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## Arkansas Global Rice Economics Program

# International Rice Outlook

International Rice Baseline Projections, 2015-2025

By

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# Table of Contents

- List of Figures..... 5
- List of Tables..... 7
- International Rice Outlook ..... 11
- Abstract ..... 11
- Introduction..... 12
- Rice Policy Overview..... 13
- Macro Data for Major Exporting Countries ..... 13
- Macro Data for Major Importing Countries ..... 15
- Key Market Drivers ..... 17
  - Thailand Domestic Rice Policies ..... 17
  - Wide Margins between U.S. and Asian Rice Prices ..... 18
  - Growing Segmentation in Rice Markets ..... 19
- Overview of Global Rice Supply and Demand ..... 19
- Detailed Results of the Deterministic Baseline Analysis ..... 21
  - Total Global Rice Trade..... 22
  - Main Sources of Growth in Global Rice Trade..... 24
  - Rice Harvested Area and Production..... 26
  - Rice Domestic Consumption..... 27
  - Rice Global Stocks..... 28
    - Changing Dynamics in Global Rice Stocks ..... 28
- Rice Supply and Demand by World Region ..... 30
  - Africa..... 30
  - Americas ..... 30
  - Asia ..... 31

Europe .....	31
Oceania.....	31
World.....	31
ECOWAS.....	32
Results of Stochastic Baseline Analysis .....	32
Detailed Results of the Stochastic Baseline Analysis.....	32
Summary and Conclusions.....	32
Estimates of the Deterministic Baseline Analysis.....	34
Tables and Charts of Rice Supply, Utilization and Net Trade, 2015-2025 .....	34
Estimates of the Stochastic Baseline Analysis .....	89
Charts of Selected Price and Trade Variables Showing the 10 <sup>th</sup> and 90 <sup>th</sup> Percentiles, the Stochastic Mean, and the C.V. of Future Probable Distributions Based on Outcomes from 300 Random Draws .....	89
References .....	102

## List of Figures

Figure 1 Gross Domestic Product (GDP) growth of exporting countries, percent, 2010-2025.....	14
Figure 2 Nominal foreign exchange rate index (2010=100), exporting countries, US \$/local currency, 2010-2025.14	14
Figure 3. Population growth rates of exporting countries, percent, 2010-2025. ....	15
Figure 4. Gross Domestic Product (GDP) growth importing countries, percent, 2010-2025.....	16
Figure 5. Nominal foreign exchange rate index (2010=100), importing countries, US \$/local currency, 2010-2025. .....	16
Figure 6. Population growth rates of importing countries, percent, 2010-2025. ....	17
Figure 7. Long grain world reference rice prices, US \$ per metric ton, 2007-2025. ....	18
Figure 8. U.S. long grain and medium grain rice export prices relative to long grain world reference price, US \$ per metric ton, 2007-2025.....	19
Figure 9. World rice harvested area and yield, historical and projected, 1995-2025.....	21
Figure 10. World rice production, consumption, trade and stocks, historical and projected, 1995-2025. ....	21
Figure 11. Share of total global rice exports, million metric tons, 2013-2015 average and 2025. ....	23
Figure 12 Share of total global rice imports, million metric tons, 2013-2015 average and 2025.....	24
Figure 13. Sources of growth in global rice exports to 2025.....	25
Figure 14. Sources of growth in global rice imports to 2025. ....	26
Figure 15. Top world rice producing countries, historical and projected, million metric tons, 2002-2025.....	27
Figure 16. Top world rice consuming countries, historical and projected, million metric tons, 2002-2025.....	28
Figure 17. Top rice ending stocks countries, historical and projected, million metric tons, 2002-2025. ....	29
Figure 18. Share in world rice ending stocks of exporters and importers, historical and projected, 1982-2025.....	29
Figure 22 Stochastic Projection of Long Grain Rice International Reference Price, 2015-2025 .....	90
Figure 23 Stochastic Projection of U.S. Long Grain Rice FOB Export Price, 2015-2025 .....	90
Figure 24 Stochastic Projection Comparisons of International Reference and U.S. Long Grain Rice Export Prices, 2015-2025.....	91
Figure 25 Stochastic Projection of Medium Grain Rice Price, FOB California, 2014-2025 .....	91

Figure 26 Stochastic Projection of U.S. Season Average All Rice Farm Price, 2015-2025 .....	92
Figure 27 Stochastic Projection of U.S. Long Grain Average Farm Price, 2015-2025.....	92
Figure 28 Stochastic Projection of U.S. Medium Grain Average Farm Price, 2015-2025.....	93
Figure 29 Stochastic Projection of World Rice Total Trade, 2015-2025.....	93
Figure 30 Stochastic Projection of World Rice Area Harvested, 2015-2025 .....	94
Figure 31 Stochastic Projection of World Rice Milled Production, 2015-2025 .....	94
Figure 32 Stochastic Projection of World Total Rice Consumption, 2015-2025 .....	95
Figure 33 Stochastic Projection of World Rice Ending Stocks, 2015-2025 .....	95
Figure 34 Stochastic Projections of Thailand Net Rice Exports, 2015-2025 .....	96
Figure 35 Stochastic Projection of Thailand Rice Ending Stocks, 2015-2025 .....	96
Figure 36 Stochastic Projections of Vietnam Net Rice Exports, 2015-2025 .....	97
Figure 37 Stochastic Projections of India Net Rice Exports, 2015-2025.....	97
Figure 38 Stochastic Projection of India Rice Ending Stocks, 2015-2025 .....	98
Figure 39 Stochastic Projections of U.S. Net Rice Exports, 2015-2025 .....	98
Figure 40 Stochastic Projections of Philippine Net Rice Imports, 2015-2025 .....	99
Figure 41 Stochastic Projections of Indonesia Net Rice Imports, 2015-2025 .....	99
Figure 42 Stochastic Projections of People’s Republic of China Net Rice Imports, 2015-2025 .....	100
Figure 43 Stochastic Projections of Nigeria Net Rice Imports, 2015-2025.....	100
Figure 44 Stochastic Projections of ECOWAS-15 Net Rice Imports, 2015-2025.....	101

## List of Tables

Table 1 World Rice Net Trade by Country and International Reference Prices, 2015-2025 .....	35
Table 2 World Rice Supply, Utilization, Total Trade and Stocks-to Use, 2015-2025 .....	37
Table 3 U.S. Rice Supply, Utilization, Net Trade and Farm Prices, 2015-2025 .....	37
Table 4 Argentina Rice Supply, Utilization and Net Trade, 2015-2025 .....	38
Table 5 Australia Rice Supply, Utilization and Net Trade, 2015-2025 .....	38
Table 6 Bangladesh Rice Supply, Utilization and Net Trade, 2015-2025 .....	39
Table 7 Brazil Rice Supply, Utilization and Net Trade, 2015-2025 .....	39
Table 8 Brunei Darussalam Rice Supply, Utilization and Net Trade, 2015-2025 .....	40
Table 9 Cambodia Rice Supply, Utilization and Net Trade, 2015-2025 .....	40
Table 10 Cameroon Rice Supply, Utilization and Net Trade, 2015-2025 .....	41
Table 11 Canada Rice Utilization and Net Trade, 2015-2025 .....	41
Table 12 People’s Republic of China Rice Supply, Utilization and Net Trade, 2015-2025 .....	42
Table 13 Colombia Rice Supply, Utilization and Net Trade, 2015-2025 .....	42
Table 14 Cote D’Ivoire Rice Supply, Utilization and Net Trade, 2015-2025 .....	43
Table 15 Egypt Rice Supply, Utilization and Net Trade, 2015-2025 .....	43
Table 16 EU-28 Rice Supply, Utilization and Net Trade, 2015-2025 .....	44
Table 17 Ghana Rice Supply, Utilization and Net Trade, 2015-2025 .....	44
Table 18 Guinea Rice Supply, Utilization and Net Trade, 2015-2025 .....	45
Table 19 China-Hong Kong Rice Utilization and Net Trade, 2015-2025 .....	45
Table 20 India Rice Supply, Utilization and Net Trade, 2015-2025 .....	46
Table 21 Indonesia Rice Supply, Utilization and Net Trade, 2015-2025 .....	46
Table 22 Iran Rice Supply, Utilization and Net Trade, 2015-2025 .....	47
Table 23 Iraq Rice Supply, Utilization and Net Trade, 2015-2025 .....	47
Table 24 Japan Rice Supply, Utilization and Net Trade, 2015-2025 .....	48



Table 25 Kenya Rice Supply, Utilization and Net Trade, 2015-2025 .....	48
Table 26 Lao PDR Rice Supply, Utilization and Net Trade, 2015-2025 .....	49
Table 27 Liberia Rice Supply, Utilization and Net Trade, 2015-2025 .....	49
Table 28 Malaysia Rice Supply, Utilization and Net Trade, 2015-2025.....	50
Table 29 Mali Rice Supply, Utilization and Net Trade, 2015-2025 .....	50
Table 30 Mexico Rice Supply, Utilization and Net Trade, 2015-2025 .....	51
Table 31 Mozambique Rice Supply, Utilization and Net Trade, 2015-2025 .....	51
Table 32 Myanmar Rice Supply, Utilization and Net Trade, 2015-2025.....	52
Table 33 Nigeria Rice Supply, Utilization and Net Trade, 2015-2025.....	52
Table 34 Pakistan Rice Supply, Utilization and Net Trade, 2015-2025.....	53
Table 35 Philippines Rice Supply, Utilization and Net Trade, 2015-2025.....	53
Table 36 Saudi Arabia Rice Supply, Utilization and Net Trade, 2015-2025 .....	54
Table 37 Senegal Rice Supply, Utilization and Net Trade, 2015-2025.....	54
Table 38 Sierra Leone Rice Supply, Utilization and Net Trade, 2015-2025 .....	55
Table 39 Singapore Rice Utilization and Net Trade, 2015-2025.....	55
Table 40 South Africa Rice Supply, Utilization and Net Trade, 2015-2025 .....	55
Table 41 South Korea Rice Supply, Utilization and Net Trade, 2015-2025 .....	56
Table 42 Taiwan Rice Supply, Utilization and Net Trade, 2015-2025.....	56
Table 43 Tanzania Rice Supply, Utilization and Net Trade, 2015-2025 .....	57
Table 44 Thailand Rice Supply, Utilization and Net Trade, 2015-2025 .....	57
Table 45 Turkey Rice Supply, Utilization and Net Trade, 2015-2025 .....	58
Table 46 Uruguay Rice Supply, Utilization and Net Trade, 2015-2025.....	58
Table 47 Vietnam Rice Supply, Utilization and Net Trade, 2015-2025.....	59
Table 48 Cuba Rice Supply, Utilization and Net Trade, 2015-2025 .....	59
Table 49 Costa Rica Total Rice Supply, Utilization and Net Trade, 2015-2025.....	60

Table 50 Dominican Republic Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	60
Table 51 Guatemala Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	61
Table 52 Honduras Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	61
Table 53 Nicaragua Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	62
Table 54 Panama Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	62
Table 55 Chile Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	63
Table 56 Paraguay Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	63
Table 57 Peru Total Rice Supply, Utilization and Net Trade, 2015-2025.....	64
Table 58 Africa Total Rice Supply, Utilization and Net Trade, 2015-2025.....	64
Table 59 African Aggregate of Countries with Individual AGRM Models – Rice Supply, Utilization, and Net Trade, 2015-2025.....	65
Table 60 African Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025 .....	65
Table 61 Western Hemisphere Rice Supply, Utilization and Net Trade, 2015-2025.....	66
Table 62 Western Hemisphere Aggregate of Countries with Individual AGRM Models – Rice Supply, Utilization and Net Trade, 2015-2025.....	66
Table 63 Western Hemisphere Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025 .....	67
Table 64 Asian Rice Supply, Utilization and Net Trade, 2015-2025 .....	67
Table 65 Asian Aggregate of Countries with Individual Models in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025.....	68
Table 66 Asian Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2013-2025 .....	68
Table 67 European Total Rice Supply, Utilization and Net Trade, 2015-2025.....	69
Table 68 European Aggregate of Countries Modeled Individually in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025 .....	69
Table 69 European Aggregate of Other Countries Modeled as a Group in AGRM - Rice Supply, Utilization and Net Trade, 2015-2025 .....	70
Table 70 Oceania Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	70

Table 71 Oceania Aggregate of Countries Modeled individually in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025.....	71
Table 72 Oceania Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization, and Net Trade, 2015-2025 .....	71
Table 73 World Total Rice Supply, Utilization and Net Trade, 2015-2025 .....	72
Table 74 World Aggregate of Countries Modeled individually in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025.....	72
Table 75 World Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025 .....	73
Table 76 ECOWAS-7* Rice Supply, Utilization and Net Trade, 2015-2025.....	73
Table 77 ECOWAS-8** Rice Supply, Utilization and Net Trade, 2015-2025.....	74
Table 78 ECOWAS-15 (sum of ECOWAS-7 and ECOWAS-8) Rice Supply, Utilization and Net Trade, 2015-2025 .....	74
Table 79 Projected Rice Milled Yields Per Hectare for the World and Selected Countries, 2015-2025 .....	75
Table 80 Projected Per Capita Rice Utilization for the World and Selected Countries, 2013-2025.....	77
Table 81 Total World Rice Trade by Country, 2015-2025 .....	79
Table 82 Total World Long Grain Rice Trade by Country, 2015-2025 .....	81
Table 83 Total World Medium Grain Rice Trade by Country, 2015-2025 .....	83
Table 84 World Rice Prices and Price Relationships, 2015-2025 .....	84
Table 85 Detailed U.S. Rice Supply and Utilization (in English Units), 2015-2025 .....	85
Table 86 U.S. Long Grain Rice Supply and Utilization (in English Units), 2015-2025.....	86
Table 87 U.S. Medium Grain Rice Supply and Utilization (in English Units), 2015-2025.....	86
Table 88 Arkansas Rice Supply by Type, 2015-2025.....	87
Table 89 Louisiana Rice Supply by Type, 2015-2025 .....	87
Table 90 Texas Rice Supply by Type, 2015-2025 .....	88
Table 91 Missouri Rice Supply by Type, 2015-2025 .....	88
Table 92 Mississippi Rice Supply by Type, 2015-2025.....	88
Table 93 California Rice Supply by Type, 2015-2025.....	88

# International Rice Outlook

## International Rice Baseline Projections, 2015-2025

Eric J. Wailes and Eddie C. Chavez

**Keywords:** Rice, baseline, supply and demand projections policy, deterministic, stochastic, Arkansas Global Rice Model

**JEL Codes:** C02, F01, F14, F17, Q17, Q18, R11

### Abstract

This outlook contains updated baseline rice projections from the Arkansas Global Rice Economics Program (AGREP) for U.S. and international rice economies as of January 2016. The purpose of this document is to present the current state and the expected directions of the rice economies in the world by assessing their potential supply and demand paths over the next decade. This set of projections serves as a baseline for evaluating and comparing alternative macroeconomic, policy, weather, and technological scenarios. The estimates are intended for use by government agencies and officials, farmers, consumers, agribusinesses and other stakeholders who conduct medium- and long-term planning.

