

# U.S. 2014 Farm Bill Overview and Projections of the Global Rice Market

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Global Japonica Rice Competitiveness  
Miyazaki, Japan  
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# Outline

- Overview
- Title I commodity provisions
  - Provisions and programs
  - New options for farmers
- Title XI Crop Insurance
  - Provisions an programs
  - New options for producers

# Disclaimer and Acknowledgement

- Information is based on our reading of the bill and discussion with Congressional Staff and other economists
- There will likely be difference in our interpretation and the final rules and regulations
- Information is intended to be for educational purposes only
- This work is funded by the Arkansas rice industry through rice check-off funds administered by the Arkansas Rice Research and Promotion Board.

# The farm bill

- Agricultural Act of 2014 changes the nature and level of support
- Key features:
  - Eliminates many existing programs:
    - Direct payments, CCP and ACRE
    - Dairy price and MILC payments
  - Reduces SNAP (food stamp) spending
  - Limits conservation reserve program
  - Reallocates “savings” to risk management

# “Mandatory” spending

CBO estimates, FY 2014-23 totals, billion dollars

	Pre 2014 farm bill	With 2014 farm bill	Change with 2014
Commodity programs	58.8	44.5	-14.3
Crop Insurance	84.1	89.8	+5.7
Sub-total	142.9	134.3	-8.6
Conservation	61.6	57.6	-4.0
Nutrition (SNAP)	764.4	756.4	-8.0
Everything else*	4.0	8.1	+4.0
Total	972.9	956.4	-16.6

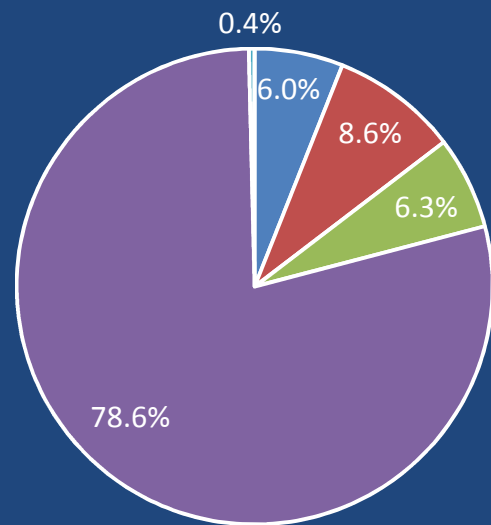
- Includes research, energy, horticulture, rural development, trade, and more
- Source: CBO publication 45049

# “Mandatory” spending

CBO estimates, FY 2014-23 totals, billion dollars

## Pre-2014 Policies Continued

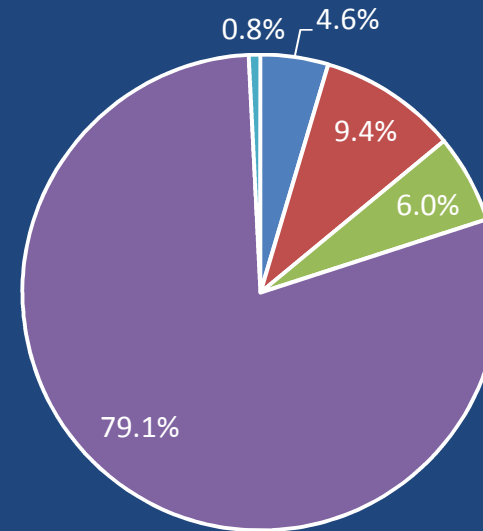
(\$972 bil.)



Commodities Crop Ins. Conservation  
Nutrition Other

## 2014 Farm Bill Policies

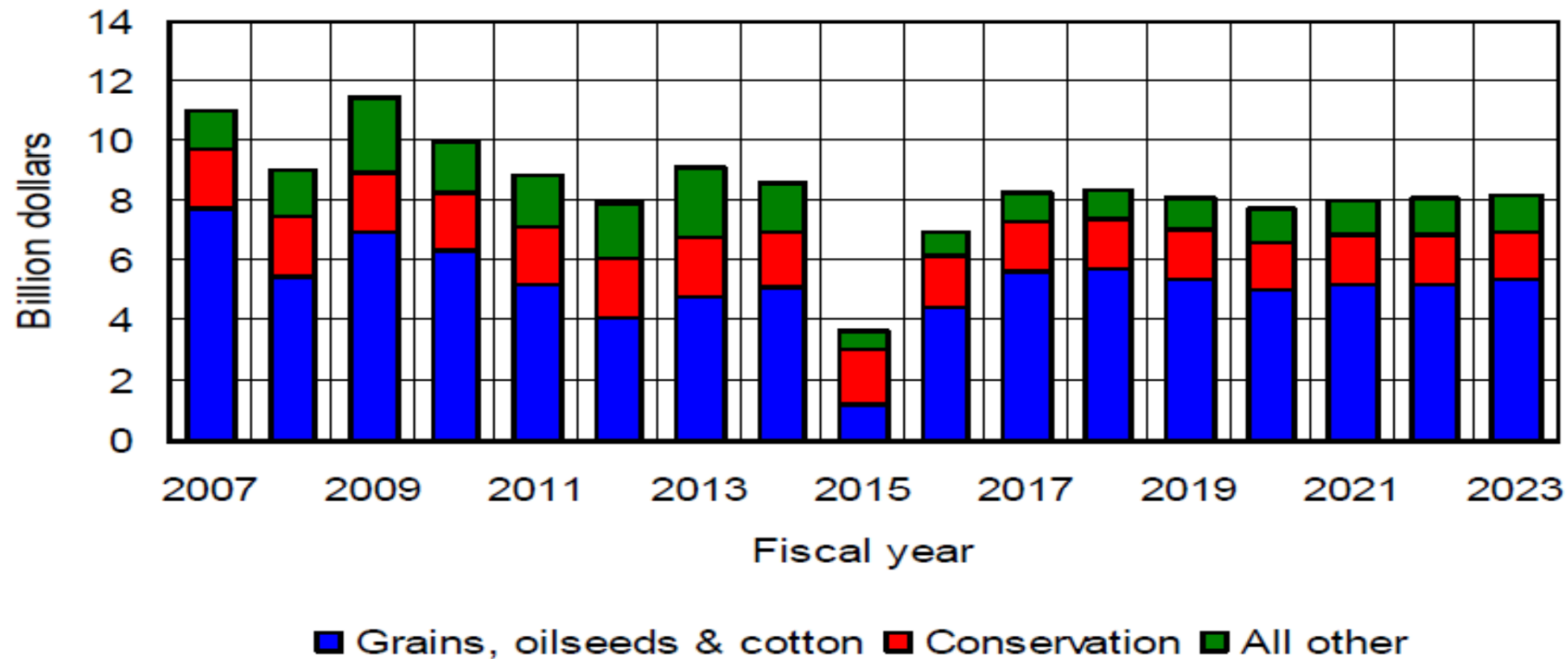
(\$956 bil.)



Commodities Crop Ins. Conservation  
Nutrition Other

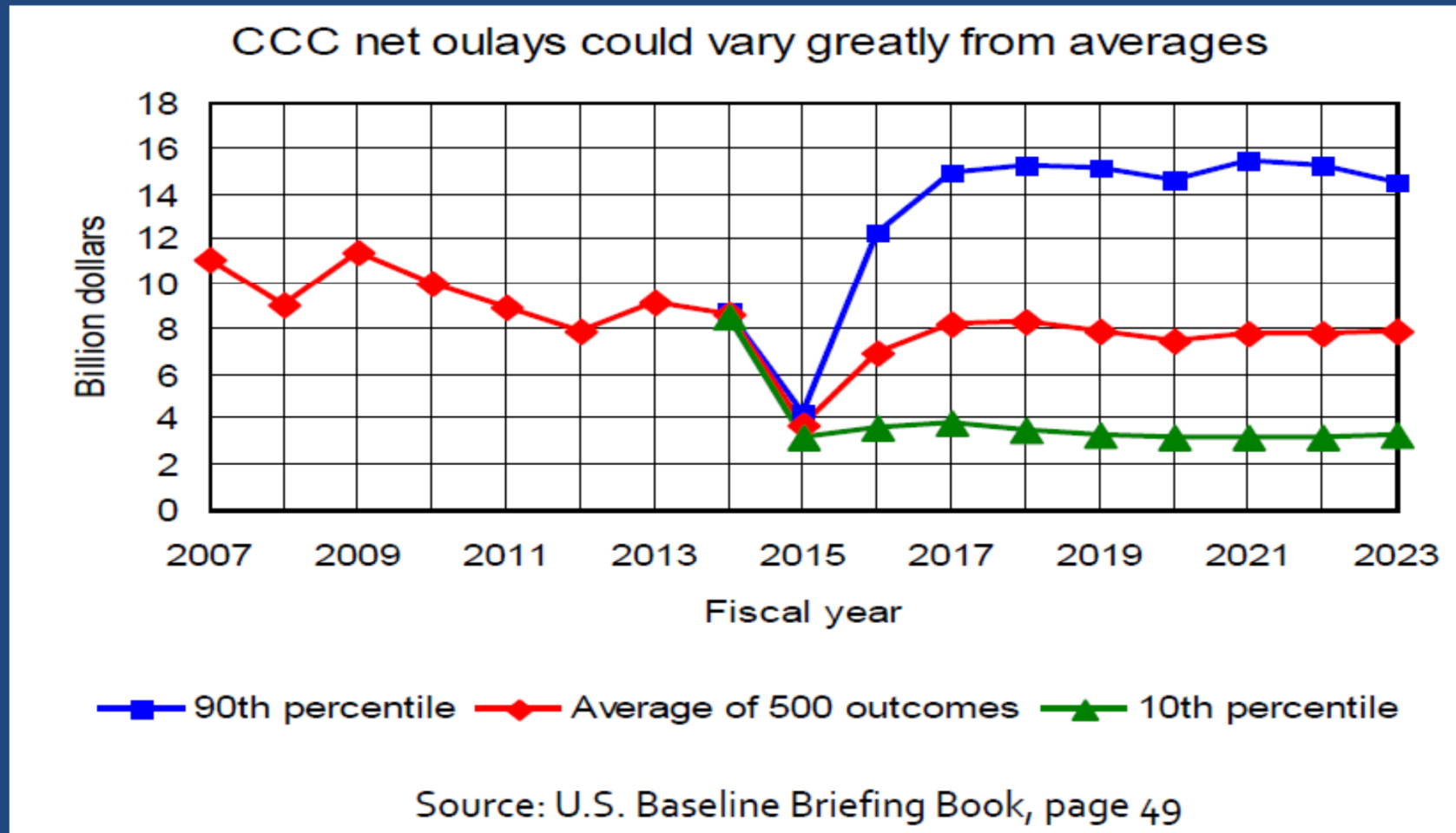
# CCC farm program spending under new bill

CCC net outlays total \$76 billion over FY 2014-23



Source: U.S. Baseline Briefing Book, page 47

# FAPRI's Stochastic Estimates





# Title 1 Commodities

- Price Loss Coverage (PLC) or Agricultural Risk Coverage (ARC) – one time, irrevocable choice
  - ARC has county level or farm level option
- Crop by crop and farm by farm choice of programs (except farm level ARC is whole farm/all crops on farm)
- If no choice is made in 2014, no payments for 2014, and remainder of years automatically in PLC

# Title 1 Commodity program

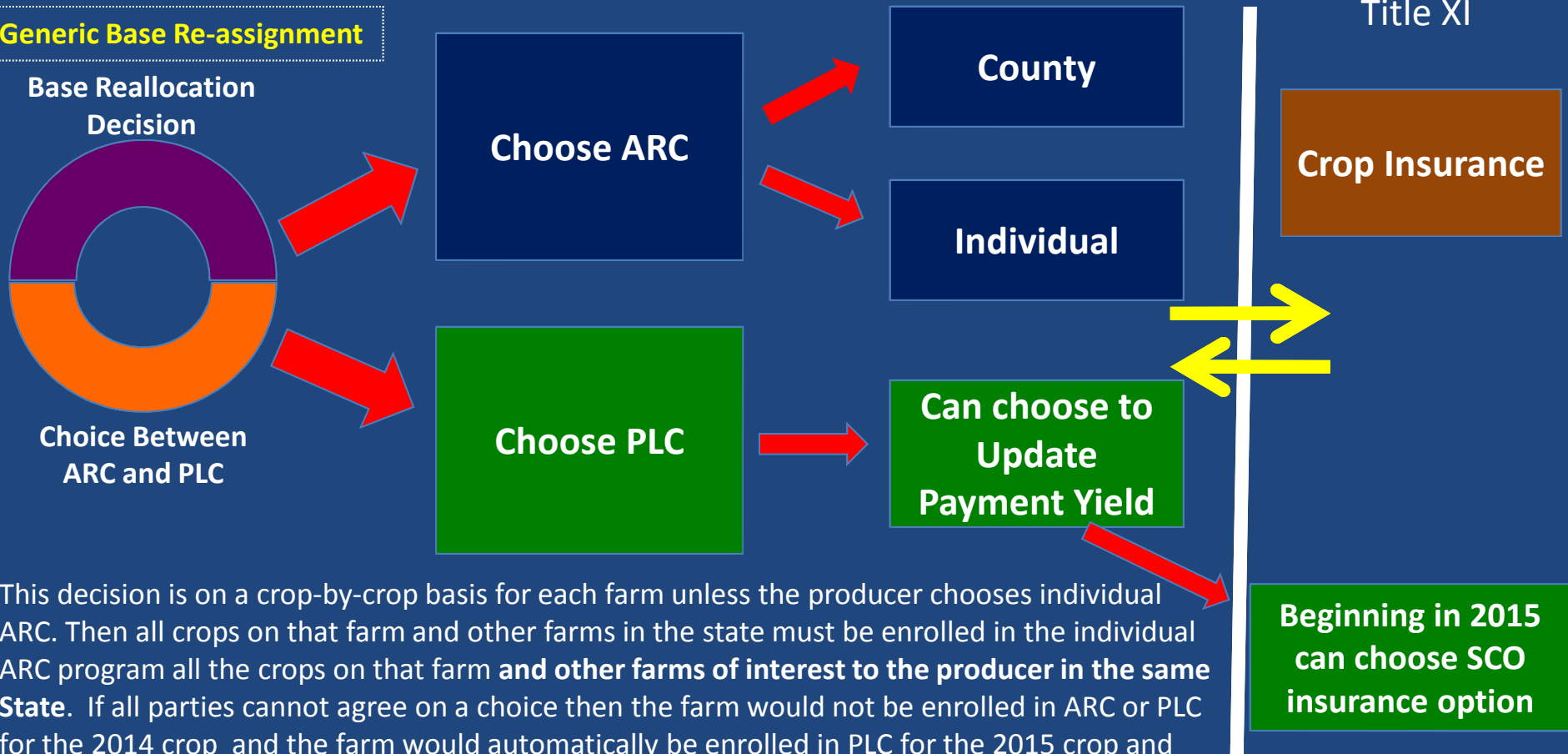
## Provisions and Producer choices

- Base reallocation
- Yield update
- Price Loss Coverage (PLC)
- Agriculture Risk Coverage (ARC)
- Payment limits and AGI
- Choices to be made and when
- Decision aid/tools

# Flow Chart of Title I Producer Choices for Covered Commodities Other than Upland Cotton

Adapted from Joe Outlaw, Professor & Extension Economist Co-Director, AFPC

## Generic Base Re-assignment



This decision is on a crop-by-crop basis for each farm unless the producer chooses individual ARC. Then all crops on that farm and other farms in the state must be enrolled in the individual ARC program all the crops on that farm **and other farms of interest to the producer in the same State**. If all parties cannot agree on a choice then the farm would not be enrolled in ARC or PLC for the 2014 crop and the farm would automatically be enrolled in PLC for the 2015 crop and beyond.

