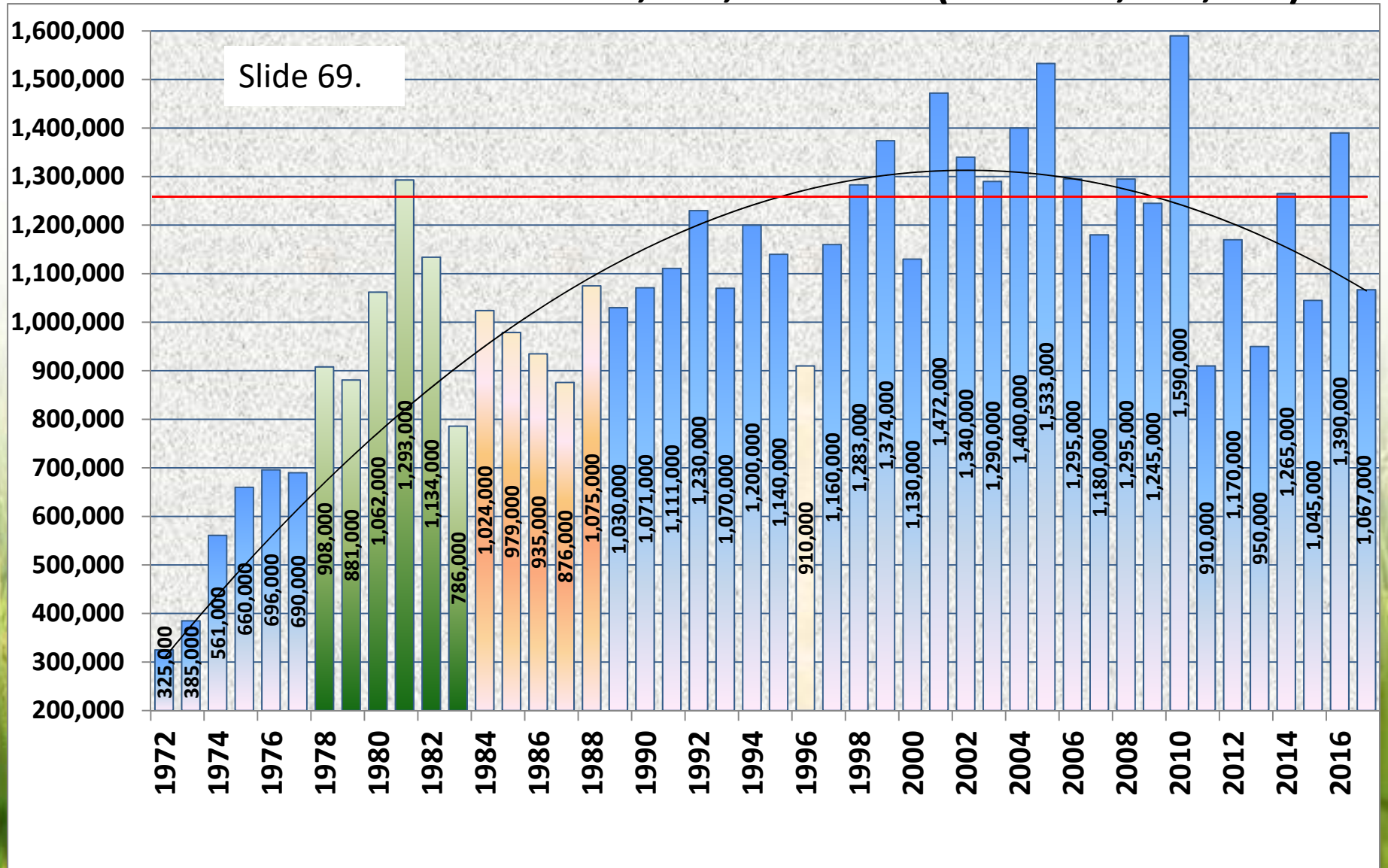
<sup>3</sup>Share rent and cash land rent are deducted from crop revenue.

<sup>4</sup>Does not include land costs, management, or other expenses and fees not associated with production.