The AGREP baseline projections are grounded in a series of assumptions about the general economy, agricultural policies, weather, and technological change. It is generally assumed that current agricultural policies will be continued in the United States and other countries included in this study. The projections in this outlook are based on the information available as of January 2016. In light of the volatility of the global rice economy, a stochastic analysis is included in this report to provide a better understanding of the probable uncertainty of future outcomes. The stochastic estimates establish the likely upper and lower bound estimates for selected variables, which serve as indications of inherent risks associated with the global rice economy.

We acknowledge and appreciate the collaboration with the team at FAPRI-MU, based at the University of Missouri in Columbia, but we take full responsibility for any errors in this document.

## Introduction

This updated outlook is not a set of predictions but rather a framework to present a baseline of the likely direction of key variables in the global rice economy and the degree of variability on some of the key variables. Deterministic and stochastic baseline projection estimates presented in this report are generated using the Arkansas Global Rice Model (AGRM). AGRM is a statistical simulation and econometric framework developed and maintained by the Arkansas Global Rice Economics Program (AGREP) with the Department of Agricultural Economics and Agribusiness at the University of Arkansas in Fayetteville. It covers 61 rice-producing/exporting and rice-consuming/importing countries/regions.

The AGRM has benefited from working closely with the Food and Agricultural Policy Research Institute (FAPRI) based at the University of Missouri, Columbia which maintains U.S. agricultural and other commodity models. They provide projections on variable costs of production for U.S. rice, and prices and net returns for other U.S. crops which are iteratively-transmitted into the AGRM country models until an equilibrium condition is reached.

In particular, prices and net returns for corn, soybeans, and wheat are relevant considering that these commodities are substitute crops for rice in the U.S. and other countries. For example, rice area competes with a number of crops including soybeans, corn, and cotton in rice-producing states in the U.S. (Arkansas, Louisiana, Missouri, Mississippi, Texas, and California). In the People's Republic of China (PRC), rice competes with corn in the provinces of Guangxi, Heilongjiang, Jilin, and Liaoning; with wheat in the province of Jiangsu; and with both corn and wheat in the provinces of Anhui, Chongqing, Guizhou, Hubei, Ningxia, Sichuan, and Yunnan. In India, rice competes with wheat particularly in the northern states (Carriquiry et al., 2012; Wailes and Chavez, 2013).

The historical rice data is obtained from the Production, Supply, and Distribution (PS&D) online database (USDA-FAS, 2016) and Rice Outlook (USDA-ERS, 2016) as of January 2016. The AGRM rice marketing years by country generally follow the USDA system. For example, *the year 2015 or marketing year 2015/16* in the model refers to January 2016–December 2016 for Thailand, Vietnam, and Indonesia; October 2015–September 2016 for India; July 2015–June 2016 for the Philippines; August 2015–July 2016 for the U.S.; and April 2016–March 2017 for South American countries. See the link <http://apps.fas.usda.gov/psdonline/psdAvailability.aspx> for details. The annual compound growth rates as well as the total growth numbers presented in this document are estimated using the three-year average from 2013 through 15 as the base year; and cover the next 10-year period ending in 2025.

The global model is disaggregated into 56 of the major rice producing, consuming and trading rice countries/regions; and the rest-of-the-world is grouped into five regional aggregations: Africa, the Americas, Asia, Europe, and Oceania. With rice as an ascendant food staple in Sub-Saharan Africa, we provide projections of selected West African countries and for the ECOWAS (the Economic Community of West African States). Each country or regional model includes a supply sector (harvested area and yields), a demand sector (per capita use), with trade, stocks, and price linkage equations. Net global rice trade for long grain and medium grain solves for the two respective world reference prices, long grain and medium grain.

The deterministic baseline assumes the following: a continuation of existing policies; IHS Global Insight projections for macroeconomic variables; no new WTO Doha Round trade reforms; and average weather conditions. Growth rates in rice yields in selected countries consider the potential positive impacts from the Global Rice Science Partnership (GRiSP) R&D funding on global rice productivity.

The stochastic baseline provides a range of probable outcomes (confidence intervals), as opposed to the deterministic analysis which generates only average point estimates. Stochastic estimates are useful given the fact that underlying assumptions in the deterministic baseline usually do not hold true in reality, i.e., actual market outcomes deviate from average estimates. Stochastic analysis provides information on risk and uncertainty which is an important characteristic of the international rice economy.

The stochastic framework is generated using multivariate empirical distributions (MVE) of the yield variable for each of the 61 countries and regions in the model, as well as for each of the six rice-producing states in the United States. Yield is used because it varies by year and by country; and is very sensitive to changes in weather conditions and water availability—factors that are critical for rice production. The MVE takes into account serial and geographical covariance. A total of 300 random draws are implemented using a 32-year empirical distribution of historical yields from 1983 through 2014, generated using the software Simulation & Econometrics to Analyze Risk (Simetar) developed by Richardson et al.(2008).

## **Rice Policy Overview**

The rice sector policy assumptions by country are documented in Appendix Table 1 of the publication by Wailes and Chavez (2012). Current domestic and trade policies (e.g. tariff rates) are maintained over the baseline.

## **Macro Data for Major Exporting Countries**

Basic macro data are presented for major exporting countries (Figures 1-3) and importing countries (Figures 4-6). Included are growth in the economy as indicated by annual changes in Gross Domestic Product (GDP), as well as foreign exchange paths and population growth.

For the major exporters' group of countries, annual GDP generally grows from 5-8% over the baseline period, except for Thailand which has relatively low growth of 2-4% (Figure 1). The global rice market is denominated in US dollars hence exchange rate is relevant in rice trade. Figure 2 shows nominal foreign exchange rate indices in terms of US\$ per local currency using 2010 as the base. Thailand and India have currencies that are closely tied to the US dollar over the baseline period, whereas those of Vietnam, Pakistan, Myanmar, and Cambodia are depreciating—a situation reflects improving export competitiveness. The population of each of the major exporters is growing at a declining rate (Figure 3).

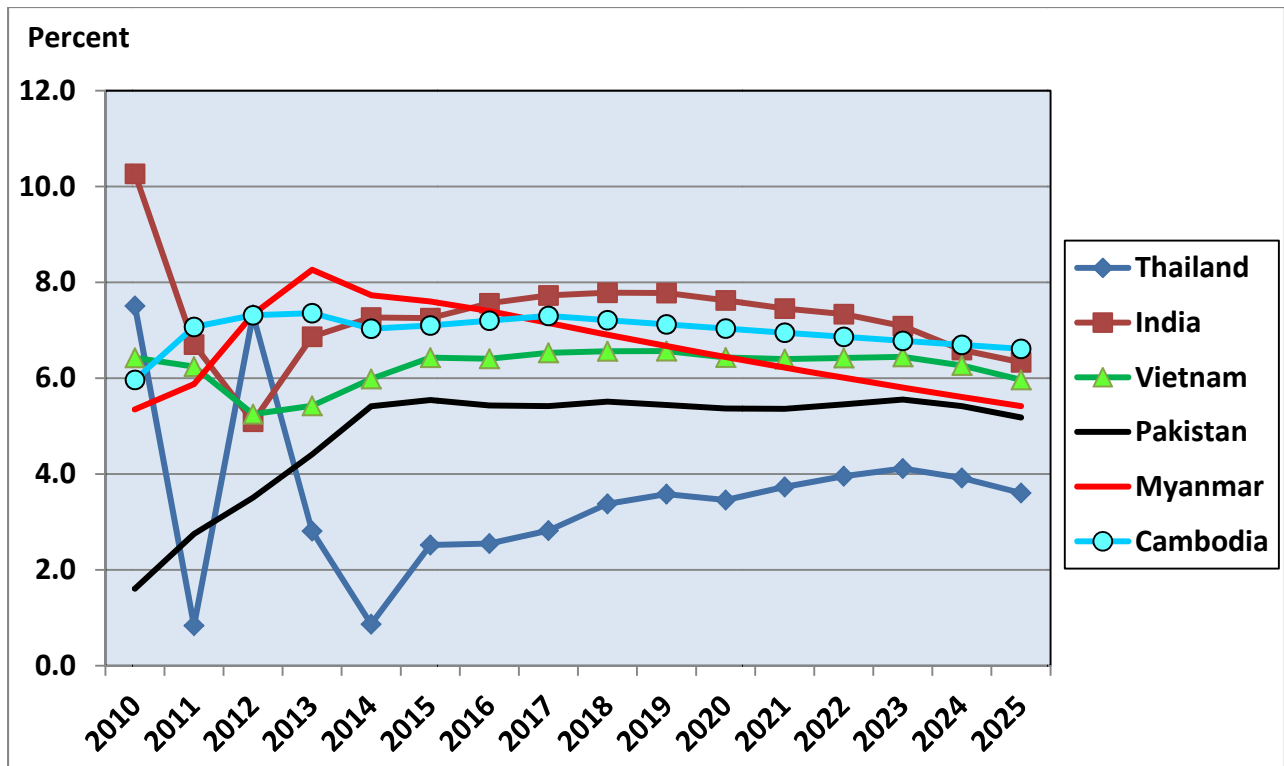


Figure 1 Gross Domestic Product (GDP) growth of exporting countries, percent, 2010-2025.

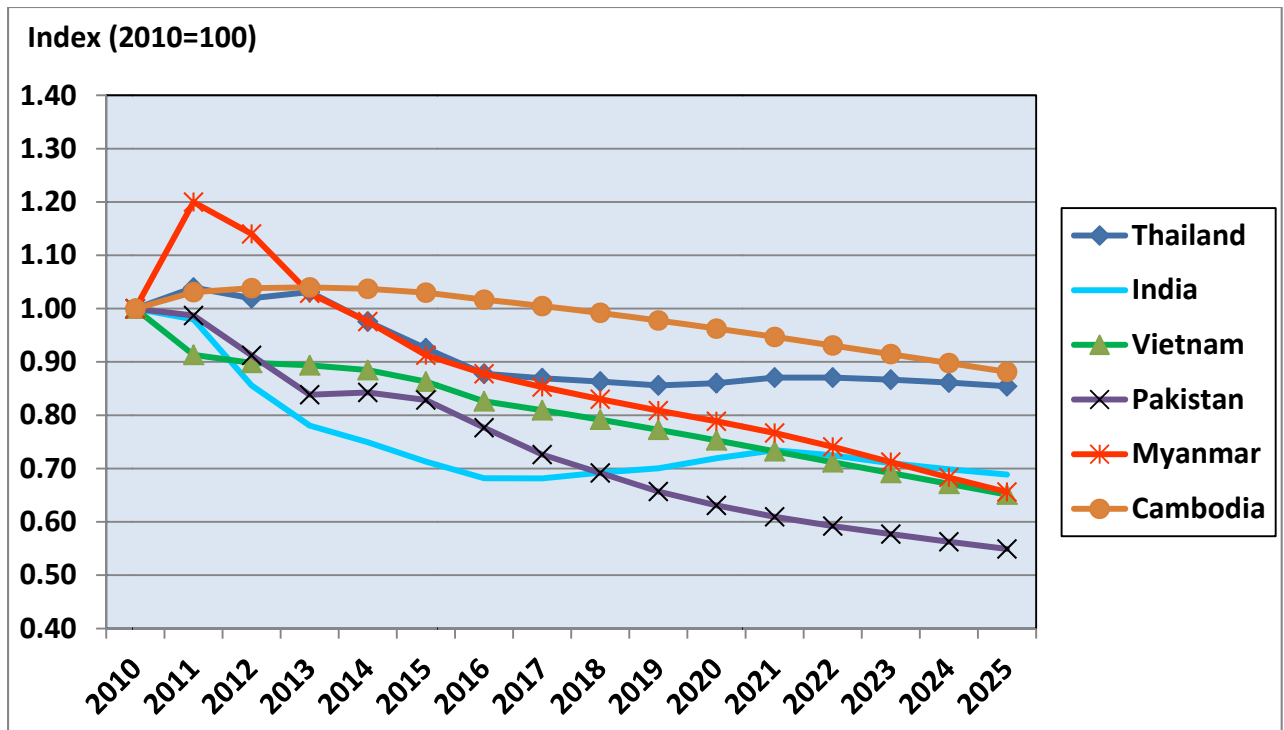


Figure 2 Nominal foreign exchange rate index (2010=100), exporting countries, US \$/local currency, 2010-2025.