# Base reallocation

- One time decision by land owner
- Decision is made on each FSA farm unit
- Two choices
  - Retain existing base acres
  - Reallocate based on 2009-12 planted crop shares
    - Cannot add base acres to a farm
- Cotton base acres become generic base and cannot be reallocated but can be reassigned each year based on planted covered crop acres

# Base Reallocation – Generic Base

- All cotton base on a farm is renamed Generic Base
  - Cotton no longer receives Title 1 program benefits except for the marketing loan program
  - Will receive transition payments in 2014 and possibly 2015
- Cotton will only receive income support through purchased insurance products
  - Traditional and Stacked income protection (STAX)

# Generic Base reassignment

- Generic base is assigned annually to other covered commodities based on the number of acres planted of these crops
- Example:
  - 1000 total base acres on farm, 500 acres of soybeans, 500 acres cotton (generic base)
  - If plant 500 acres of soybeans and 500 acres of corn, then
    - 750 acres of soybean base and 250 acres of corn base

# Yield Update

- One time decision and applies to Price Loss Coverage program (PLC)
- Made on crop by crop basis for each FSA farm unit
  - 90% of the average yield for the 2008-2012 crop years
  - Exclude any year that the planted acres are zero
  - If the farm yield per planted acre for any year is less than 75% of the country average yield for 2008-2012, then use 75% of county yield.

# Safety Net Program Options

- Price Loss Coverage (PLC) or Agricultural Risk Coverage (ARC) – one time, irrevocable choice
  - ARC has county level or farm level option
- One time crop by crop and farm by farm choice of programs (except farm level ARC is whole farm/all crops on farm)
- If no choice made in 2014, no payments for 2014, and remainder of years automatically in PLC



# Program Options

- Both PLC and ARC programs are decoupled (paid on base acres, not planted acres – except on generic base partially tied to covered crop planted each years)
- Must designate PLC or ARC for all crops that could be planted on generic base during the 2014-2018 period
- SCO can only be purchased in conjunction with PLC

# PLC program

- Payment rate = amount reference price exceeds higher of marketing year National Average Market Price or loan rate
- PLC payment = payment rate x payment yield x 85% of base acres (payment acres)

# Reference Prices compared to previous target prices

	2008 Farm Bill Target Prices	2014 Farm Bill Reference Prices
Long grain rice/cwt.	\$10.50	\$14.00
Medium grain rice/cwt.	\$10.50	\$14.00
Medium grain (japonica)/cwt.	\$10.50	\$16.10
Corn/bu.	\$2.63	\$3.70
Soybeans/bu.	\$6.00	\$8.40
Wheat/bu.	\$4.17	\$5.50
Upland cotton/lb.	71.25 cents	None*

\*Upland cotton is not eligible for PLC or ARC benefits under the 2014 farm bill. However, it has a special crop insurance program, STAX.

# Illustration of Government Support for Rice Under PLC

Revenue per cwt

Reference  
Price – \$14.00

PLC

Paid on base acres x .85

Supplemental Coverage Option

Loan  
Rate – \$6.50

MLG/LDP

Market Price

Market Receipts

Crop Insurance

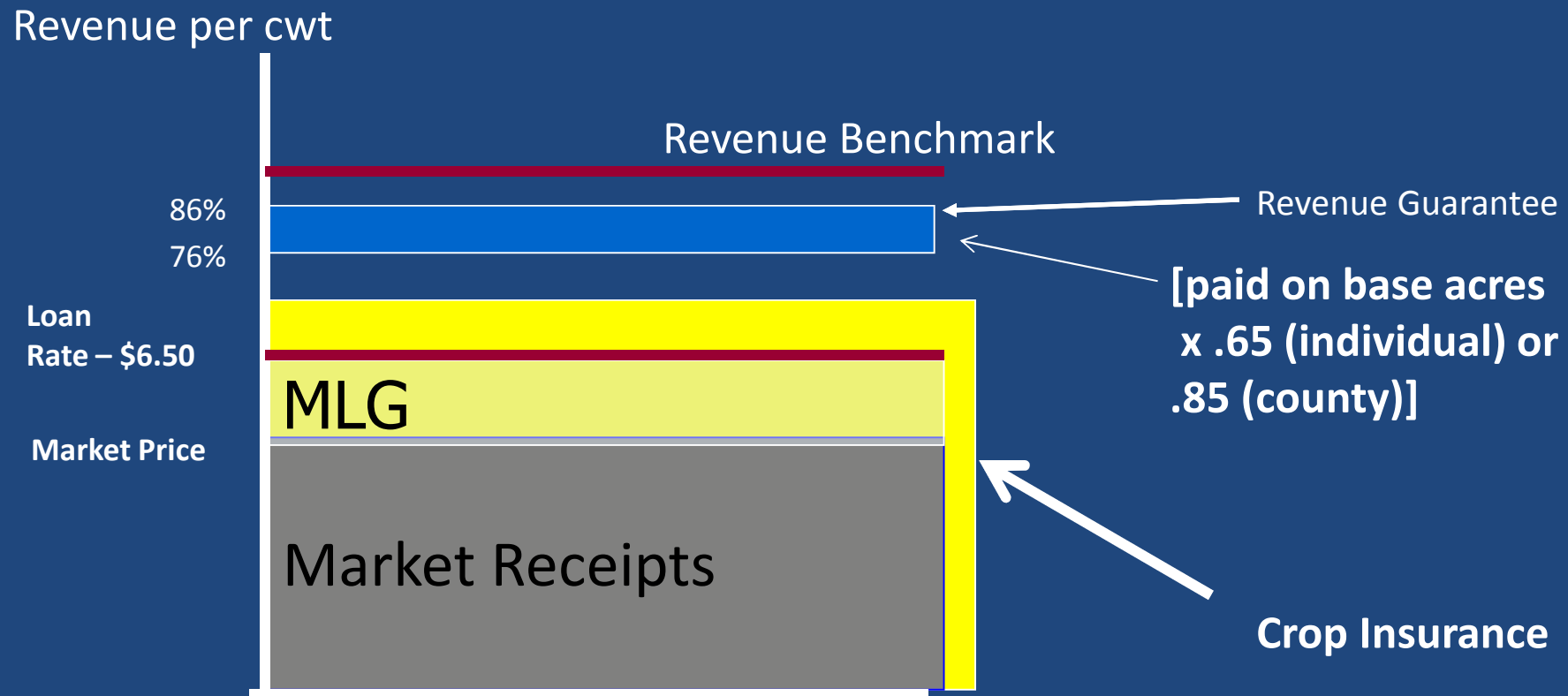
# ARC Program

- Makes payments when per-acre revenue falls below a trigger
  - Trigger depends on 5-year moving average of market prices and yields
- Paid on base acreage, not planted
  - Tied to county or farm yields
  - Covers losses of 14-24%

# ARC Payments

- Payments if per-acre revenue falls below 86% of benchmark
- Benchmark:
  - County ARC: 5 yr. Olympic avg. nation price\*5 yr. Olympic avg. county yield
  - Farm ARC: 5 yr. Olympic average of the weighted per acre revenues  
(If price in any year is less than reference price, then use reference price)
- Maximum payment: 10% of the benchmark (covers range of 76% - 86% of normal revenue)
- Paid on 85% (county option) or 65% (farm option) of base acres

# Illustration of Government Support for Rice Under ARC-County



# Payment Limits and AGI

- Overall payment limit per person – \$125,000 combined for PLC, ARC, Loan Deficiency Payments and Marketing Loan Gains
  - Separate limit for peanuts
- No change to the spousal rule
- No limit on marketing loan forfeitures
- Adjusted Gross Income (AGI) test – 3 year average of \$900,000 or less for commodity and conservation program eligibility
- AGI does not apply to crop insurance



# Actively Engaged Provisions

- USDA Secretary required to publish rule to define term “significant contribution of active personal management”
- USDA Secretary authorized, if appropriate, to establish limits for various types farming operations on number of individuals who can be considered actively engaged in farming when provision of management is the basis used to qualify

# Actively Engaged Provisions

- In rulemaking USDA shall consider:
  - Size, nature, and management requirements of each type of farming operation
  - Changing nature of active personal management due to advancements of farming operations
  - Degree to which the regulations will adversely impact the long-term viability of the farming operation

# Actively Engaged Provisions

- None of the actively engaged provisions as a result of the rulemakings shall impact or apply to individuals or entities comprised solely of family members
- Any changes apply beginning with the 2015 crop year

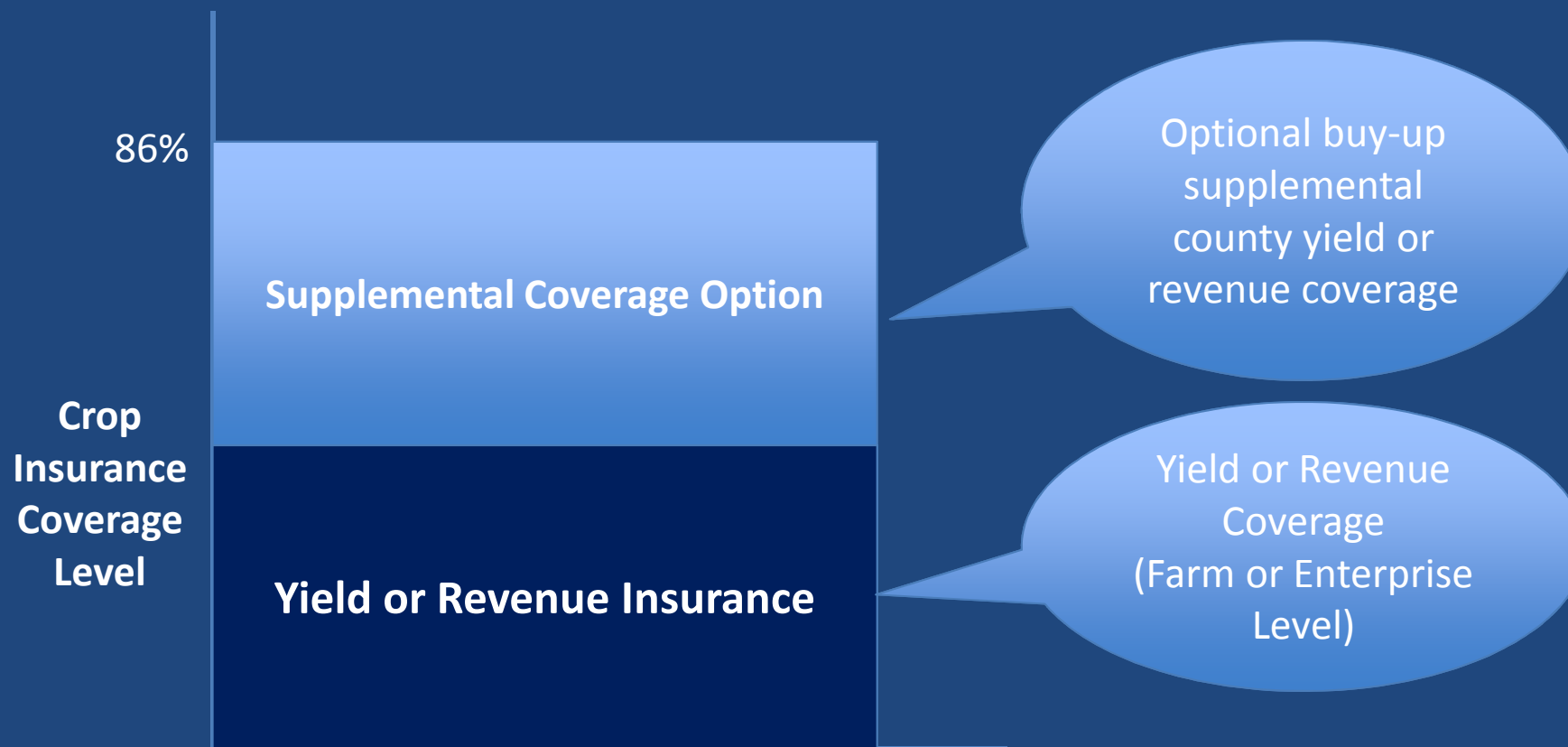
# Crop Insurance

- Individual policies
  - Yield protection
  - Revenue protection with harvest price exclusion
  - Revenue protection
- Area policies
  - Area yield protection
  - Area revenue protection with harvest price exclusion
  - Area revenue protection