# 2017 Arkansas Long Grain Rice Harvested Acreage Expectation

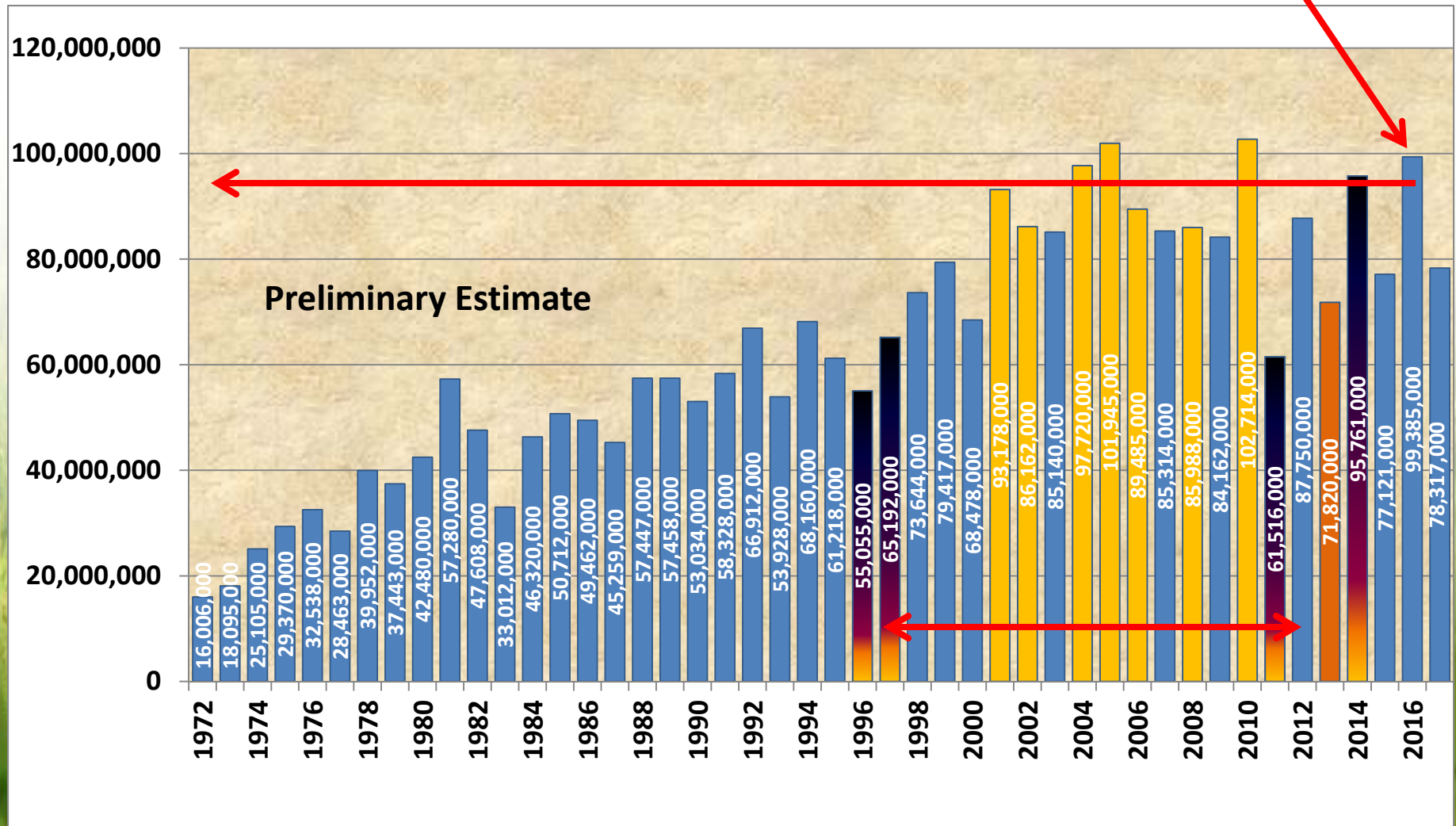
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# Arkansas Long Grain Rice Production, 1972 to 2016

Slide 70.