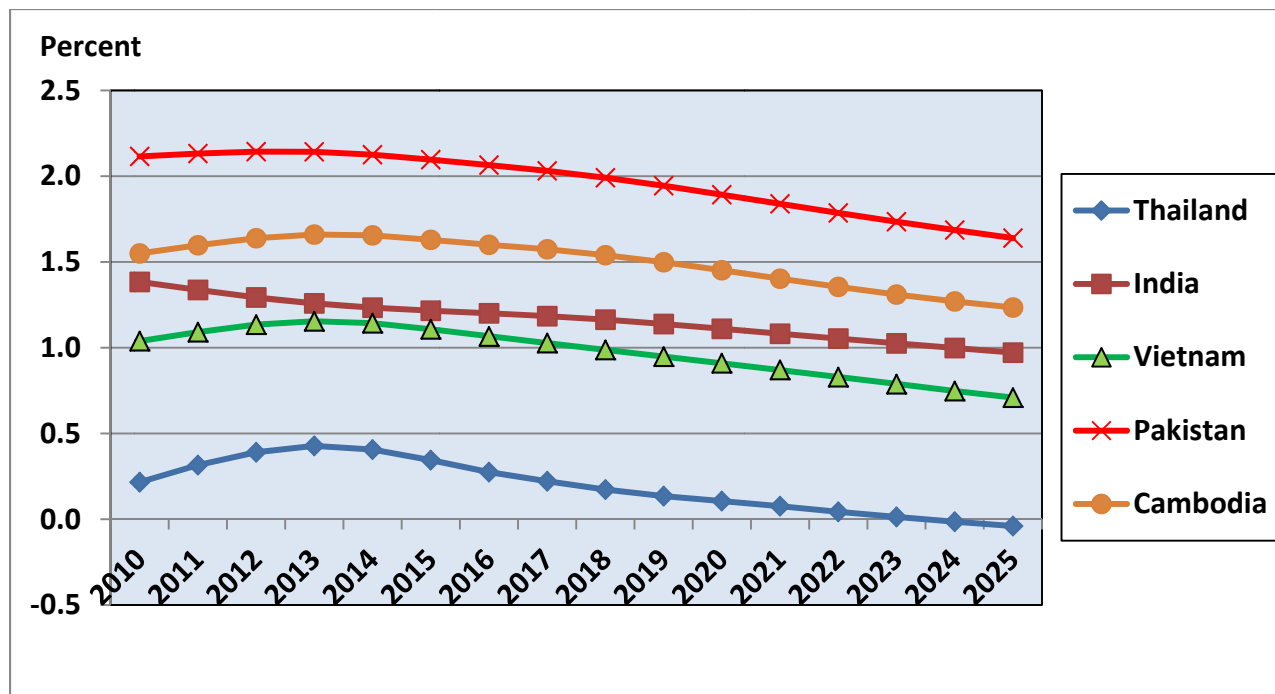


Figure 3. Population growth rates of exporting countries, percent, 2010-2025.

### Macro Data for Major Importing Countries

Figure 4 presents the annual GDP growth rates of the major rice importing countries which generally range from 4-8% over the baseline period, except for the Middle East countries and Nigeria which have lower growth rates in the near term.

Figure 5 shows that China’s currency depreciates initially then appreciates thereafter—which favors the country’s sustained level of rice imports. The currencies of the Philippines and Saudi Arabia are stable while that of Indonesia depreciates in the near term and then stabilizes. Iran, Iraq, and Nigeria have depreciating currencies making their imports more expensive.

The population growth rates of the Philippines and Nigeria are relatively steady; while the populations of the other rice importing countries are growing at declining rates (Figure 6).



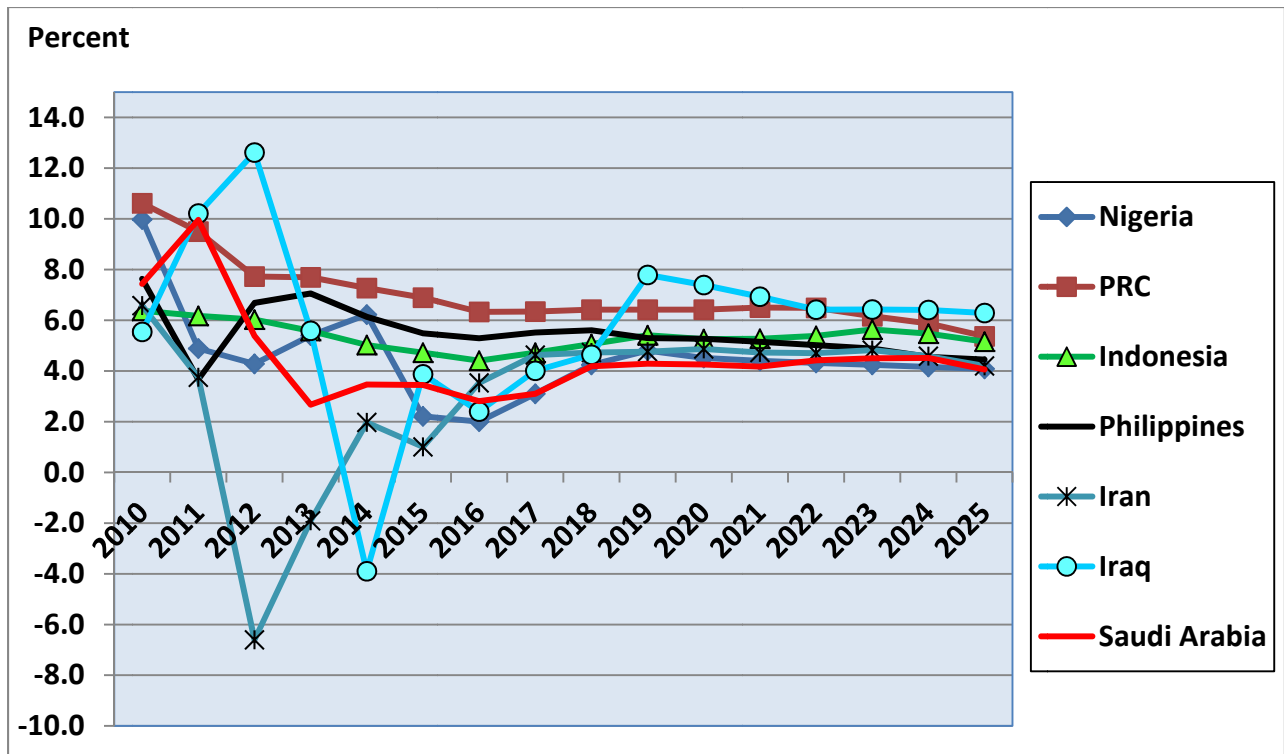


Figure 4. Gross Domestic Product (GDP) growth importing countries, percent, 2010-2025.

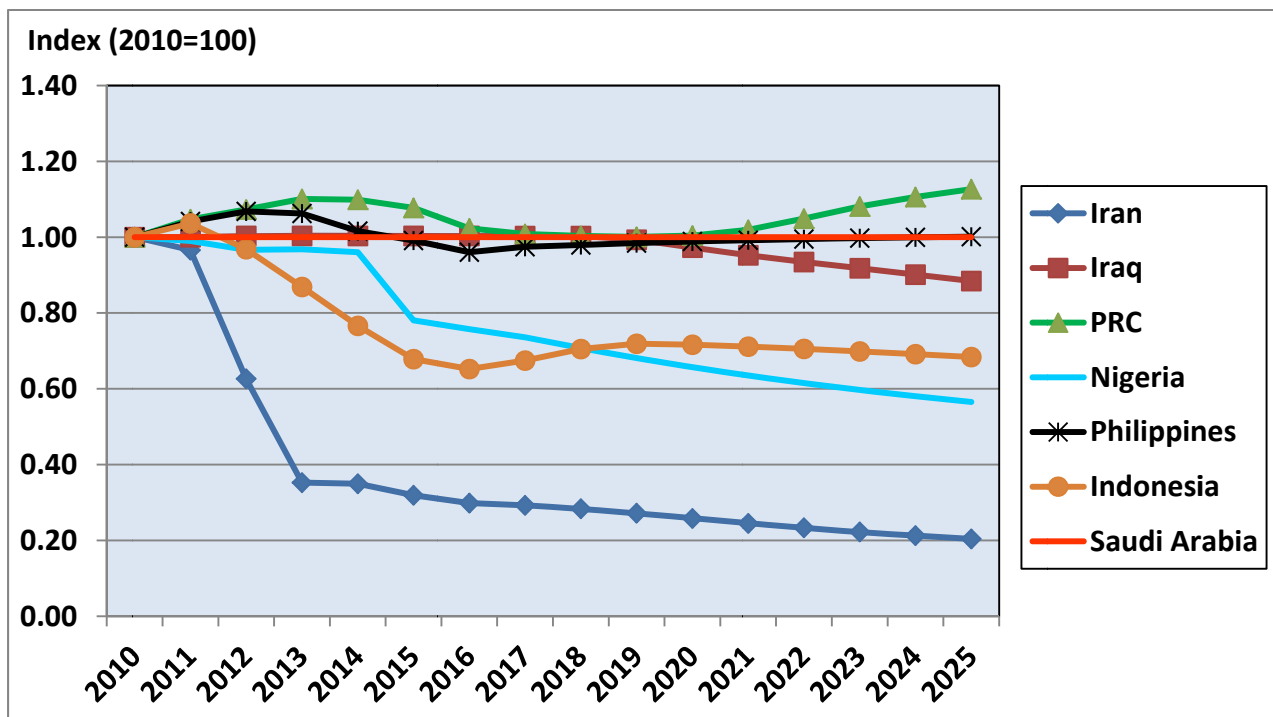


Figure 5. Nominal foreign exchange rate index (2010=100), importing countries, US \$/local currency, 2010-2025.

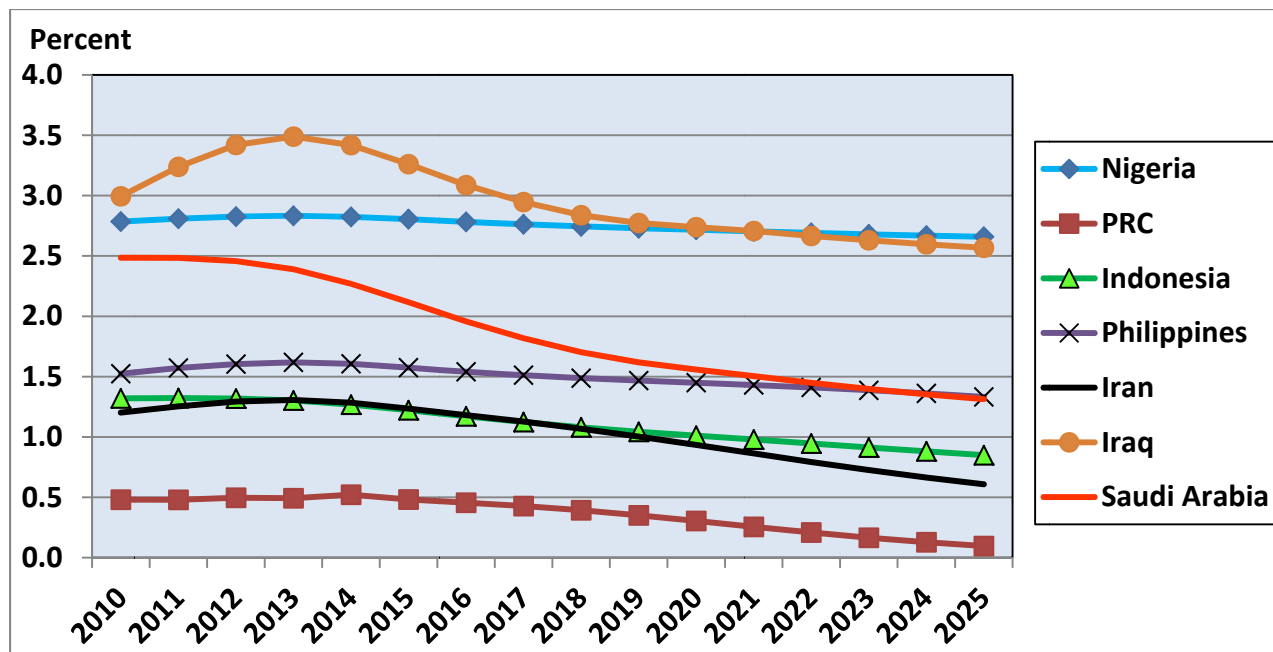


Figure 6. Population growth rates of importing countries, percent, 2010-2025.

## Key Market Drivers

### *Thailand Domestic Rice Policies*

The global rice market has recently been dominated by Thailand’s suspension of its controversial and costly paddy pledging program (PPP), a politically-motivated price-floor support policy for Thai farmers (Wailes and Chavez, 2013). As a result, Thailand re-captured its leadership position in global rice trade that it lost previously to India due to PPP-related uncompetitive prices.

Following the May 2014 coup, the PPP was discontinued by the new military government and replaced with subsidized credit and inputs to farmers (USA Rice Federation, 2014); and a limited pledging program for fragrant and glutinous rice was implemented (USDA-FAS, 2014). This situation caused the Thai long grain rice price to become competitive again; and more representative of prevailing international market prices---thus regaining its role as a useful reference price.

Over the next decade, growth in global domestic use is projected to exceed domestic supply causing increasing total rice trade and steadily increasing nominal long grain international prices. Major rice-deficit countries continue to import as domestic production falls short of domestic demand despite subsidies and expressed desires to achieve self-sufficiency.

The average long grain rice international reference price (Thai 100%B) increases from \$405 per mt (2013-2015 average) to \$545 per mt in 2025. This price path will most likely experience volatility as weather shocks (droughts and uncertain monsoons) and policy interventions occur. Over the same period, international medium grain rice prices are projected to remain at a relatively higher level, ranging from \$828-845 per mt (Table 1 and Figure 7), as a lack of substitution and market segmentation remains in trade flows and prices of long and medium grain rice markets.