# Crop Insurance Provisions 2015

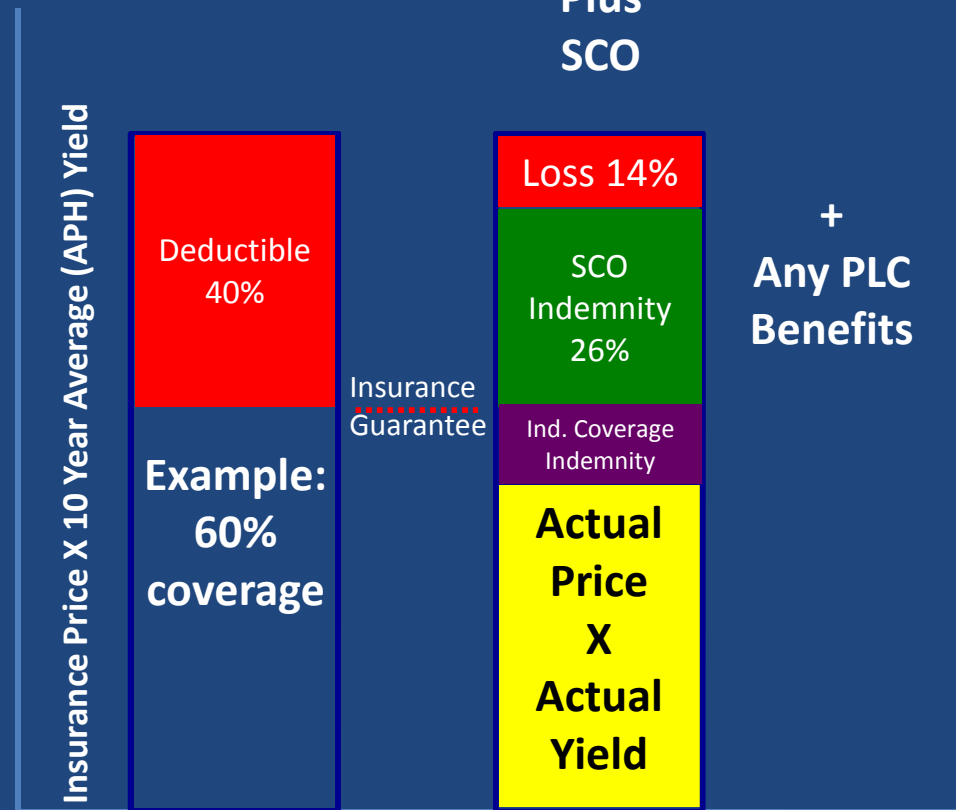
- SCO policy allows for county yield or revenue coverage up to 86%
- Premium subsidy of 65%
- Requires underlying policy
  - Buy-up or CAT (catastrophic)
  - Both policies of same type (i.e. yield/yield or revenue/revenue)
- Requires RMA to offer margin protection policy for rice

# PLC + SCO + Crop Insurance



Crop Insurance  
Expected Revenue

Example of  
Price Loss Coverage  
(PLC)  
Plus  
SCO



# Choices to be made

- Sign-up
  - Starting this fall and ending sometime in 2014 according to Sec. Vilsack
- Exclusive for each FSA farm unit
- Base acres and ARC farm made for whole unit
- PLC, ARC county and Yield update on a crop-by-crop
- If payments are triggered in 2014 producers will receive them in October 2015
- All choices are for the life of the farm bill



# Long-Term International Rice Baseline Projections: 2014-2024

Arkansas Global Rice Economics Program  
Arkansas Global Rice Model  
Department of Agricultural Economics and Agribusiness  
University of Arkansas Division of Agriculture

February 2015



# Presentation Outline

- A. Overview of the international rice story
- B. Recent global rice market drivers
- C. Uncertainties in the global rice markets
- D. Long-term baseline projections

# Overall International Rice Story

- Steady growth in global trade
  - Export expansion in Vietnam, Thailand, Myanmar, and Cambodia
  - Import growth in Nigeria, other ECOWAS, and the Middle East
- Production growth
  - yield growth; marginal increases in area harvested
- Consumption growth
  - population growth driver; slight decline per capita use
- Abundant global rice supplies keep price growth reasonably steady

# Key Global Rice Market Drivers

- Thailand resumes active market participation
- China remains major rice importer
- Myanmar and Cambodia become important rice exporters
- Growing segmentation in trade flows and prices of long and medium grain markets

# Uncertainties in the Global Rice Market

- Timing and ability of Thailand to dispose rice stocks
- India export capacity with expanded PDS
- High margins between Western Hemisphere and Asian prices
- Growth in African import markets

# Uncertainties in the Global Rice Market

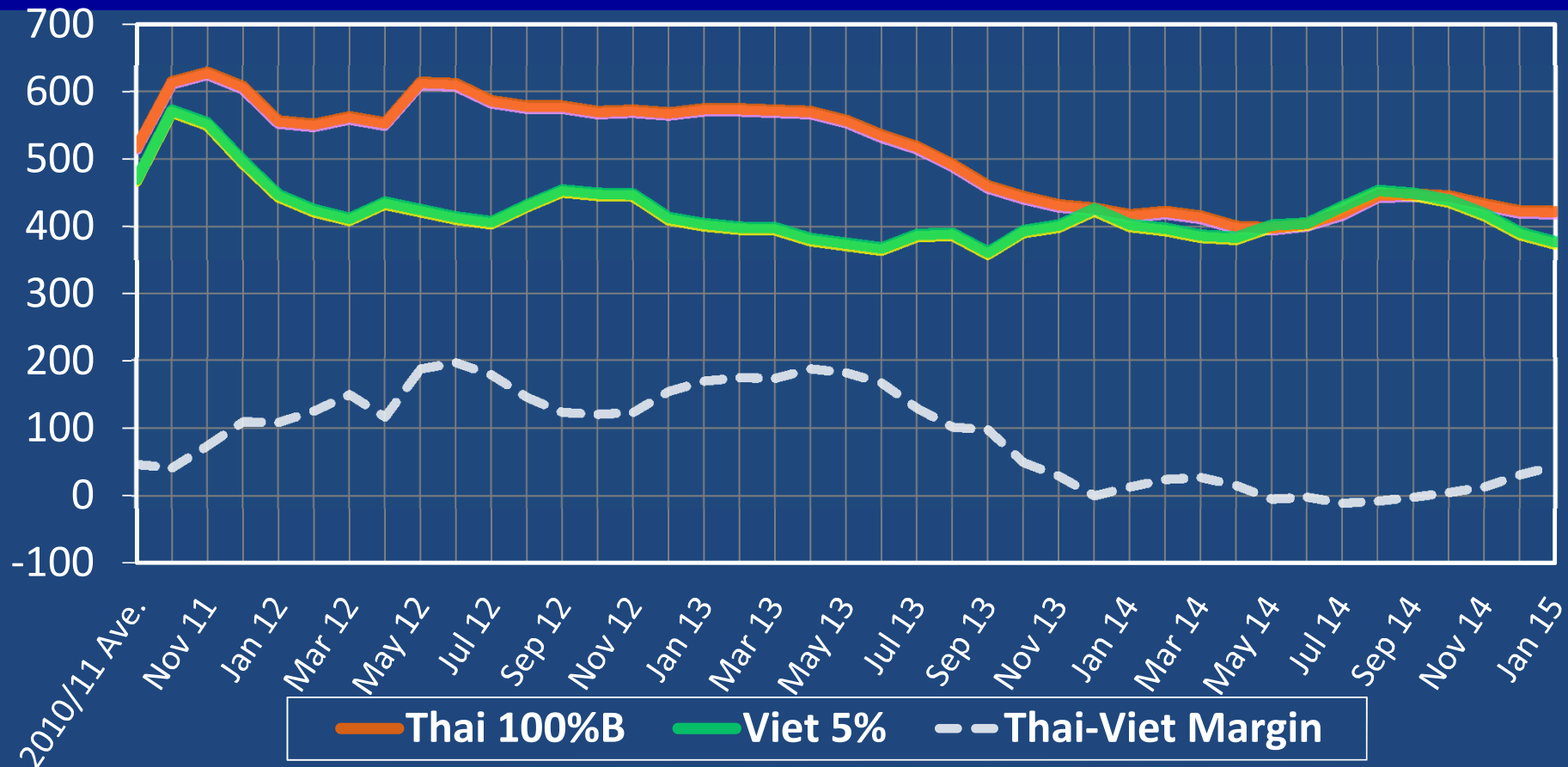
- Self-sufficiency drive by SE Asian importers
- Growth in government subsidies
  - Massive payments in China
  - Indonesia
  - Philippines
  - Thailand

# Basic Assumptions

- Macroeconomic data : IHS Global Insight
- Average weather conditions
- Continuation of existing policies
- Liquidation Thailand's PPP excess rice stocks

# Milled Rice Export Prices, Thailand vs. Vietnam (2010/2011 Average-January 2015)

USD/MT

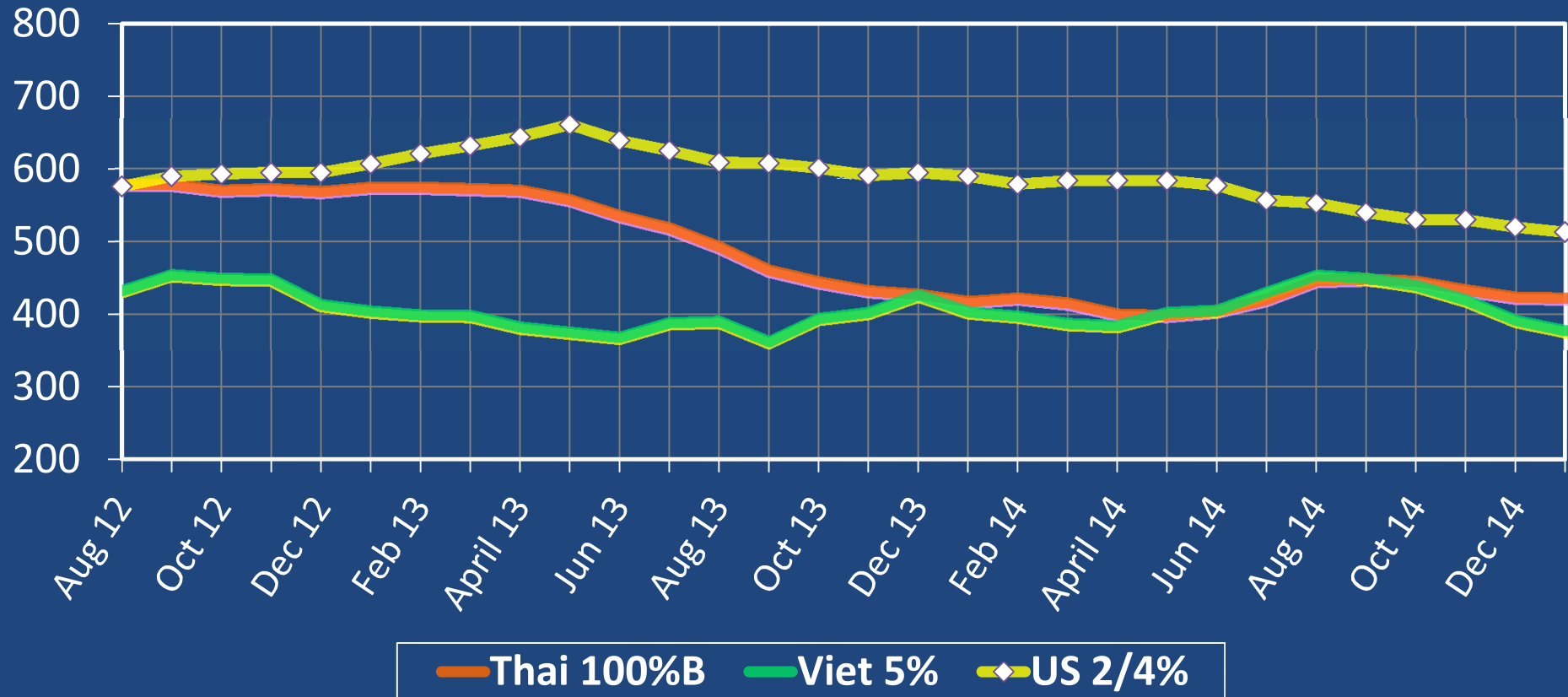


- Separation between Thai price and other Asian prices under PPP
- Recent PPP suspension made Thai price more competitive

Source: USDA-ERS Rice Outlook, January 2015.



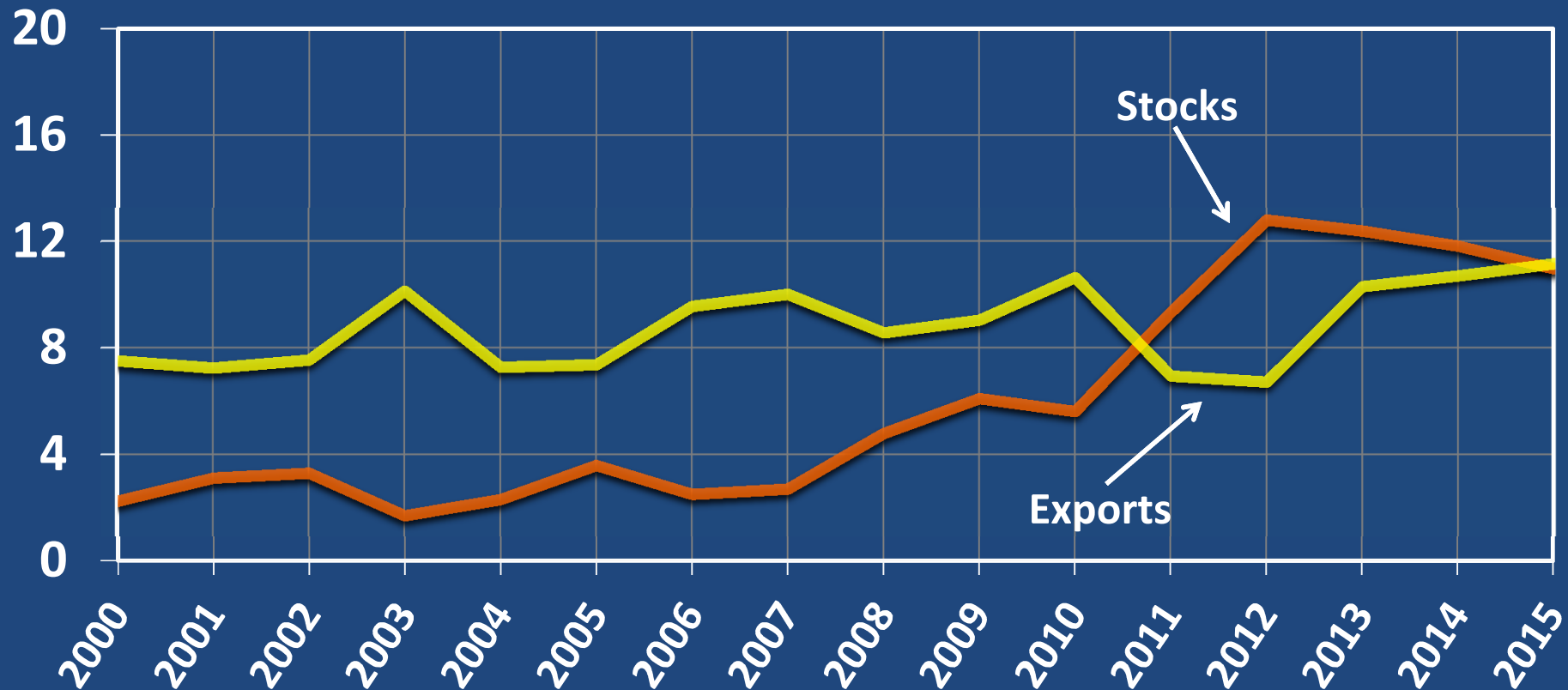
# Milled Rice Export Prices, August 2012-January 2015



- However, Western Hemisphere prices remain high
- Margins likely to weaken; abundant supplies and Asian competition

Source: USDA-ERS Rice Outlook, January 2015.