**2017's Preliminary Estimate of 78 million cwt.**

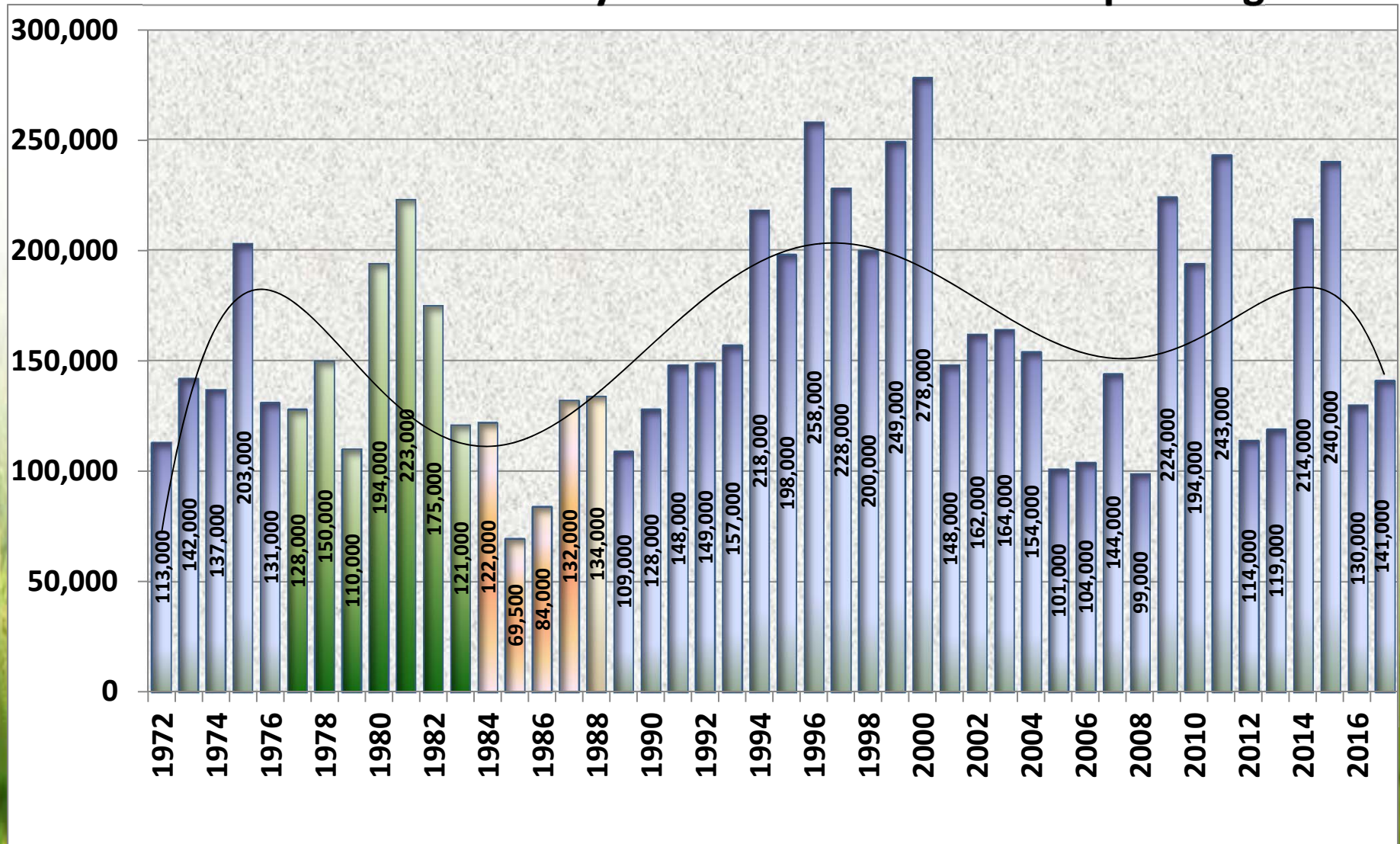


# 2017 Arkansas Medium Grain Rice Harvested Acreage

Slide 71.

## Expectation 141,000 Acres

### Producers should study demand for MG before planting



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**I do appreciate your attention!**  
**Thank you so very much!**

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