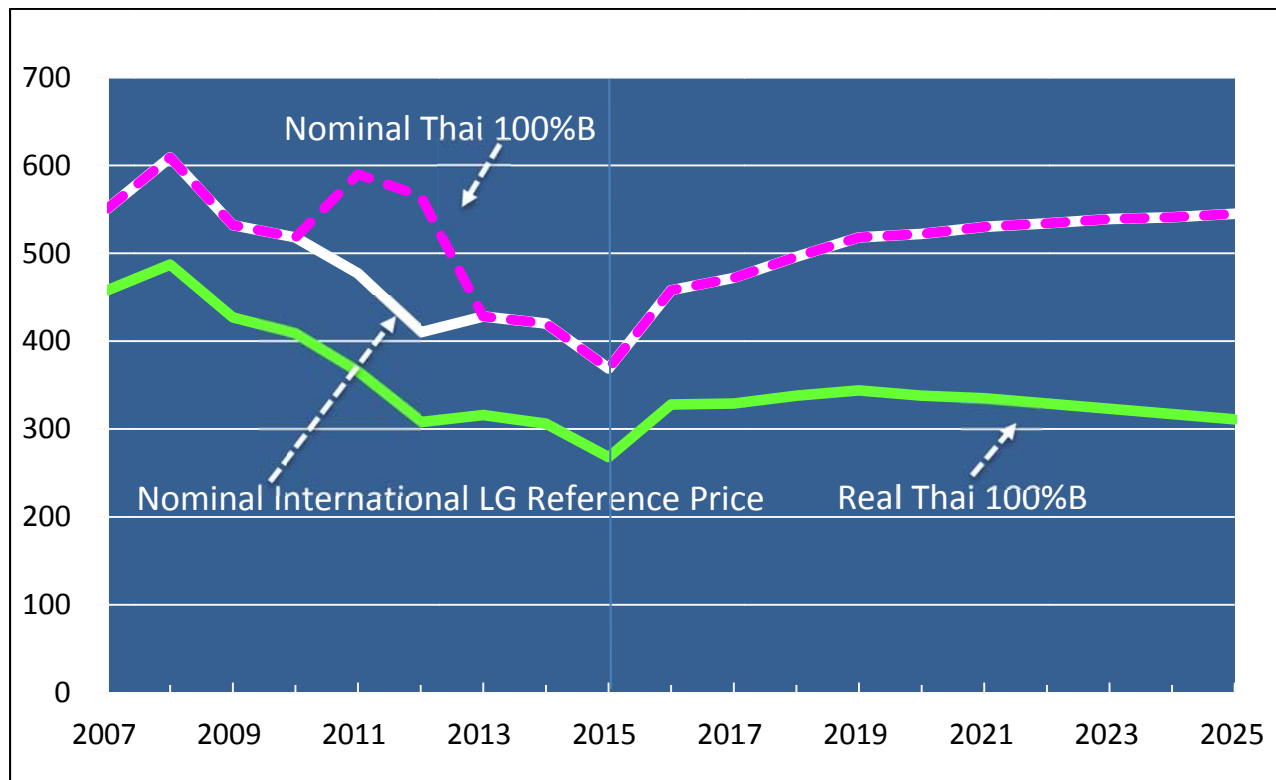
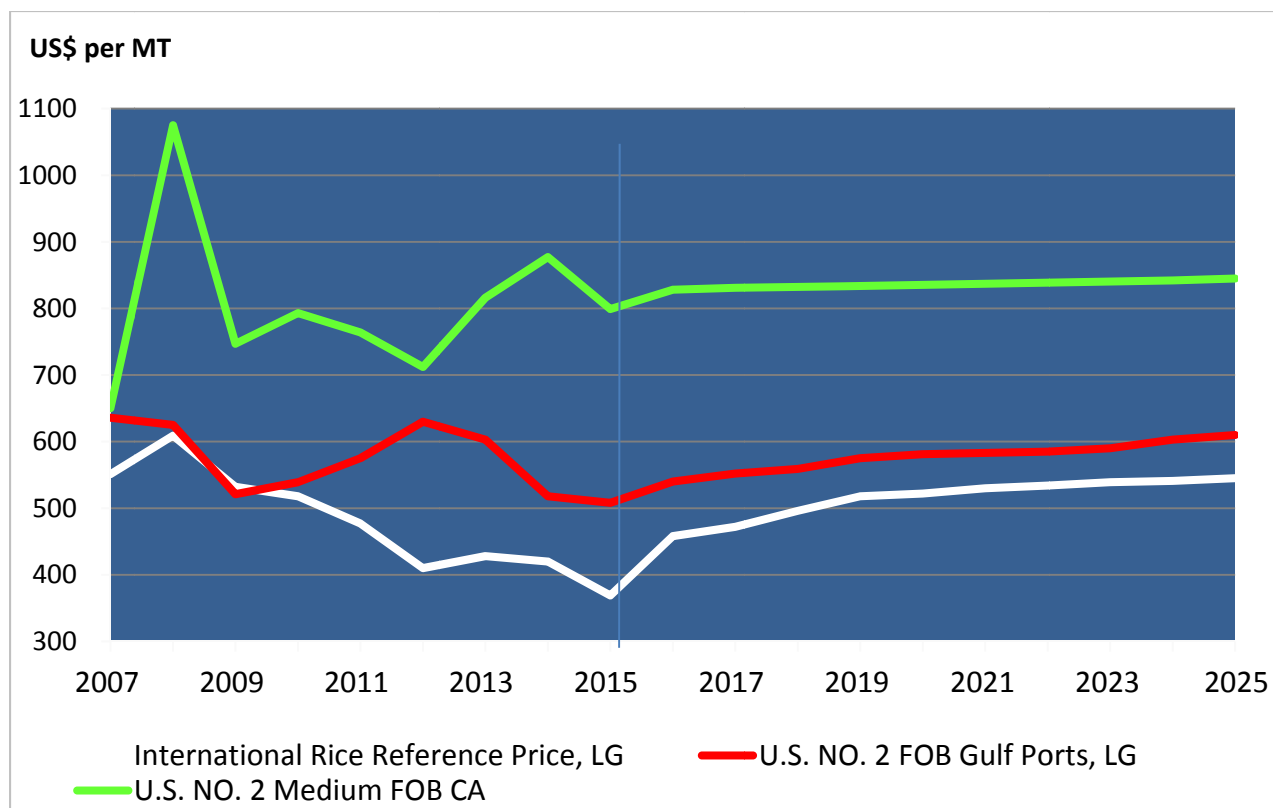


Figure 7. Long grain world reference rice prices, US \$ per metric ton, 2007-2025.

### **Wide Margins between U.S. and Asian Rice Prices**

While long grain Thai prices and other exporter prices have recently converged, Western Hemisphere (U.S. and Mercosur) prices have been substantially higher---with margins to Asian prices reaching as high as nearly \$200 per mt in September 2015. We view this as an unsustainable relationship and project some convergence between Asian and Western Hemisphere prices of long grain.. Margins have narrowed since the fall of 2015 and are projected to further decline to a more historically-consistent level of about \$65 per mt by 2025, the end of the projection period (Table 1 and Figure 8). Rigidity in moving the margin narrower is based on quality differences and negotiated tariff preferences for US rice in bilateral and regional trade agreements.



**Figure 8. U.S. long grain and medium grain rice export prices relative to long grain world reference price, US \$ per metric ton, 2007-2025.**

### ***Growing Segmentation in Rice Markets***

There is increasing segmentation in trade flows and prices of long and medium grain markets. This is indicated by the recent trend where the medium California rice market is increasingly separated from long grain. The lack of substitution in demand for medium grain rice provides support for a sustained higher price going forward.

### **Overview of Global Rice Supply and Demand**

Rice is the most important food crop of the developing world and the staple food of more than half of the world's population, accounting for more than 20% of daily caloric requirement (IRRI, 2013). International rice prices are volatile due to a number of reasons. Rice has price inelastic supply and demand throughout much of Asia, where it is the dominant food staple. While rice is the primary staple for half the world's population, it is thinly-traded. Only about 7% of rice production is traded as opposed to 10 percent for coarse grains and 16 percent for wheat (Wailes and Chavez, 2012). Additionally, the international rice trade is highly concentrated, with five dominant players (Thailand, India, Vietnam, Pakistan, and the U.S.) accounting for over 80% of global net trade (Table 1). Supply disturbances in any of these five countries can transmit price shocks easily onto the world market.

Shown in Figures 9 and 10 are the historical and projected paths of world rice supply and utilization. Over the projection period, India and the People's Republic of China (PRC) will continue to account for

the bulk of the global rice production and consumption. Together, these two countries are projected to account for 35.3% of the world population from 2015-2025. Over the same period, they will have an average combined share of 45.3% of world rice area harvested, 51.2% of total milled rice production, 50.2% of total rice consumption, and 66.2% of world rice ending stocks.

Global rice output is projected to expand over the next decade, driven by the use of higher-yielding varieties and hybrids and other improved production technologies—in line with more subsidies for self-sufficiency programs of major consuming countries. World production is projected to expand by 50.2 mmt over the next decade, equivalent to a growth of 1.0% per year; and reaching a total global output of 525.8 million metric tons (mmt) in 2025 with 90% of the growth from yield improvement and 10% from increases in area harvested (Table 2).

By volume, 34.1% of the expected output growth over the next decade will come from India; 40.9% from the seven countries of Bangladesh, Indonesia, Thailand, Cambodia, Myanmar, Philippines, and Vietnam combined; and 9.0% from the 15-member Economic Community of West African States (ECOWAS). Rice output of China however, declines by a total of 1.2 mmt, and production by Japan and South Korea decline by a combined 1.1 mmt over the same period. Total U.S. rice production, on the other hand, is projected to increase by a total of about 1.1 mmt over the same period, equivalent to a 1.6% annual growth—with annual growth of 1.0% in area harvested and 0.6% annual yield growth (Table 3).

Factors driving global rice consumption are income, population, and other demographic variables. Rising incomes dampen rice demand in some Asian countries where rice is considered an inferior good. These countries include Japan, Taiwan, PRC, Vietnam, and Thailand. Demographic trends also weaken rice demand as aging populations and increasing health consciousness shift preferences away from carbohydrates and towards protein-based diets.

Over the baseline, global rice consumption is projected to increase by 43.6 mmt reaching 524.9 mmt in 2025—a growth of 0.8% per year, with projected population growth of 1.1% per year offset partly by a 0.3% decline in average world rice per capita use (Table 2).

About 31.3% of the total consumption growth is accounted for by India; 24.6% by the four-country total of Bangladesh, Indonesia, the Philippines, and Myanmar; and 17.8% by ECOWAS. U.S. rice consumption increases by nearly 280 tmt over the same period, reaching 4.3 mmt in 2025 or an annual growth of 0.7%; which is solely coming from population growth as per capita use declines slightly (Table 3).

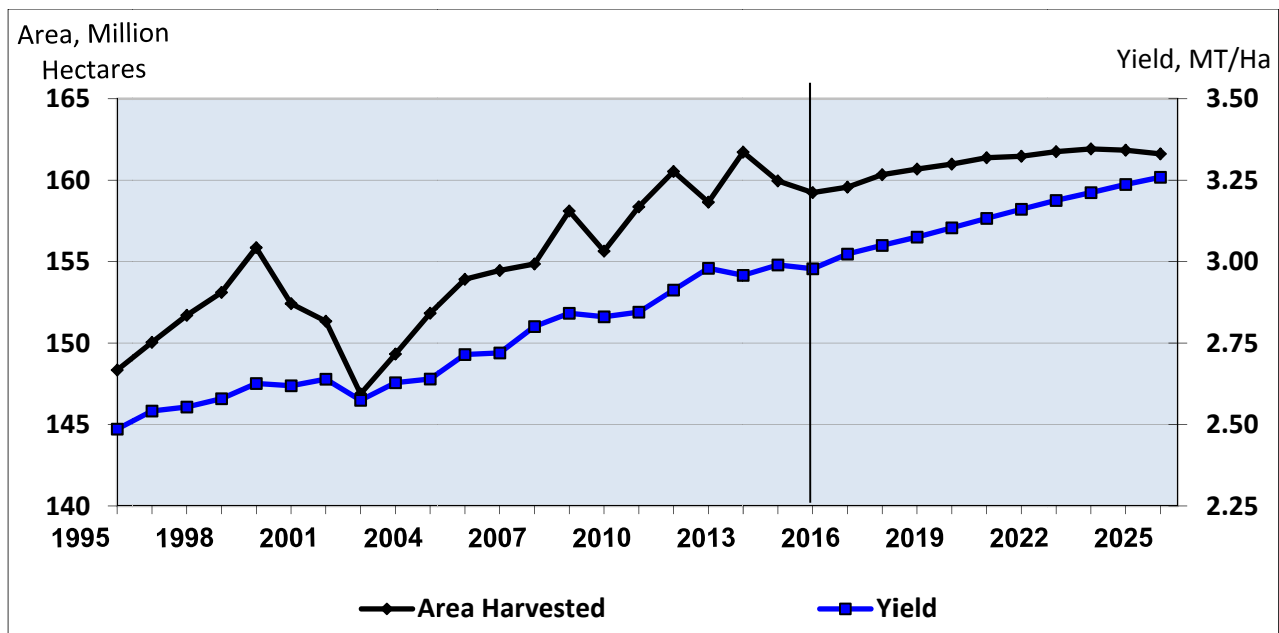


Figure 9. World rice harvested area and yield, historical and projected, 1995-2025.