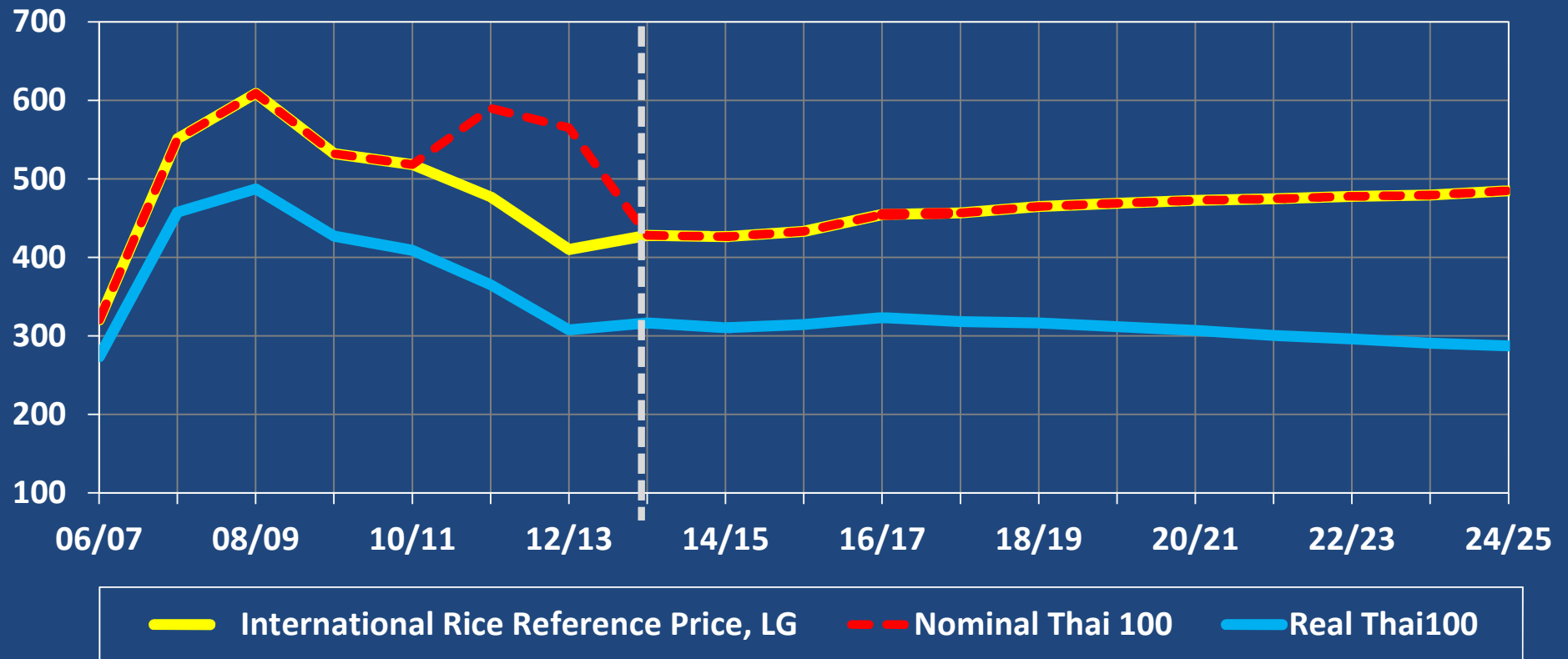
## Thailand Rice Exports and Stocks, 2000-2015



- Under PPP, rice exports plunged; and stockpiles increased sharply
- With suspension of PPP, Thailand regains leadership in global trade

Source: USDA-ERS Rice Outlook, January 2015.

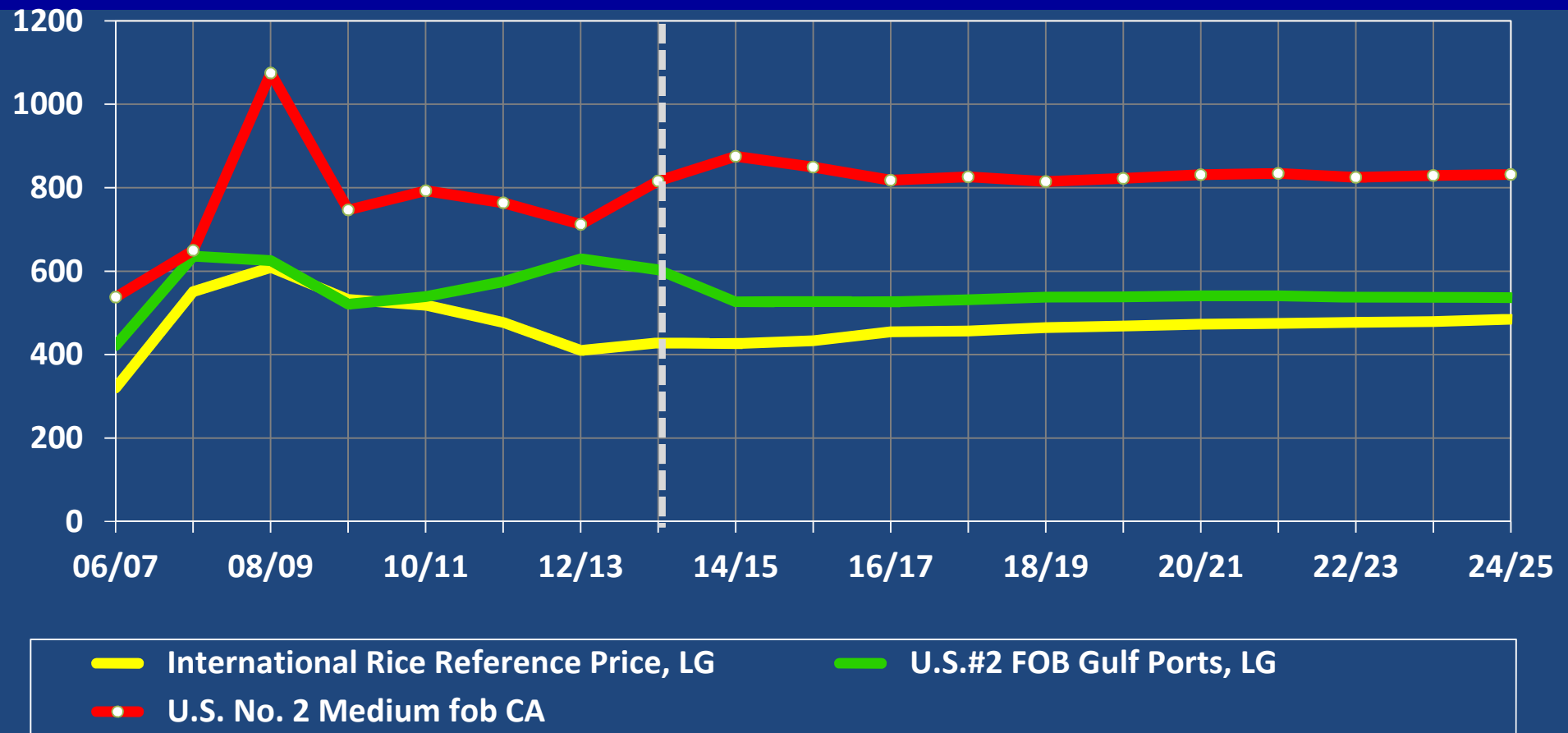
# LG International Reference Price vs. Thai Price, 2006-2024



- International reference price range: \$426- 485
- Nominal Thai price converges with international reference price
- Real Thai price declines below \$300/mt

Source: USDA-ERS Rice Outlook and AGRM projections, January 2015.

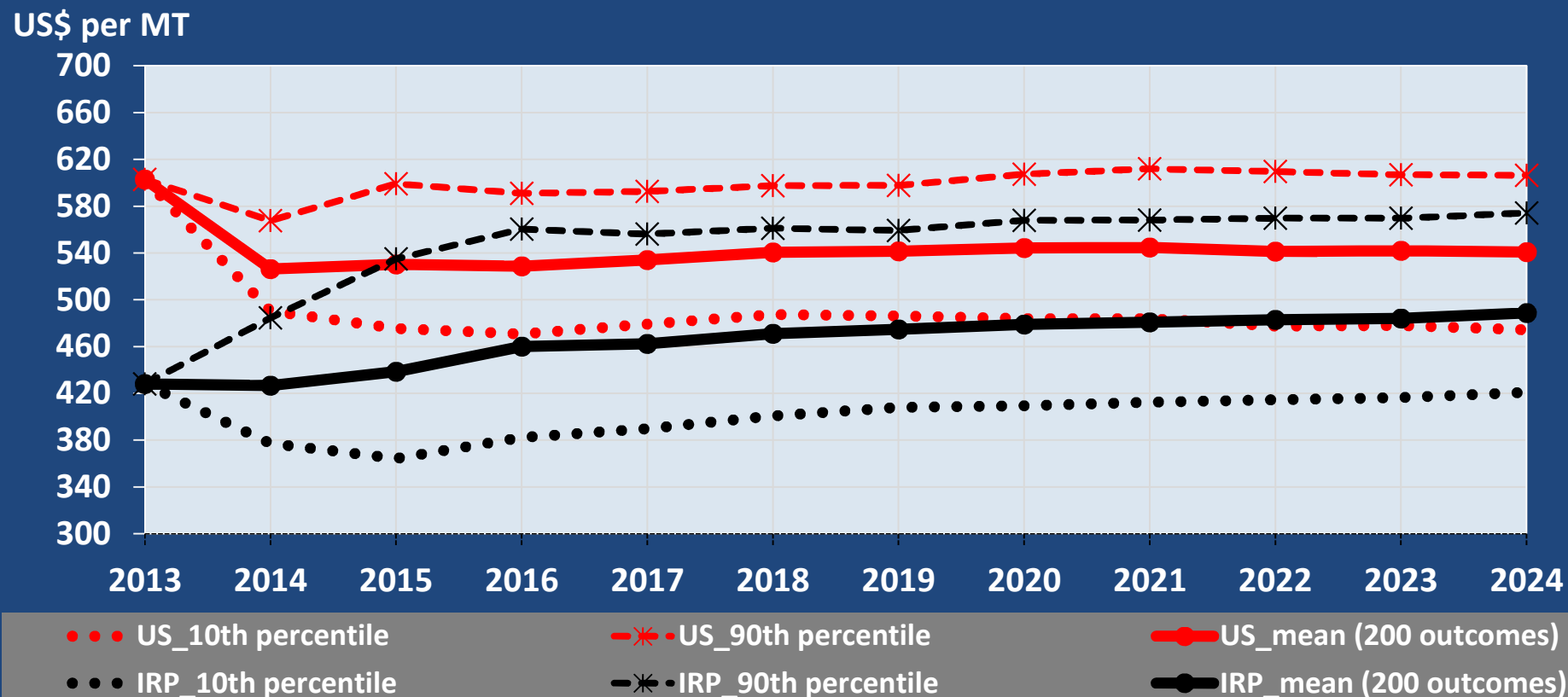
# LG International Price vs. LG Western Hemisphere Price and MG Price, 2006-2024



- Premium of Western Hemisphere long grain price weakens
- Medium grain margin remains strong ; limited substitution

Source: USDA-ERS Rice Outlook and AGRM projections, January 2015.

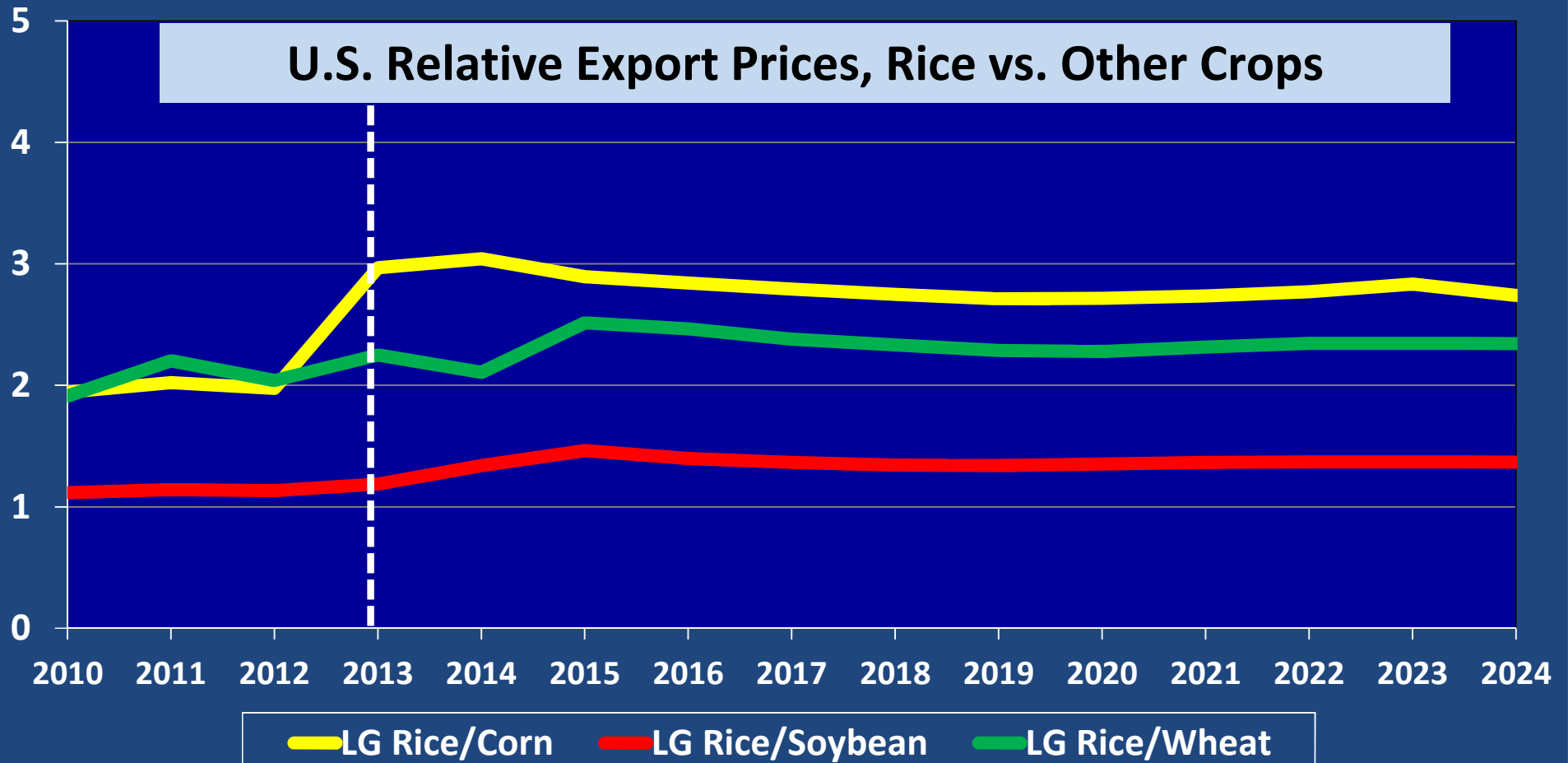
# Stochastic Projection Comparisons of International Reference and U.S. Long Grain Rice Export Prices, 2013-2024



- U.S. price 10<sup>th</sup> percentile converges with International price mean
- International price 90<sup>th</sup> percentile lies above U.S. price mean

Source: USDA-ERS Rice Outlook and AGRM projections, January 2015.

## U.S. Relative Export Prices, Rice vs. Other Crops

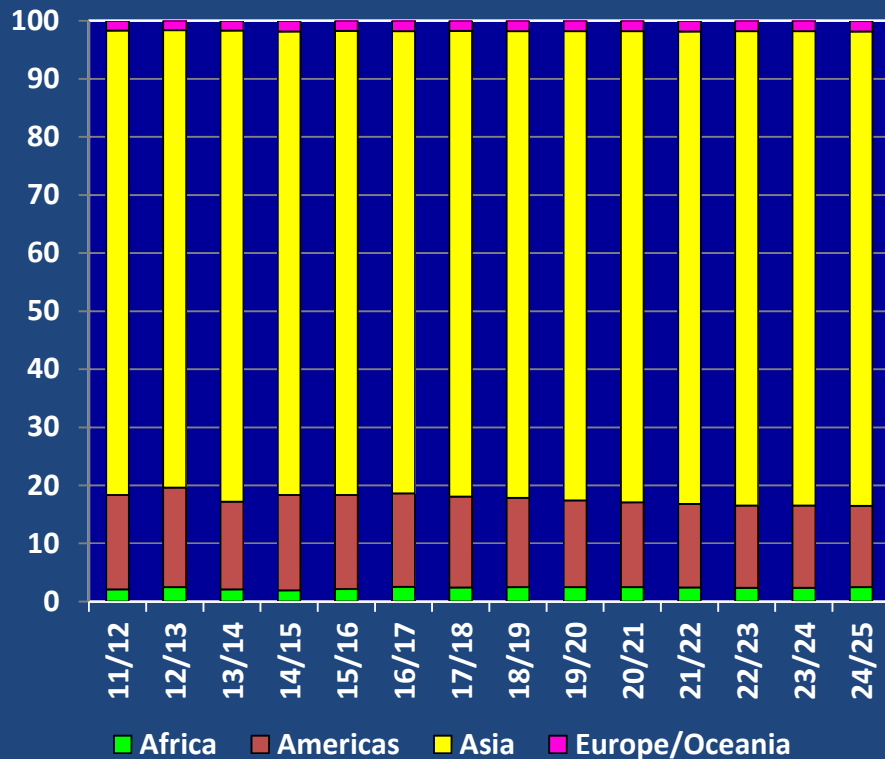


- Rice price increases relative to corn in 2014, then declines and stabilizes
- Relative to wheat, rice price declines in 2014, increases in 2015, then stabilizes
- Relative to soybeans, rice price increases in 2015, then stabilizes

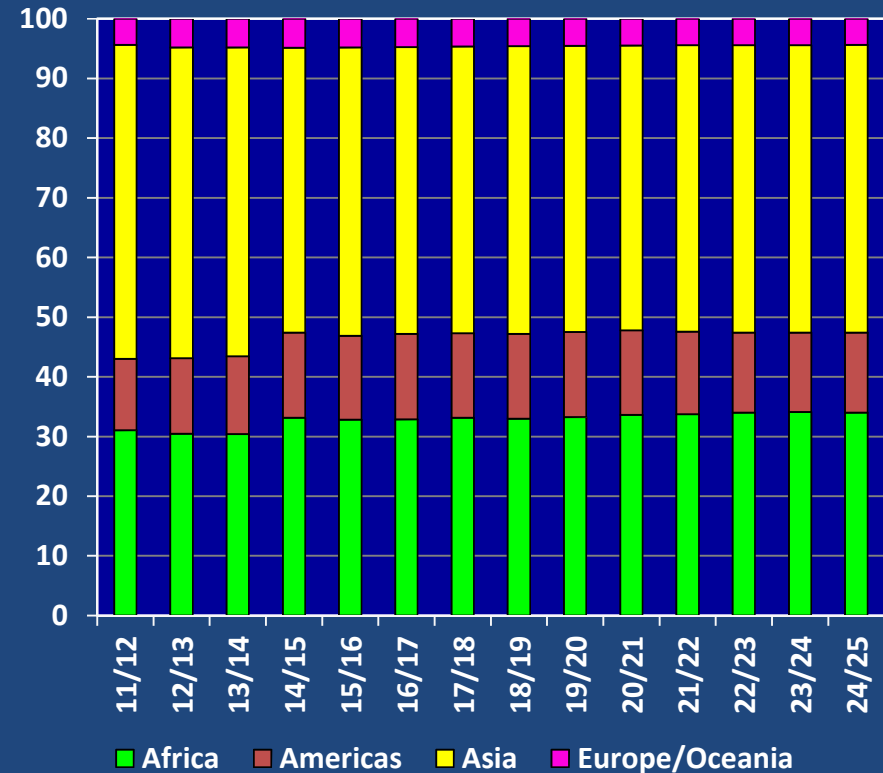
Source: FAPRI-MU and AGRM projections, January 2015.

# Global Rice Trade Balance, % Share by Region, 2011-2024

## Origins (Exporters)



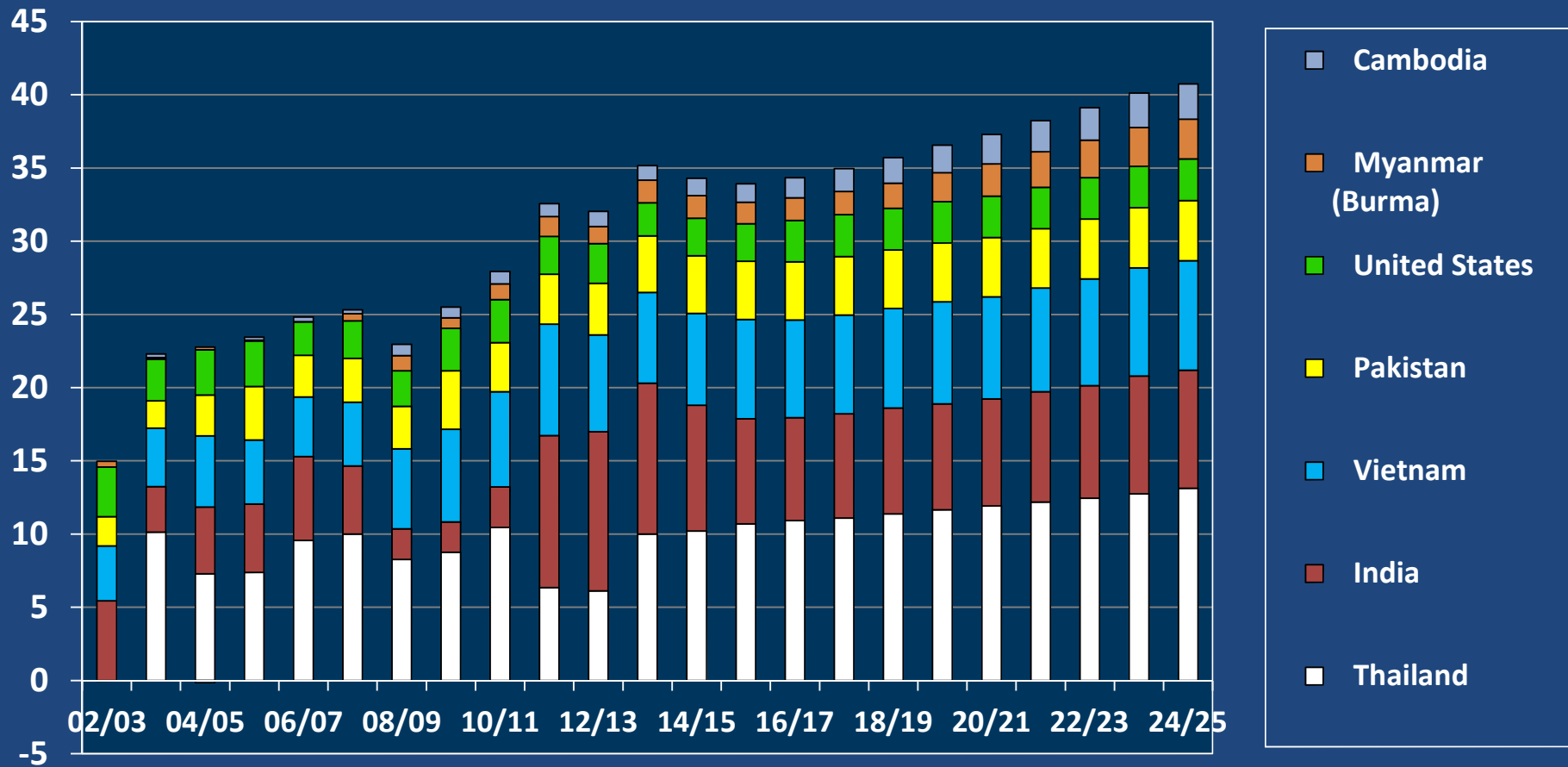
## Destinations (Importers)



- Most exports and export growth come from Asia
- Decreasing rice surplus from the Americas
- Most rice imports go to Asia and Africa; with growth to Africa

# Top World Rice Exporting Countries, 2002-2024

Million MT

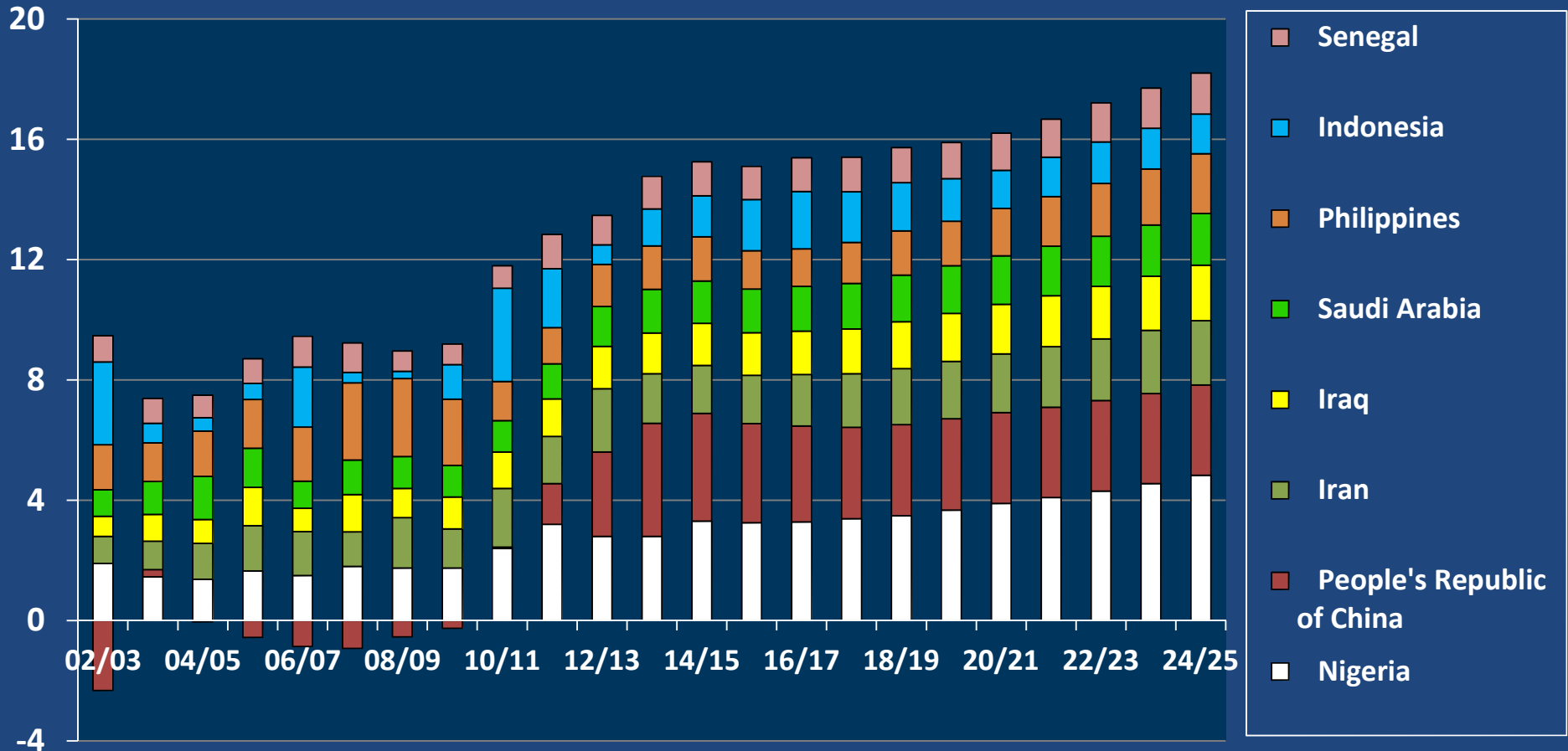


Source: AGRM Projections, January 2015.