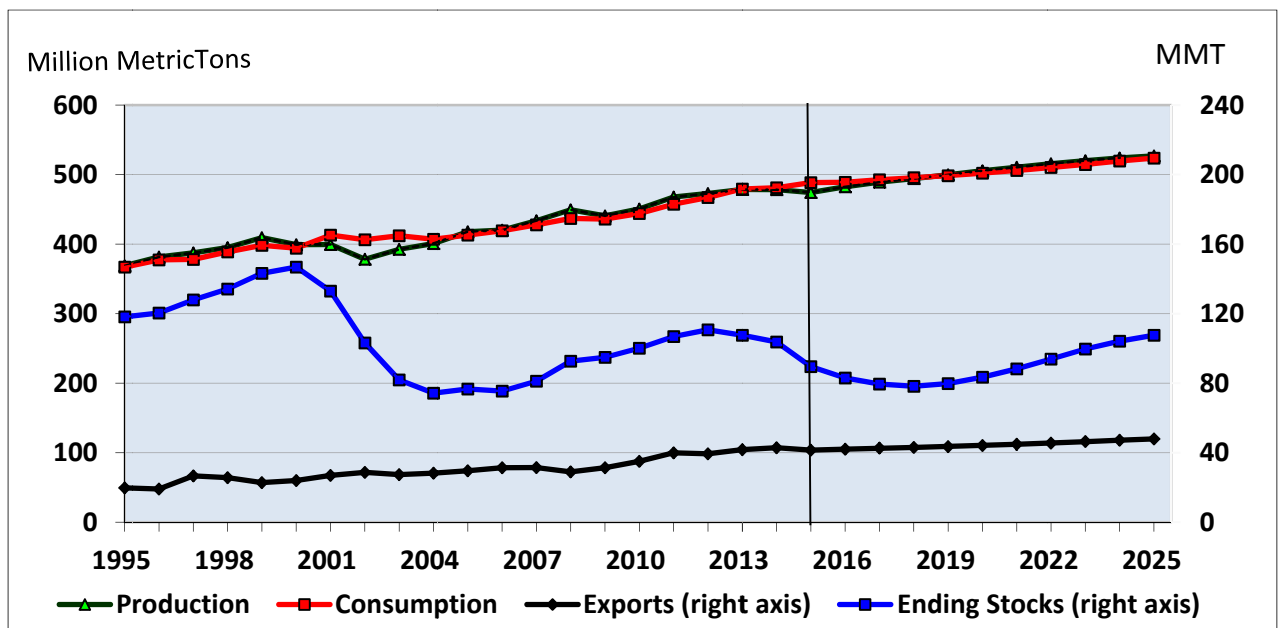


Figure 10. World rice production, consumption, trade and stocks, historical and projected, 1995-2025.

### Detailed Results of the Deterministic Baseline Analysis

- Projections generated from the deterministic analysis by country and by region for the period 2015-2025 are presented in Tables 1 thru Tables 83i. To serve as convenient reference, a list of the tables with descriptions is included below:

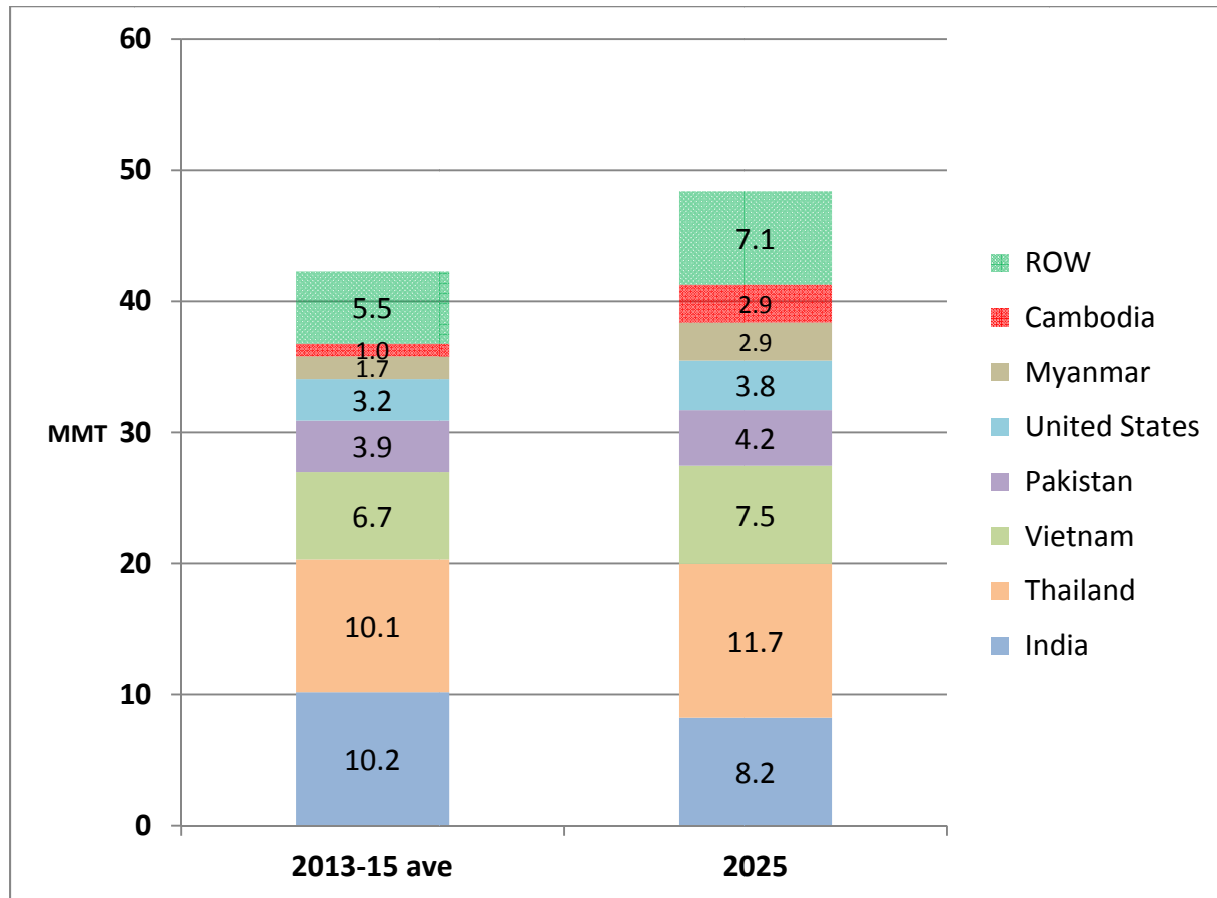
- Table 1: Summary of the *net trade* by country and international rice prices (international long grain reference price, U.S. long grain export price, and the U.S. medium grain export price which serves as the international reference price for medium grain).
- Table 2: Summary of the global rice supply and demand.
- Tables 3-57: Basic supply and demand projections (production, consumption, stocks, and net trade), by country.
- Tables 58-75: World regional (Africa, Asia, Western Hemisphere, Europe, and Oceania) rice supply and demand projections with a sub-regional aggregate for countries of each region that are modeled individually in AGRM, and another sub-regional aggregate for countries of each region that are modeled as a group in AGRM.
- Tables 76-78: Rice supply and demand projections for ECOWAS, presented separately to highlight the increasing importance of the West African region to the global rice economy.
- Table 79: Average rice yield per hectare by country.
- Table 80: Average rice per capita use by country.
- Table 81: Total world rice *trade*, as opposed to *net trade* in Table 1.
- Table 82: World long grain rice trade
- Table 83: World medium grain rice trade
- Table 84: World rice prices and price relationships
- Tables 85-87: U.S. detailed rice supply and utilization (paddy basis)
- Tables 88-93: U.S. rice supply by producing State

### ***Total Global Rice Trade***

Total rice trade is expected to expand annually by 1.4%, from 42.3 mmt for the base period average of 2013-15 to 48.4 mmt in 2025 (Table 1). Figure 11 compares leading rice exporters averaged over the period 2013-15 with the 2025 projection. By 2025, India, Thailand, Vietnam, Pakistan, and the U.S. remain the top 5 exporters accounting for more than 80% of total exports; but Myanmar and Cambodia are emerging players with a combined share nearly doubling from 6.4% in the base period to 11.9% by 2025.

Following the termination of Thailand's costly and controversial paddy pledging program, it is projected to resume a dominant presence in the global rice market over the next decade based on its good infrastructural resources and concerted focus on developing and maintaining a strong presence in the branded high quality rice market. The popularity of the fragrant Thai Hom Mali branded Jasmine long grain rice is strongly preferred by consumers in many nations.

India was a top rice exporter over the 2011 to 2014 marketing years with total annual average shipments exceeding 10 mmt. However, India’s exports have declined to 8.5 mmt in 2015; and are projected to remain in the range 8-9 mmt over the projection period.



**Figure 11. Share of total global rice exports, million metric tons, 2013-2015 average and 2025.**

U.S. total rice exports expand by 622 thousand mt over the next decade, reaching 3.8 mmt in 2025; and total imports grow by 64 tmt, reaching 828 tmt in 2025. For reference purposes, a detailed U.S. rice supply and use in English units (paddy basis) is presented in Table 85.

On the demand side, global imports are more dispersed and widely-distributed among rice-deficit countries/regions (see right side of Figure 12). The destinations of the bulk of imports are ECOWAS (West Africa including Nigeria), the Middle East, Philippines, Indonesia and EU-28. While China remains an important rice importer over the next decade, we project relatively stable imports levels as it maintains reasonable stock levels.



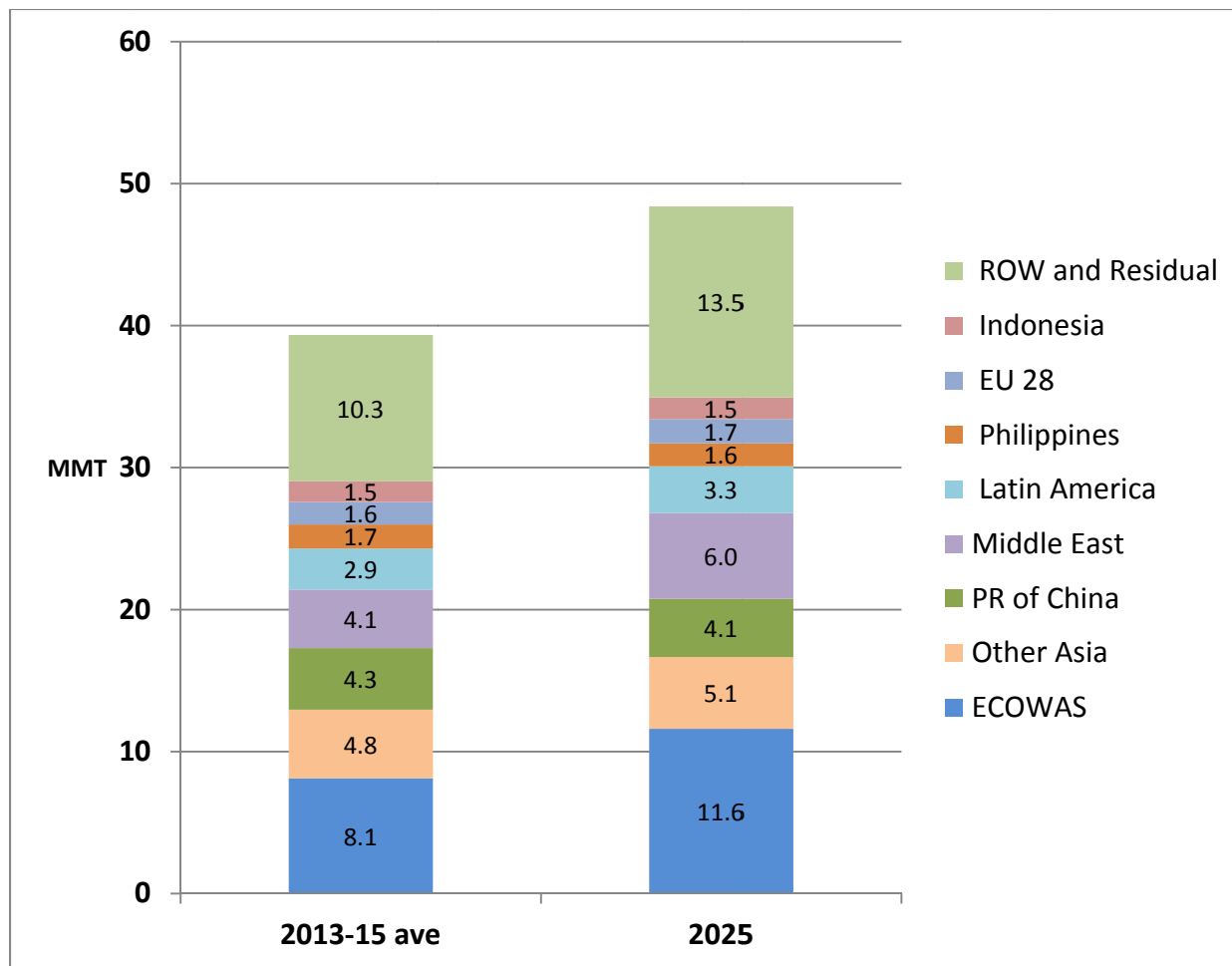


Figure 12 Share of total global rice imports, million metric tons, 2013-2015 average and 2025.

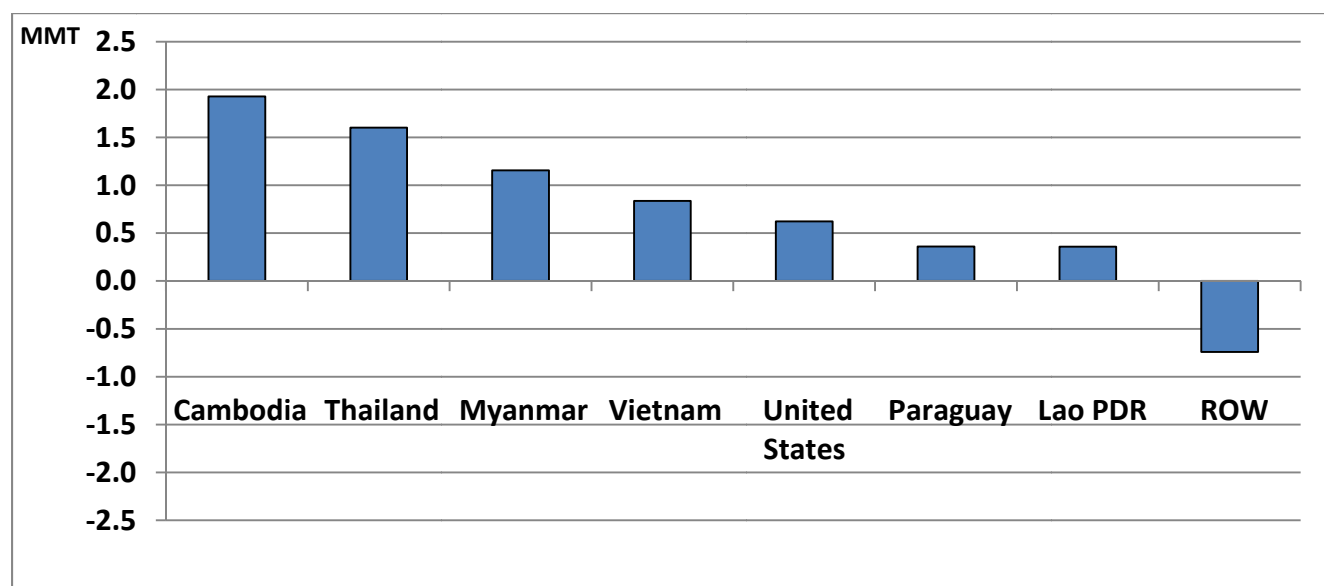
### Main Sources of Growth in Global Rice Trade

Total global rice trade expands 1.4% per year, reaching 48 mmt in 2025 up from 42 mmt in 2015 (Table 1). Total trade expands by 6.1 mmt over the projection period. On the exporters' side, the significant investment in production and processing capacity in Mekong Delta in Vietnam, Cambodia, Myanmar and Lao PDR will result in the major net increases to global export growth (Figure 13). As low-cost producers, these countries are located near the large China market and endowed with production resources making them more competitive in the global rice market. Cambodia's exports are projected to expand at 11.6% per year, reaching 2.9 mmt in 2025 as both area and yield growth causes production to exceed consumption consistently. Myanmar's exports, on the other hand, are projected to expand from 1.8 mmt in 2015 to 2.9 mmt in 2025, supported by yield-based growth in production. Vietnam is a more mature export supplier but gains are possible as it restructures the rice milling and export infrastructure to enhance competitiveness. Marginal increases are expected for Lao PDF as it develops irrigation and improves productivity. The uncertainty for this region comes from potentially negative impacts of climate change and questionable water availability from the Mekong River as demands for water in the Upper Mekong basin expand.