# Top World Rice Importing Countries, 2002-2024

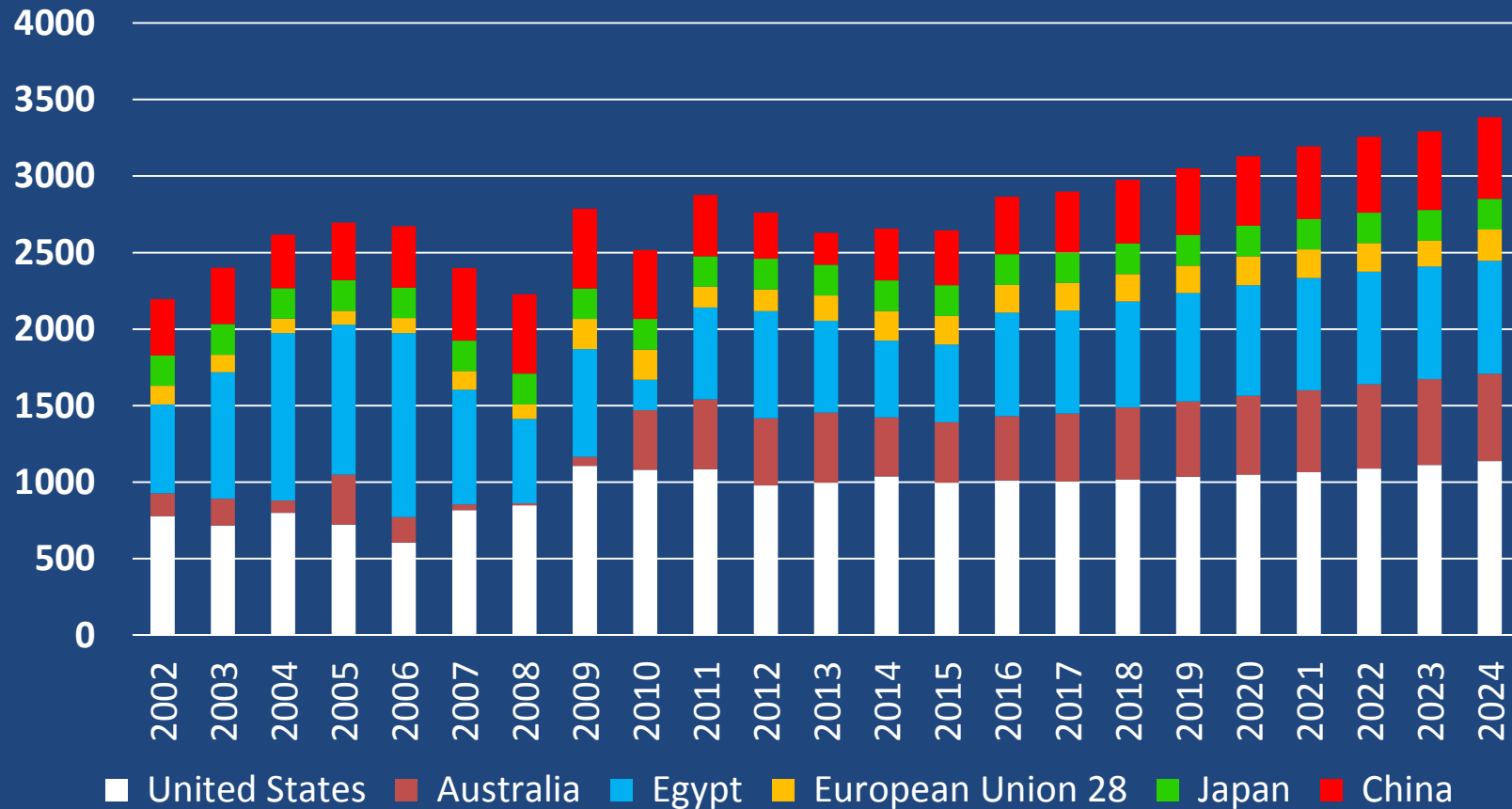
Million MT



Source: AGRM Projections, January 2015.

# World Medium/Short Rice Exports, 2002-2024

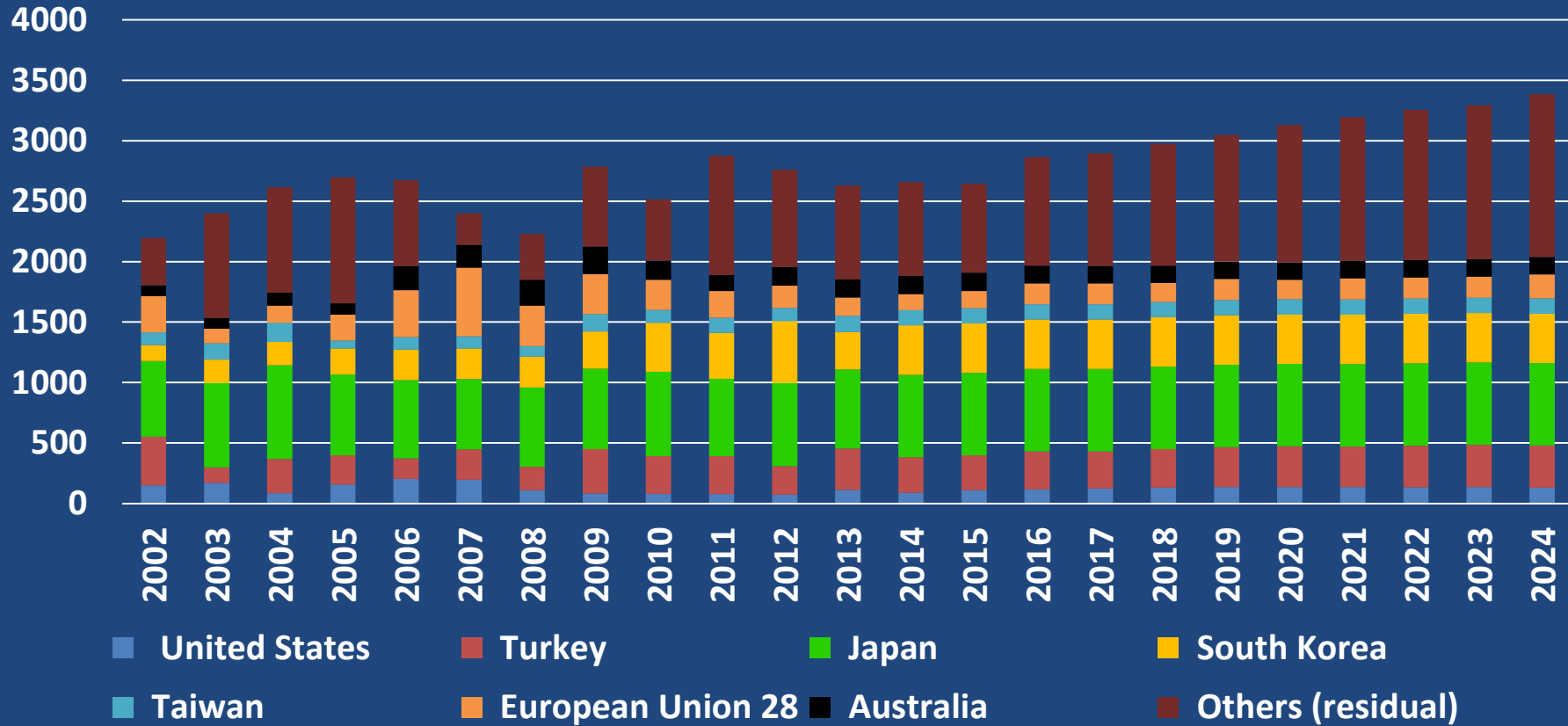
Thousand MT



Source: AGRM Projections, January 2015.

# World Medium/Short Rice Imports, 2002-2024

Thousand MT

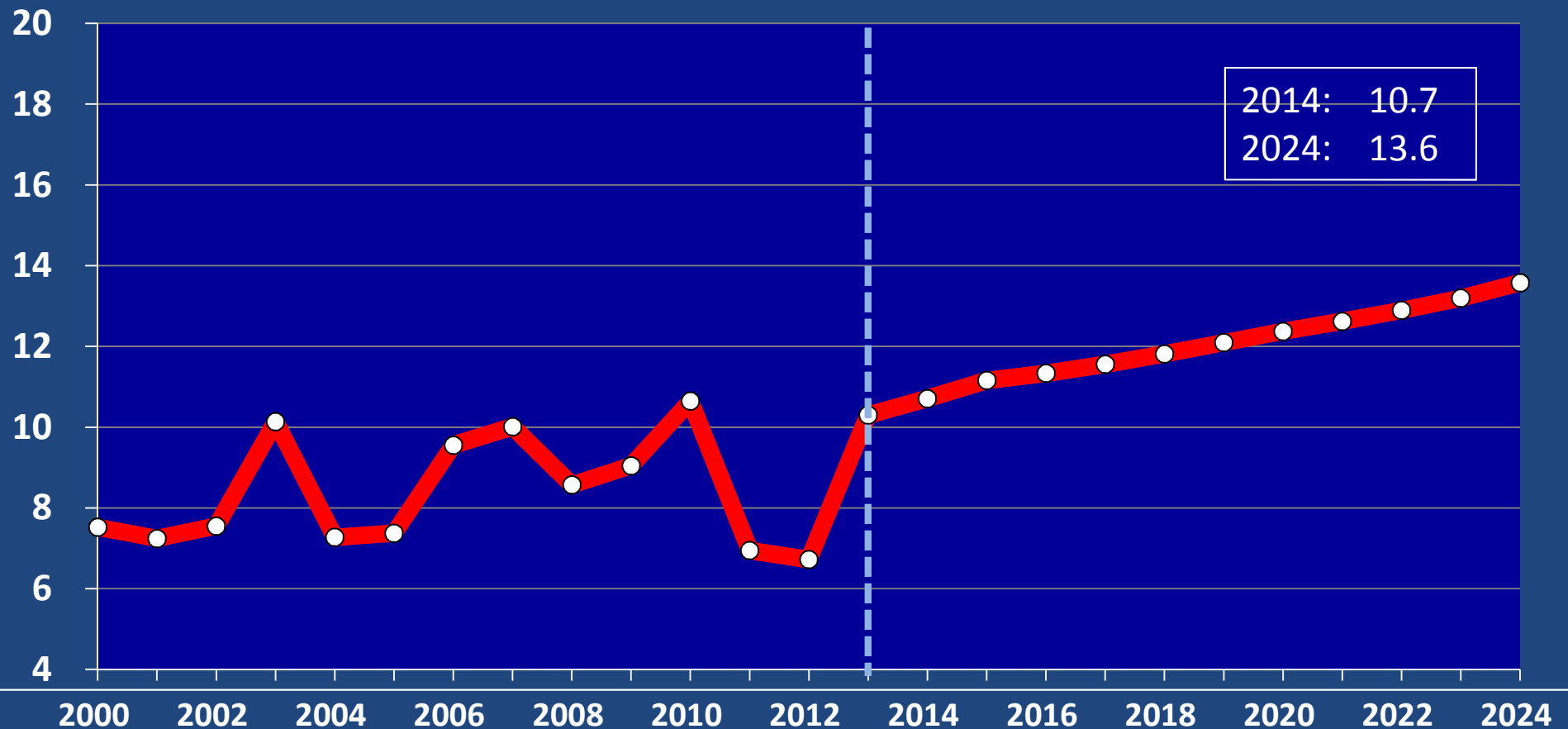


Source: AGRM Projections, January 2015.

# Baseline Story for Medium/Short Japonica Rice

- Important market segmentation
- Base driven by WTO commitments by Japan, S. Korea, and Taiwan.
- Growth in demand by Middle East, Mediterranean, and Africa.
- Supply constraints in leading exporters on land and water.
- Price margin strength over long grain prices.

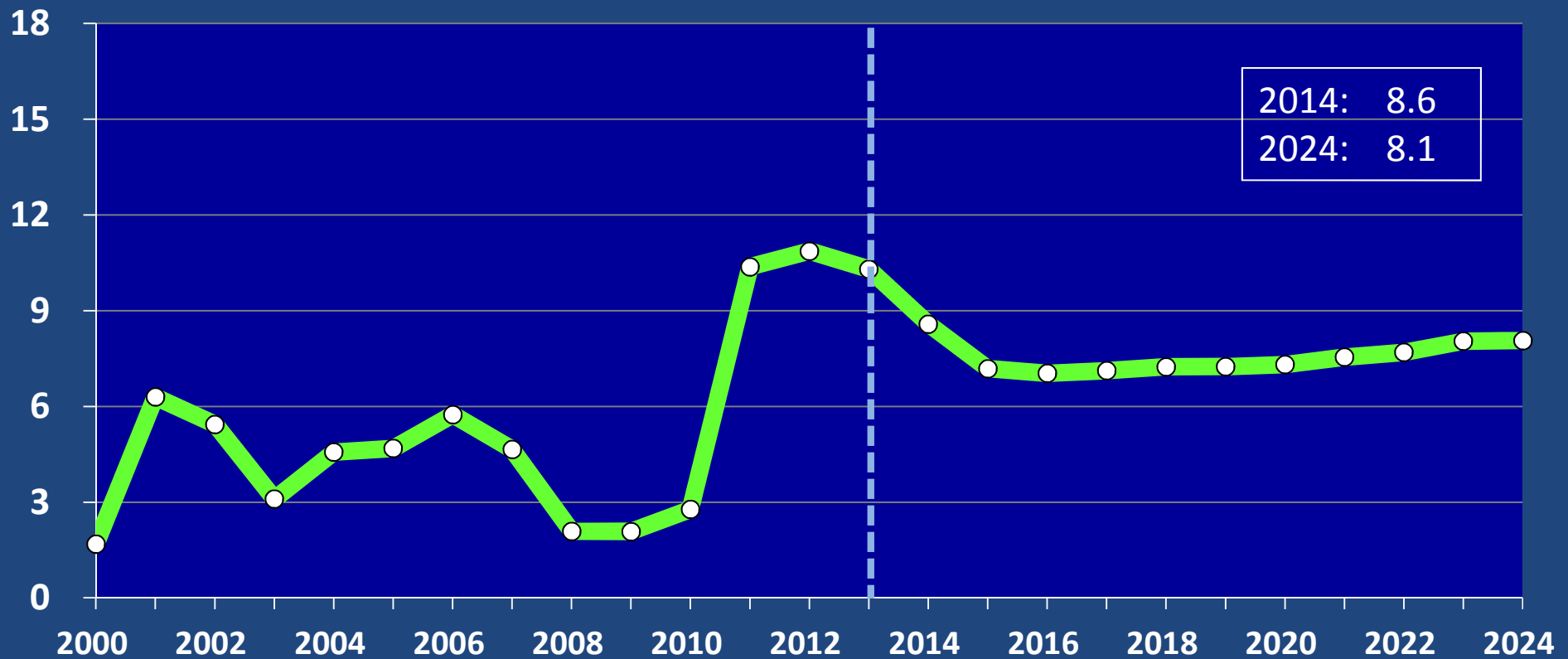
## Thailand Rice Exports, MMT



- After 2 years of weakness, Thailand re-captures leadership in global trade
- Average production (2014-24) exceeds consumption by 101.5% (surplus)

Source: USDA-PSD and AGRM projections, January 2015.

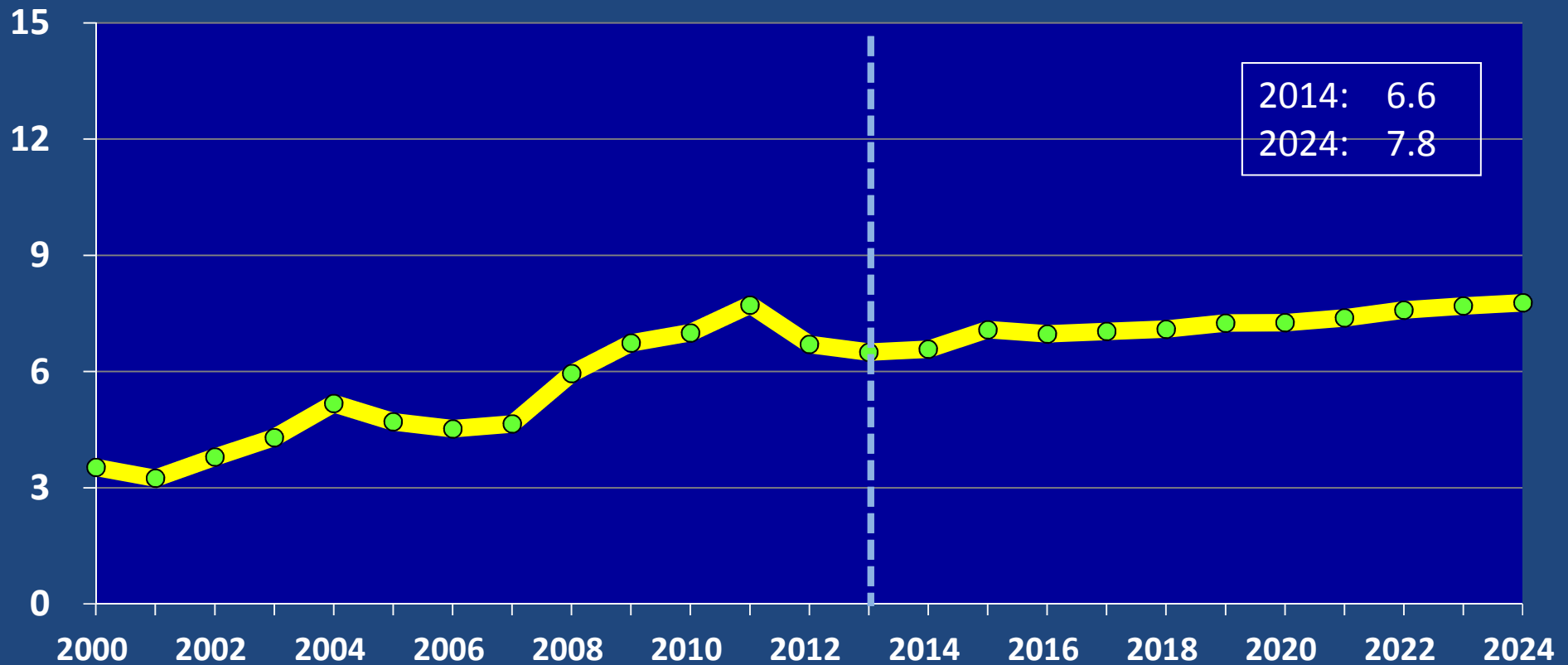
## India Rice Exports, MMT



- India's exports decline and stabilize around 7-8 MMT
- PDS program expanded; recent decline in Basmati exports
- Average production (2014-24) exceeds consumption by 7.3% (surplus)

Source: USDA-PSD and AGRM projections, January 2015.

## Vietnam Rice Exports, MMT



- Vietnam focuses more on quality than quantity; aims to improve competitiveness in the export market
- Average production (2014-24) exceeds consumption by 31.6% (surplus)

Source: USDA-PSD and AGRM projections, January 2015.

## Pakistan Rice Exports, MMT



- Rice is not a staple food in Pakistan
- Average production (2014-24) exceeds consumption by 136.1% (surplus)

Source: USDA-PSD and AGRM projections, January 2015.



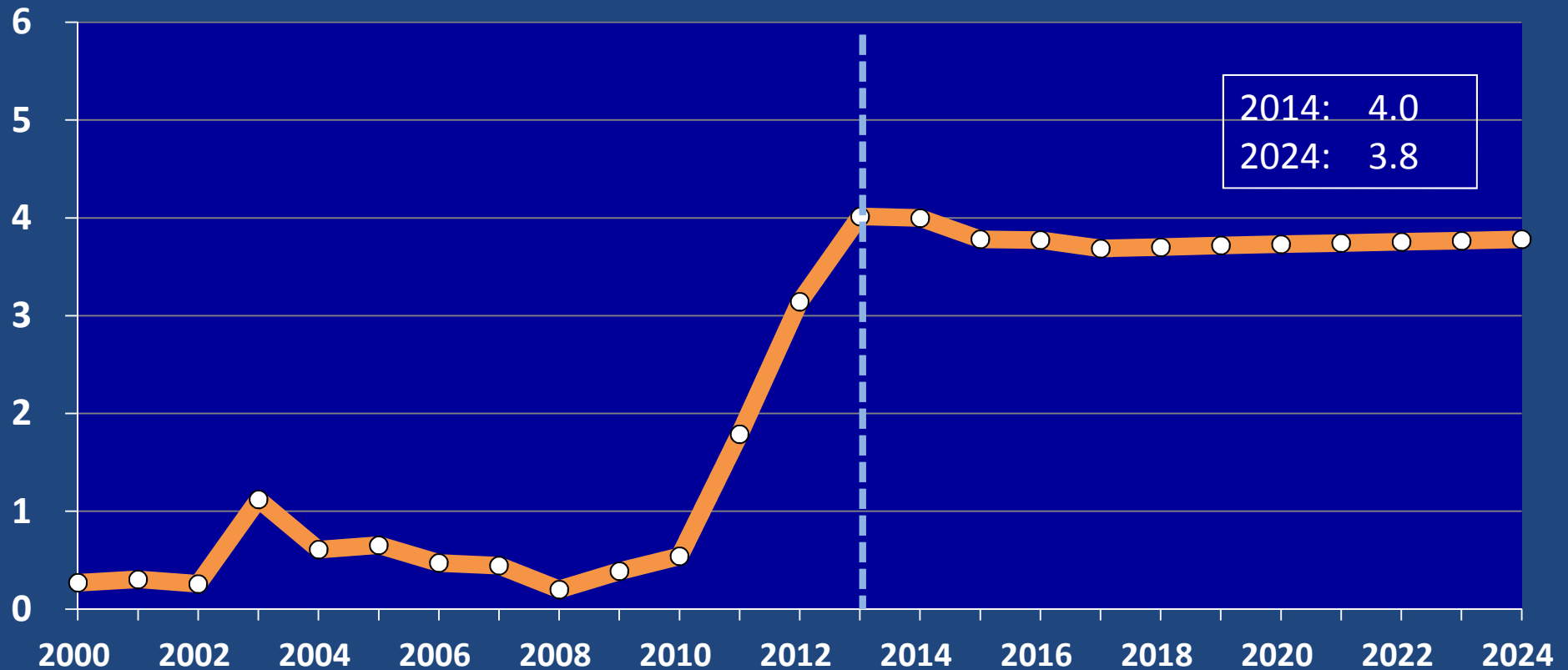
## Cambodia and Myanmar Rice Exports, MMT



- Increasing investments will support expanded exports from these two countries
- Average production (2014-24) exceeds consumption by 25.1% (surplus)

Source: USDA-PSD and AGRM projections, January 2015.

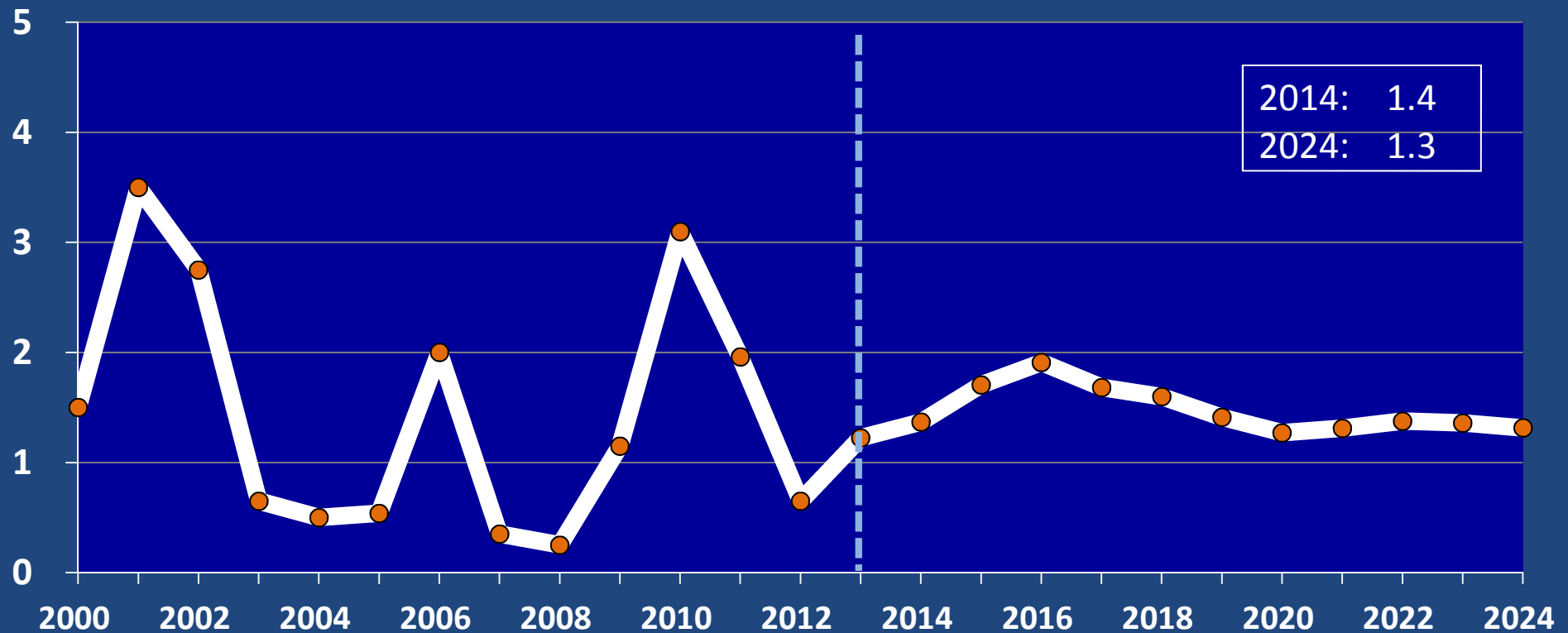
## People's Republic of China Rice Imports, MMT



- PRC to remain a major importer; population grows 0.4%, per capita use -0.5%
- Dependent on extent of government supports; TRQ implementation
- On average, production (2014-24) lags consumption by 0.6% (deficit)

Source: USDA-PSD and AGRM projections, January 2015.