After terminating its costly and controversial paddy pledging program, Thailand is expected to resume its leadership position in global trade. Thailand has good infrastructural resources and has a concerted focus on developing and maintaining a strong presence in the branded high quality long grain and fragrant rice markets. Based on USDA-FAS data (2016), the country has liquidated about 7.6 mmt of its excess stocks over the last three years.

The United States is expected to expand exports in-line with its bilateral and regional trade agreements. Little expansion is projected for Brazil, Uruguay and Argentina, however, Paraguay has emerged as a new exporter in Latin America. Investments in new production areas and infrastructure are expected to translate into a growing presence in the export markets.

Expansion of exports from India will be limited. India’s rice consumption will remain robust with population growing at 1.09% and per capita consumption increasing by 0.1% per year. This growth is fueled in part by its subsidized domestic rice consumption program as legislated in the National Food Security Bill, signed into law on September 12, 2013 (USDA-FAS, 2013b). The law creates an entitlement for eligible beneficiaries to receive 5 kilograms of rice, wheat or coarse grain (millet) at highly subsidized prices. This reportedly covers 50% of the urban and 75% of the rural populations which translate to about 820 million people (USDA-FAS, 2014).

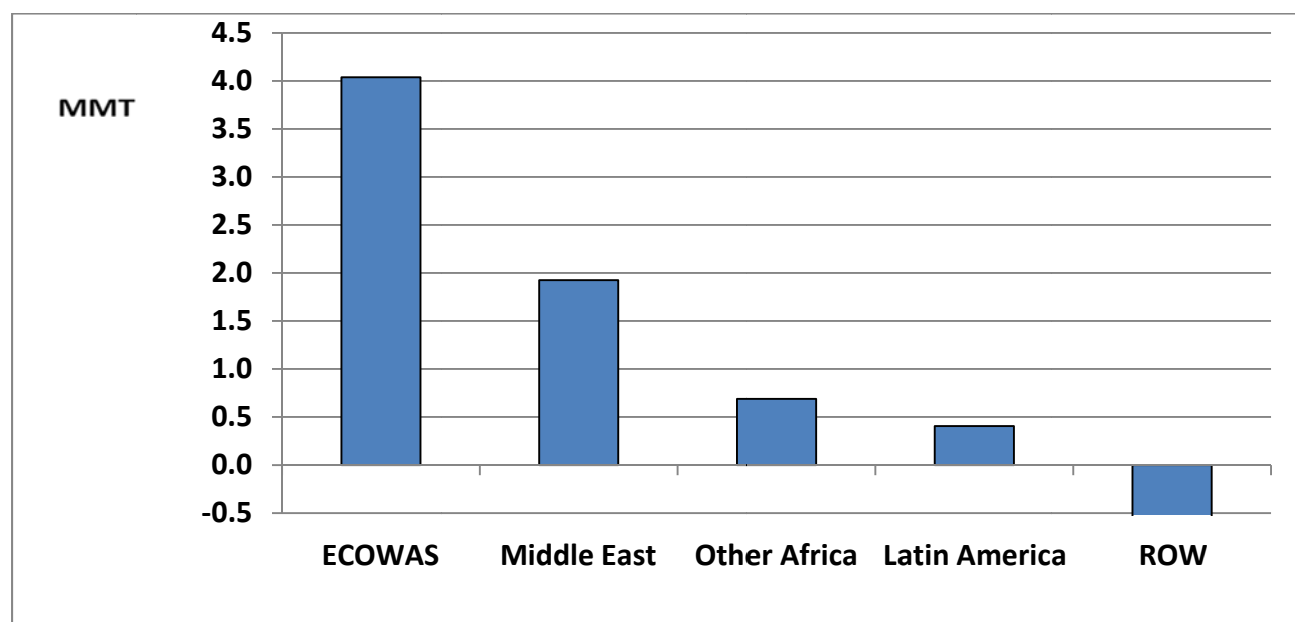


**Figure 13. Sources of growth in global rice exports to 2025.**

On the import side, nearly 72% of the growth in global imports is expected to come from Africa, with ECOWAS accounting for the bulk of this growth (Figure 13). In general, expansion in imports is associated with a combination of increasing per capita consumption and population growth that will exceed productivity improvements and output growth. Eastern and Southern Africa are also important regions of import growth. Similar to West Africa, import growth is fueled by population and per capita consumption growth rates that are greater than the ability to expand rice production. The projected level of African imports however is uncertain and primarily will depend upon the success of national rice development strategies which are being implemented in most African countries (CARD).

Supported by increasing population and growing incomes, the Middle East is another region with strong growth in rice imports. Political unrest within this region has likely limited even greater import expansion.

Projections for rice imports by China are uncertain. Lower imports would result from improved yields but water constraints and the need to diversify agricultural production would result in higher rice import levels. We believe that China will remain a significant rice importer over the next decade.



**Figure 14. Sources of growth in global rice imports to 2025.**

### ***Rice Harvested Area and Production***

Global rice output is projected to expand over the next decade, driven by the use of higher-yielding varieties and hybrids and other improved production technologies—in line with more subsidies for self-sufficiency programs of major consuming countries. The top rice producers are presented in Figure 15. World production is projected to expand by 50.2 mmt over the next decade, equivalent to a growth of 1.0% per year; and reaching a total global output of 525.8 million metric tons (mmt) in 2025 with 90% of the growth from yield improvement and 10% from increases in area harvested (Table 2). By volume, 34.1% of the expected output growth will come from India; 40.9% from the seven countries of Bangladesh, Indonesia, Thailand, Cambodia, Myanmar, Philippines, and Vietnam combined; and 9.0% from the 15-member Economic Community of West African States (ECOWAS).

Rice output of the China however, declines by a total of 1.2 mmt, and those of Japan and South Korea decline by a combined 1.1 mmt over the same period. Total U.S. rice production, on the other hand, is projected to increase by a total of about 1.1 mmt over the same period, equivalent to 1.6% annual growth—with annual growth of 1.0% in area harvested and 0.6% annual yield growth (Table 3).

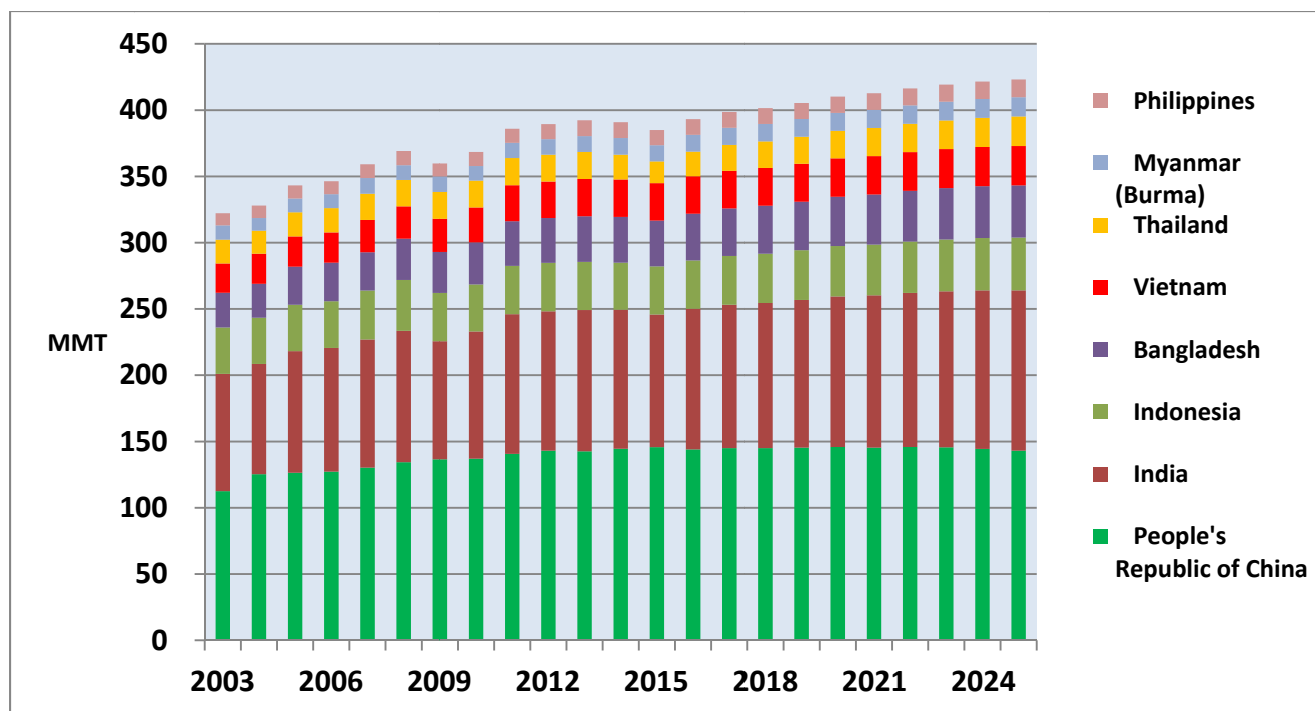


Figure 15. Top world rice producing countries, historical and projected, million metric tons, 2002-2025.

### Rice Domestic Consumption

Income and population growth and other demographic variables such as changing age structure drive changes in rice consumption. Rising incomes dampen rice demand in some Asian countries where rice is considered an inferior good. These countries include Japan, Taiwan, China, Vietnam, and Thailand. Demographic trends may also weaken rice demand as aging populations and increasing health consciousness shift preferences away from carbohydrates and towards protein-based diets.

Over the baseline, global rice consumption is projected to increase by 43.6 mmt reaching 524.9 mmt in 2025—a growth of 0.8% per year, with global population growth of 1.1% per year projected to be offset partly by an annual 0.3% decline in average world rice per capita use (Table 2).

The top rice consuming countries are shown in Figure 16. Approximately 31.3% of the total growth is accounted for by India; 24.6% by the four countries of Bangladesh, Indonesia, the Philippines, and Myanmar combined; and 17.8% by ECOWAS. U.S. rice total consumption increases by nearly 280 tmt over the same period, reaching 4.3 mmt in 2025 or an annual growth of 0.7%; which is solely coming from population growth as per capita use declines slightly.

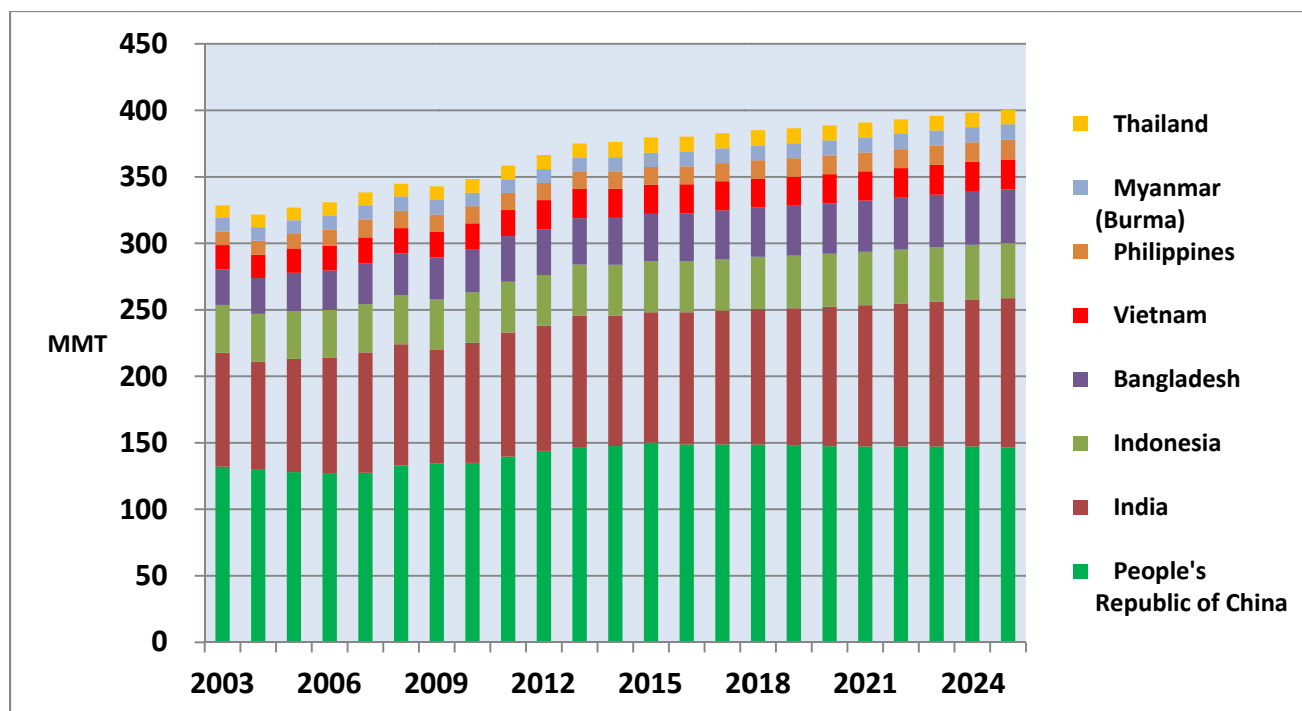


Figure 16. Top world rice consuming countries, historical and projected, million metric tons, 2002-2025.