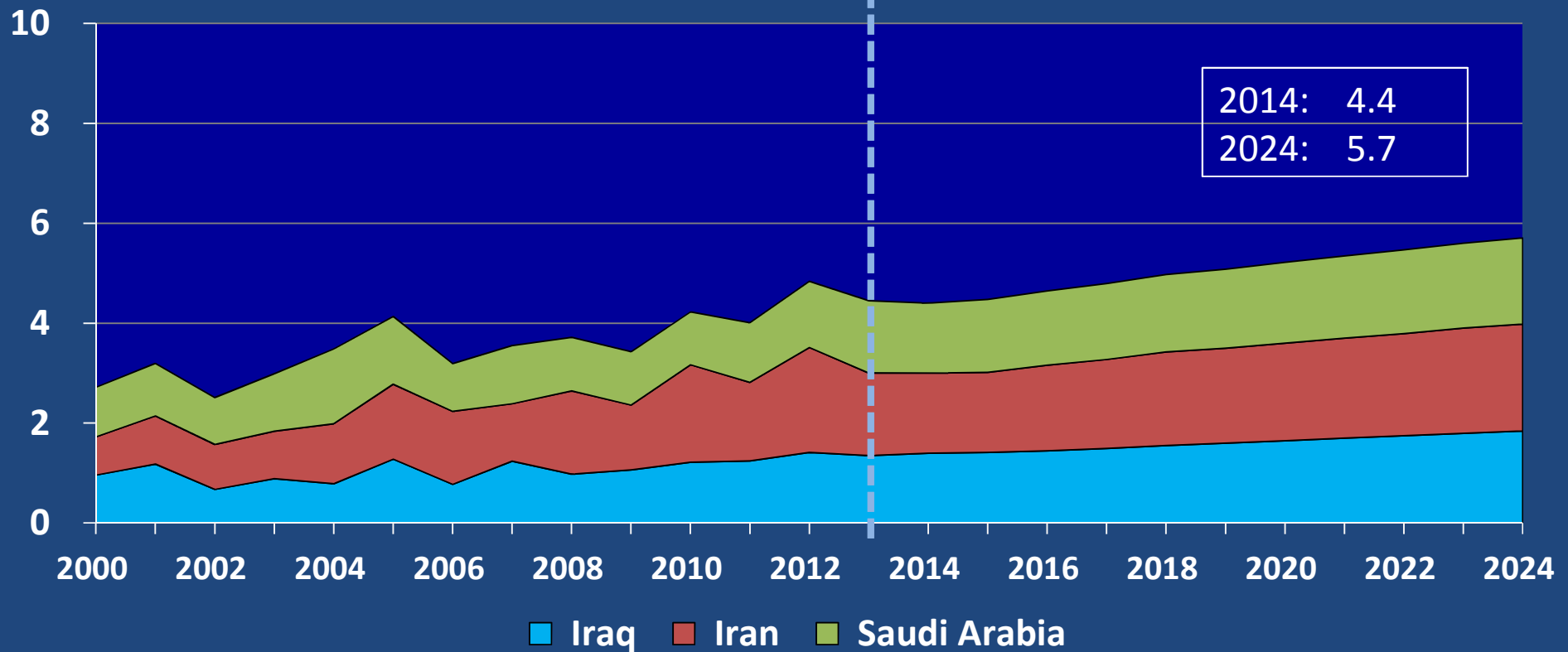
## Indonesia Rice Imports, MMT



- Indonesia to remain a major exporter despite self-sufficiency goal
- Population grows 1.0%; per capita use declines 0.3% per year
- Average production (2014-24) lags consumption by 3.8% (deficit)

Source: USDA-PSD and AGRM projections, January 2015.

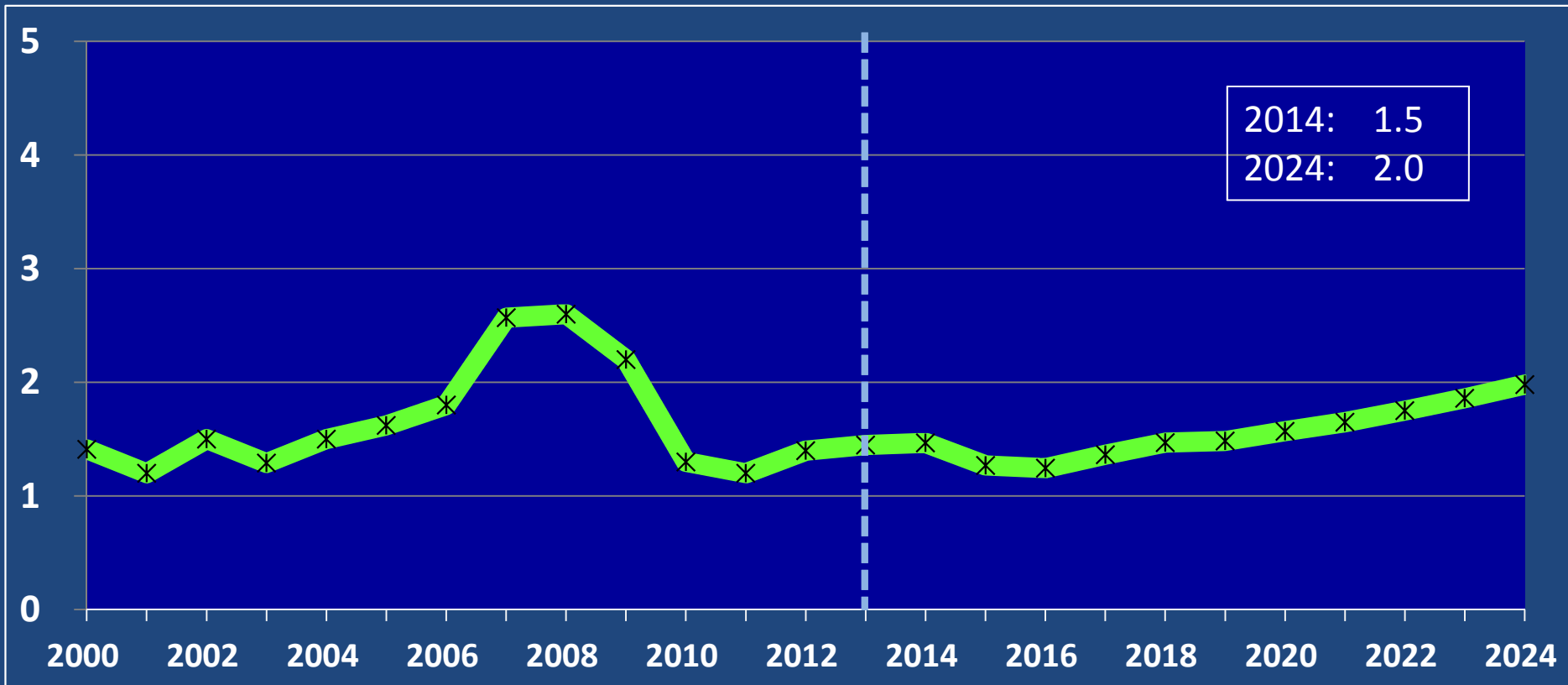
## Middle East Rice Imports, MMT



- Middle East consumption grows 2.1% annually,
- Population grows 1.6% and per capita use 0.5% per year
- Average production (2014-24) lags consumption by 71.1% (deficit)

Source: USDA-PSD and AGRM projections, January 2015.

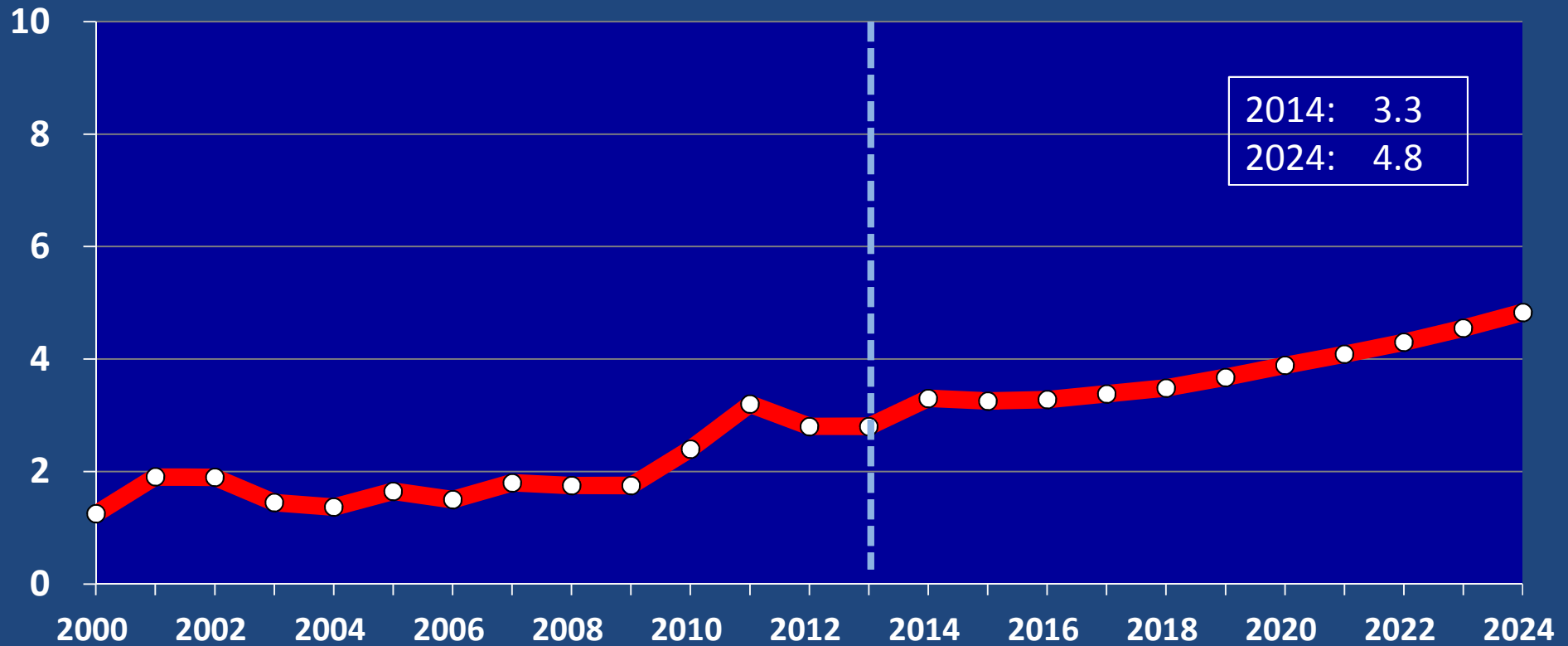
## Philippine Rice Imports, MMT



- The Philippines will remain a substantial importer despite government efforts to attain self-sufficiency; population grows 1.6%; per capita use flat
- Average production (2014-24) lags consumption by 10.1% (deficit)

Source: USDA-PSD and AGRM projections, January 2015.

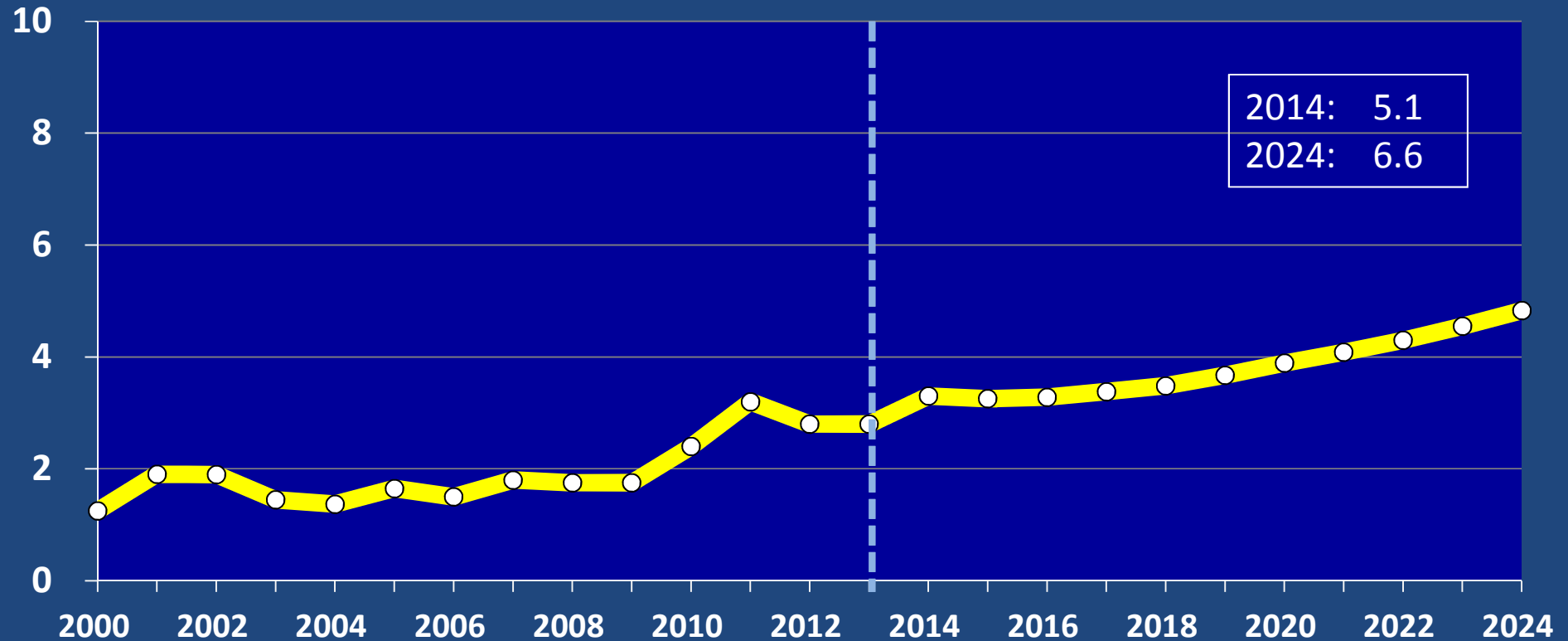
## Nigeria Rice Imports, MMT



- Nigeria emerges as the top importer over the baseline
- Consumption expands as population grows 2.7% and per capita use 1.5%
- Average production (2014-24) lags consumption by 51.5% (deficit)

Source: USDA-PSD and AGRM projections, January 2015.

## ECOWAS-14 Rice Imports, MMT (excluding Nigeria)



- ECOWAS-14 population grows 2.3%; per capita use 1.0%
- Average production (2014-24) lags consumption by 43.6% (deficit)

Source: USDA-PSD and AGRM projections, January 2015.

# Thank You!

## Comments/Questions?