### Rice Global Stocks

Figure 17 presents projections for the top rice stockholding countries in the world. Global rice stocks have tightened recently, with stocks-to-use at 18.4% in 2015, the lowest on record over the last 30 years. The reason for this situation is that consumption has exceeded production over the last three years, coupled with the disposal of excess rice stockpiles by India and Thailand amounting to nearly 22 mmt from 2013-2015.

Global stocks-to-use is projected to decline further to 16.0% in 2019 before recovering gradually to 17.6% by the end of the projection period. This provides underlying support to the projected steady increase in international prices (Figures 7 and 8).

### Changing Dynamics in Global Rice Stocks

A shift in world rice stock ownership has occurred, away from rice importing countries who have maintained a stocks policy sensitive to food security, to major rice exporting countries over the last three decades. The average share by exporting countries of global rice stocks increased from 16% over the period 1986-1995, to 20% from 1996 thru 2005, and to 33% from 2006 thru 2015 (Figure 18). Consequently, rice stocks have become more price flexible, i.e., more likely to be released to the international market as prices increase.

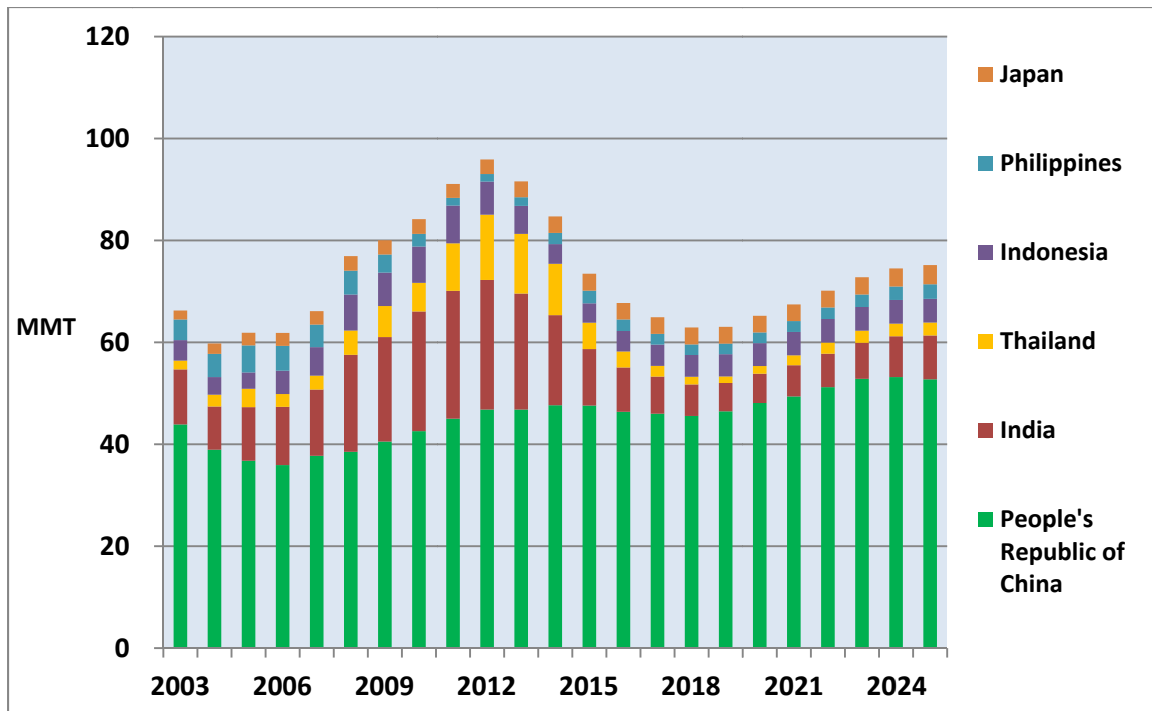


Figure 17. Top rice ending stocks countries, historical and projected, million metric tons, 2002-2025.

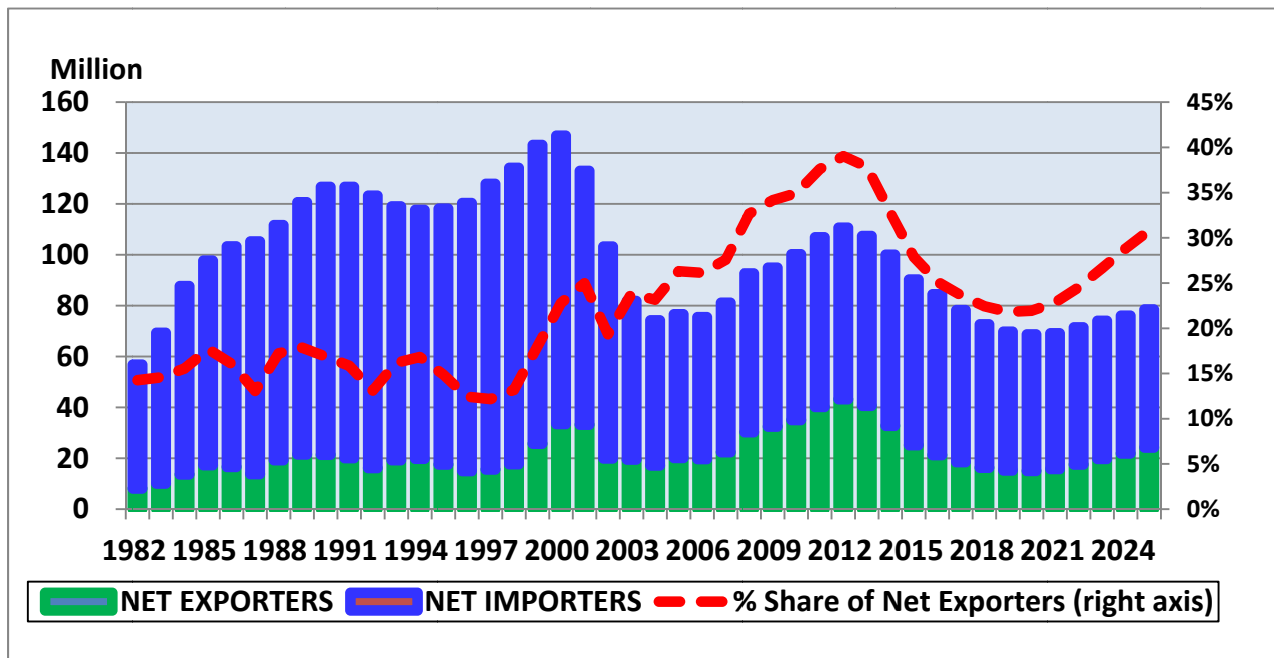


Figure 18. Share in world rice ending stocks of exporters and importers, historical and projected, 1982-2025

## ***Rice Supply and Demand by World Region***

The summary results for the five world regions are presented in Tables 58-72. Three tables are associated with each region: the first table in each group is the total for the region; the second is the sum of individually-modeled countries in the region; and the third consists of the other countries in the region modeled as a group. The sum of the five world regions represents the entire world rice economy.

A more detailed look at the regional projections is useful as it provides a better understanding of the geographical dynamics and the relative importance of each region to the global rice economy.

### **Africa**

Table 58 shows that Africa's total rice output is projected to grow by 3.4% per year, driven by both growth in area (1.6%) and yields (1.7%). This expected productivity improvement is supported by availability of increased research funding from institutions and NGOs, more focused efforts by the Africa Rice Center and the International Rice Research Institute (IRRI), and an expanded distribution and adoption of improved rice varieties like the locally-developed New Rice for Africa (NERICA) cultivars. The region's total rice consumption grows by 3.1% per year as population grows by 2.4% and per capita use by 0.5% annually. This increased consumption is supported by 1.5% growth in real per capita income<sup>2</sup>.

Table 59 presents the results for the group of individually-modeled African countries in AGRM. This group is expected to grow total rice production by 3.4% per year, as both area and yields increase by an annual average of 1.7%. Total consumption of this group expands 3.2% annually, driven by 2.2% growth in population, 1.0% growth in per capita use, and 1.4% growth in real per capita income.

Table 60 shows that the "Other Africa" region (or the rest of African countries that are modeled as a group) expands rice output by 3.4% per year, with 1.2% coming from growth in area and 2.1% from yield improvements. Total consumption of this group expands at 2.0% per year, as the 2.4% population growth is offset by slight decline in per capita use. Real per capita income grows by 1.6% annually.

### **Americas**

Total rice production of the Western Hemisphere (Table 61) grows at 1.3% per year which comes from 0.9% yield growth and area expansion of 0.4% annually. Total consumption increases at 1.1% annually, a combined effect of 0.9% population growth and 0.1% gain in per capita use with 1.5% growth in real per capita income.

The group of individually-modeled Western Hemisphere countries (Table 62) is projected to increase total rice output by 1.4% per year, as area gains 0.4% and yields improve by 1.0%. Total rice consumption of this group gains 1.1% annually, as population increases by 0.8% and per capita use by 0.1%. Real per capita income grows at 1.6% per year.

Total rice production of the "Other Western Hemisphere" region, modeled as a group (Table 63), increases by 1.0% per year with 0.3% coming from area expansion and 0.7% from yield gain. Total consumption of this group grows at 1.0% per year, which comes solely from the 1.1% population growth as per capita use declines slightly. Real per capita income grows by 1.7% annually.

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<sup>2</sup> Real per capita income is computed by dividing total real gross domestic product by population.

## Asia

Total rice production of Asia (Table 64) increases by 0.9% per year, solely accounted for by yield growth as area remains flat. The total Asian rice consumption grows by 0.7% per year as the population growth of 0.8% is offset by a decline in per capita use. Rice is an inferior good in most Asian countries and the relatively strong projected growth of 3.7% in real per capita income has dampening effect on rice consumption.

Similarly, the group of individually-modeled Asian countries (Table 65) is projected to grow total rice production by 0.9% annually solely coming from yield gain. Total rice consumption of this group grows by 0.6% annually, all contributed by population growth as per capita use declines by 0.3% --with 3.8% annual gain in real per capita income.

The net growth of total rice output of the “Other Asia” region modeled as a group (Table 66) is 1.6% annually, with area growing by 0.6% and yield gaining 1.0% per year. Total consumption of this group grows at 1.9% per year, of which 1.3% comes from population growth and 0.4% from per capita use; and real per capita income grows at 2.5% which is relatively slower than that of the group of modeled Asian countries.

## Europe

The total rice production of Europe (Table 67) grows at 1.3% per year which is accounted for by 0.4% gain in area and 0.9% yield growth. Total consumption increases at 0.9%, almost solely from gain in per capita use, as population remains relatively flat. Real per capita income is up 1.8% per year.

The group of individually-modeled European countries (Table 68) is projected to grow total rice output by 1.3% per year, of which 0.9 % comes from improvement in yield and 0.4% from increased area. Total consumption of this group gains 0.8% annually, with population and per capita use accounting for 0.2% and 0.6%, respectively. Real per capita income of this group grows at 1.6% per year.

Total rice production of the “Other Europe” region modeled as a group (Table 69) grows by 1.3% per year, as yield grows by 0.9% and harvested area by 0.4%. Consumption of this group grows at 3.5% per year, with the 3.7% gain in per capita use being offset by a 0.2% decline in population. The real per capita income of this group grows strongly at 2.3% per year.

## Oceania

Tables 70 thru 72 show the results for Oceania which mainly consists of Australia. Total rice production expands by 5.9% per year, mainly from 5.5% gain in area harvested as yield grows only at 0.5%. Total consumption grows 1.4% annually, due solely to population growth as per capita use declines slightly. Real per capita income grows at 1.3% annually.

## World

Tables 73 thru 75 present the sum of the five world regions discussed above.



## ECOWAS

Production of this 15-country region, which includes Nigeria, is projected to grow by 4.1% per year, which comes from 1.9% gain in harvested area and 2.2% yield improvement (Tables 76-78).

Consumption expands by 3.8% per year, driven by 3.0% population growth, 0.8% gain in per capita use, and 4.1% income growth. Net imports is projected to expand by 3.5 mmt over the next decade, equivalent to a growth rate of 3.7% per year—reaching 11.5 mmt by 2025.

Nigeria is the main player in the ECOWAS region. The country accounts for 31% of the region's volume growth in net imports, as the country's domestic use continues to exceed domestic supply (Table 33).

Nigeria accounts for 48% of the region's gain in rice area harvested and 40% of the region's rice output gain, owing to the country's 5.1% annual growth in production supported by the strong growth in both area (2.4%) and yield (2.6%). Lastly, Nigeria accounts for 36% of the region's volume growth in consumption, as the country's consumption expands 4.0% annually with population growing at 3.0% and per capita use by 0.9% per year.

## Results of Stochastic Baseline Analysis

### *Detailed Results of the Stochastic Baseline Analysis*

The detailed results of the stochastic analyses for selected prices and trade are presented in Figures 19 thru 41. In order to show the direction and dispersion of the stochastic outcome distribution, four selected outcome items (stochastic average, 10<sup>th</sup> percentile, 90<sup>th</sup> percentile, and the coefficient of variation) for selected variables are presented. Intuitively, the gap between the two percentiles (10<sup>th</sup> and 90<sup>th</sup>) indicates volatility or risk. Widening indicates increased volatility and narrowing indicates decreased volatility. Another measure of dispersion used is the coefficient of variation (C.V.) which shows the extent of variability of data points in relation to the mean. Lower C.V. indicates more stability, i.e., less risk.

The information projected in each one of the charts is similar in principle. Hence, for space consideration only one representative chart (Figure 19) will be discussed--which can then be used as a basis to understanding the remaining charts. Figure 19 shows the long grain rice international reference price. For 2016, while the deterministic mean price is \$456 per mt (Table 1), the stochastic distribution indicates that 10% of the time the average price will be higher than \$569 per mt and 10% of the time lower than \$426 per mt 10% of the time. The computed C.V. for 2016 is 11.0%, which declines steadily throughout the projection period, reaching 8.1% by 2025. This feature of the stochastic analysis provides an advantage as it indicates how the possible outcomes are distributed, thus providing a better understanding of the dynamics of the global rice market.

## Summary and Conclusions

Global rice trade and prices are projected to grow steadily over the next decade, as exports expand in Cambodia, Thailand, Myanmar, and Vietnam; and imports continue to grow strongly in the Western African countries and the Middle East. The U.S remains a top five rice exporter in the world with exports accounting for nearly half of total U.S. rice output. Growth in global rice production comes mainly from yield improvements as limited area for expansion remains constrained. Abundant rice supplies are

projected due to current surpluses, productivity growth using new technologies, and increases in production subsidies in many countries. Population remains the driver of global consumption growth as per capita use declines slightly.

Under the assumption of normal average weather, with global trade continuing to grow as deficit rice-consuming countries become more attuned to food security issues, an environment of reasonable, steady increase in global rice prices will likely prevail.

As in any other enterprise, however, there are risks involved in the rice industry due to the uncertainties of weather, domestic policies, political developments, and other unexpected events. Actual market outcomes usually deviate from average estimates hence a stochastic analysis is included in this report which indicate the probable upper and lower bounds (confidence intervals) of future possible distribution of prices and trade.

Some of the uncertainties in the rice market that may impact the baseline projections in this report include the following issues:

- India's reliability as an exporter given the country's expanded PDS, and weather concerns
- Higher Western Hemisphere prices relative to Asian prices; will high margins converge or widen?
- Likelihood of Sub-Saharan Africa and SE Asia attaining targeted productivity levels and self-sufficiency
- Prevalent government subsidies in some countries, notably China, Indonesia, and the Philippines
- Impact of production structural reforms in Japan on the medium grain market; availability of water in Australia, Egypt, and CA
- Extent of El Nino damage on producing countries
- Relatively weak prices under tightening global stocks
- Rice trade potential of recent developments such as the US rice phytosanitary protocol with China and re-establishment of US relations with Cuba
- Impact of TPP given that it causes only modest increases in U.S. exports to Japan, while potentially increasing Vietnam's competitive edge in the Mexican market

Depending on the developments on these issues going forward, these baseline projections can serve as benchmark for analyzing the potential impacts of specific scenarios. Lastly, the authors hope that the information contained in this report could serve as useful guide for various domestic and international stakeholders in the rice industry.

## Estimates of the Deterministic Baseline Analysis

### *Tables and Charts of Rice Supply, Utilization and Net Trade, 2015-2025*

**Table 1 World Rice Net Trade by Country and International Reference Prices, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Net Exporters	(Thousand Metric Tons)										
Argentina	509	533	534	535	535	533	535	535	535	536	539
Australia	-84	49	161	255	322	366	393	409	417	424	429
Cambodia	798	1,116	1,374	1,588	1,819	2,035	2,203	2,439	2,627	2,736	2,894
Lao PDR	-113	-33	25	54	71	107	125	175	219	264	274
Egypt	372	400	439	464	481	490	491	488	483	478	468
India	8,524	9,132	8,902	8,666	8,530	8,579	8,423	8,322	8,174	8,142	8,237
Myanmar (Burma)	1,763	1,741	1,949	2,045	2,180	2,251	2,388	2,495	2,644	2,748	2,889
Pakistan	4,549	4,093	4,134	4,178	4,243	4,218	4,307	4,282	4,295	4,240	4,202
Thailand	9,797	9,149	9,145	9,192	9,218	9,254	9,553	10,056	10,412	10,945	11,373
United States	2,497	2,643	2,726	2,805	2,865	2,881	2,893	2,903	2,910	2,921	2,955
Uruguay	948	897	940	965	990	1,012	1,025	1,028	1,037	1,035	1,034
Vietnam	6,777	6,606	6,567	6,714	6,815	7,055	7,028	6,989	7,155	7,139	7,104
Brazil	144	90	123	126	234	276	411	432	465	469	501
Paraguay	515	551	578	605	632	659	678	707	735	765	793
<b>Total Net Exports *</b>	<b>36,995</b>	<b>36,966</b>	<b>37,597</b>	<b>38,191</b>	<b>38,937</b>	<b>39,713</b>	<b>40,452</b>	<b>41,259</b>	<b>42,107</b>	<b>42,841</b>	<b>43,694</b>
Net Importers											
Bangladesh	646	784	695	790	873	817	798	817	848	879	957
People's Republic of China	4,262	3,558	3,385	3,335	3,298	3,265	3,236	3,206	3,178	3,171	3,168
Brunei Darussalam	41	41	43	44	45	46	47	48	50	50	52
Cameroon	546	572	631	665	712	745	765	795	822	855	888
Canada	361	366	383	396	404	414	422	430	438	446	454
China - Hong Kong	364	373	379	391	393	397	400	404	407	411	414
Colombia	348	336	351	355	358	356	358	363	369	378	383
Cote d'Ivoire	842	1,019	1,055	1,130	1,193	1,246	1,289	1,318	1,364	1,419	1,443
European Union-28	1,183	1,191	1,207	1,224	1,240	1,264	1,287	1,306	1,327	1,347	1,367
Ghana	606	651	693	734	745	780	809	832	867	901	931
Guinea	309	340	377	389	404	419	438	449	467	481	493
Indonesia	2,066	2,075	2,109	2,075	2,019	1,950	1,942	1,867	1,759	1,628	1,525
Iran	1,681	1,640	1,651	1,729	1,768	1,847	1,871	1,918	1,971	2,066	2,097
Iraq	1,201	1,395	1,488	1,562	1,618	1,681	1,742	1,795	1,910	2,009	2,116
Japan	602	602	602	602	602	602	602	602	602	602	602
Kenya	522	517	538	572	577	594	608	632	650	668	682
Liberia	361	383	405	425	444	468	490	518	540	561	589
Malaysia	1,001	1,062	1,044	1,060	1,047	1,045	1,045	1,049	1,062	1,076	1,083
Mali	166	130	104	73	63	74	69	67	80	73	84
Mexico	718	760	765	778	792	811	820	832	845	860	871

Mozambique	533	523	554	574	595	643	667	703	732	760	782
Nigeria	2,522	3,137	3,147	3,116	3,208	3,374	3,530	3,660	3,813	3,915	4,026
Philippines	2,077	1,404	1,602	1,709	1,819	1,809	1,713	1,645	1,670	1,633	1,618
Saudi Arabia	1,556	1,511	1,562	1,593	1,625	1,660	1,695	1,731	1,765	1,799	1,832
Senegal	993	1,100	1,128	1,148	1,175	1,191	1,214	1,246	1,282	1,317	1,354
Sierra Leone	274	168	149	124	115	113	114	103	99	95	101
Singapore	303	307	313	315	316	319	320	322	323	324	325
South Africa	871	872	908	915	925	944	962	968	988	979	1,010
South Korea	471	409	409	409	409	409	409	409	409	409	409
Taiwan	106	106	106	106	106	106	106	106	106	106	106
Tanzania	139	138	146	142	159	178	166	159	155	146	146
Turkey	264	261	236	221	212	204	204	209	212	209	207
Other Africa	2,659	2,581	2,612	2,627	2,634	2,675	2,708	2,761	2,774	2,803	2,846
Other Americas	494	473	454	463	446	451	473	500	508	520	546
Other Asia	2,716	2,942	3,052	3,042	3,194	3,324	3,552	3,800	3,898	3,985	4,097
Other Europe	103	113	127	133	138	140	142	145	147	150	153
Other Oceania	60	75	90	105	119	132	144	155	163	171	177
Ecowas 7	1,490	1,585	1,709	1,815	1,905	1,998	2,090	2,186	2,284	2,389	2,487
Cuba	505	517	523	525	526	535	542	546	552	562	566
Costa Rica	103	108	110	110	108	111	114	117	120	122	126
Dominican Republic	18	18	18	19	16	17	17	19	19	20	21
Guatemala	78	79	80	83	86	89	92	95	99	102	105
Honduras	150	144	145	145	144	147	149	152	155	159	163
Nicaragua	69	75	74	73	72	74	76	78	81	84	87
Panama	81	86	89	91	94	98	99	100	102	102	102
Chile	122	146	144	143	144	145	147	150	153	156	159
Peru	152	167	196	200	202	195	185	181	183	190	199
Residual	259	125	11	-81	-149	-192	-219	-234	-241	-247	-252
<b>Total Net Imports</b>	<b>36,995</b>	<b>36,966</b>	<b>37,597</b>	<b>38,191</b>	<b>38,937</b>	<b>39,713</b>	<b>40,452</b>	<b>41,259</b>	<b>42,107</b>	<b>42,841</b>	<b>43,694</b>
Prices											
Nominal International Rice Reference											
Price	369	458	472	496	518	522	530	534	539	541	545
Real International Rice Reference Price	268	328	329	338	344	338	335	329	323	317	311
U.S. Long Grain FOB Gulf Ports	508	540	552	559	575	581	583	585	590	603	610
U.S. No. 2 Medium FOB CA	799	828	831	832	834	835	837	839	840	842	845

\* Total net exports are the sum of all positive net exports and negative net imports.

**Table 2 World Rice Supply, Utilization, Total Trade and Stocks-to Use, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	158,935	159,387	160,394	160,681	161,031	161,446	161,505	161,748	161,925	161,819	161,641
			(Metric Tons per Hectare)								
Yield	2.96	3.02	3.05	3.07	3.10	3.13	3.15	3.18	3.20	3.23	3.25
			(Thousand Metric Tons)								
Production	470,129	481,422	489,095	493,853	499,173	505,508	509,360	514,436	518,848	522,549	525,841
Beginning Stocks	103,866	89,351	83,755	81,167	79,257	79,281	81,488	83,611	86,413	89,108	91,097
Domestic Supply	573,995	570,773	572,850	575,020	578,430	584,789	590,848	598,048	605,261	611,658	616,938
Consumption	484,374	486,893	491,672	495,844	499,298	503,493	507,456	511,868	516,394	520,808	524,864
Ending Stocks	89,351	83,755	81,167	79,257	79,281	81,488	83,611	86,413	89,108	91,097	92,325
Domestic Use	573,725	570,648	572,839	575,101	578,579	584,981	591,067	598,281	605,503	611,905	617,189
Total Trade	41,932	41,895	42,563	43,165	43,839	44,614	45,246	46,027	46,851	47,568	48,402
			(Percent)								
Stocks-to-Use Ratio	18.45	17.20	16.51	15.98	15.88	16.18	16.48	16.88	17.26	17.49	17.59

**Table 3 U.S. Rice Supply, Utilization, Net Trade and Farm Prices, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	1,042	1,077	1,100	1,110	1,112	1,112	1,108	1,102	1,094	1,099	1,141
			(Metric Tons per Hectare)								
Yield	5.86	6.04	6.12	6.19	6.26	6.33	6.39	6.45	6.51	6.57	6.63
			(Thousand Metric Tons)								
Production	6,107	6,511	6,732	6,873	6,966	7,041	7,079	7,109	7,128	7,227	7,559
Beginning Stocks	1,552	1,266	1,122	1,072	1,004	893	815	764	716	668	700
Domestic Supply	7,659	7,777	7,854	7,945	7,970	7,934	7,894	7,873	7,845	7,895	8,259
Consumption	3,885	4,012	4,056	4,137	4,212	4,238	4,238	4,254	4,267	4,273	4,286
Ending Stocks	1,266	1,122	1,072	1,004	893	815	764	716	668	700	1,019
Domestic Use	5,151	5,134	5,128	5,140	5,105	5,053	5,002	4,970	4,935	4,974	5,304
Net Trade	2,497	2,643	2,726	2,805	2,865	2,881	2,893	2,903	2,910	2,921	2,955
U.S. Rice Farm Prices			(U.S. Dollars per Hundredweight)								
Season Average Farm Price	13.20	13.69	13.84	13.93	14.15	14.22	14.09	14.16	15.23	17.17	17.77
Long Grain Farm Price	11.53	12.60	12.86	13.12	13.40	13.51	13.38	13.48	14.45	16.26	16.85
Japonica Farm Price	20.46	20.16	20.18	19.76	19.85	19.83	19.65	19.64	21.02	23.46	24.19
Southern Medium Grain Farm Price	12.05	12.61	12.71	12.41	12.53	12.55	12.41	12.52	13.62	15.57	16.15

**Table 4 Argentina Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	215	217	220	221	222	222	224	225	225	227	227
			(Metric Tons per Hectare)								
Yield	4.33	4.38	4.43	4.46	4.49	4.56	4.59	4.62	4.66	4.70	4.77
			(Thousand Metric Tons)								
Production	930	951	976	986	997	1,013	1,027	1,038	1,050	1,066	1,083
Beginning Stocks	548	529	496	481	463	447	443	445	451	464	487
Domestic Supply	1,478	1,479	1,472	1,467	1,460	1,460	1,470	1,482	1,501	1,530	1,569
Consumption	440	450	458	469	477	484	490	496	502	507	513
Ending Stocks	529	496	481	463	447	443	445	451	464	487	517
Domestic Use	969	946	939	932	924	927	935	947	966	994	1,030
Net Trade	509	533	534	535	535	533	535	535	535	536	539

**Table 5 Australia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	30	75	83	85	87	90	93	96	100	101	101
			(Metric Tons per Hectare)								
Yield	7.20	7.09	7.16	7.24	7.33	7.41	7.50	7.58	7.66	7.75	7.85
			(Thousand Metric Tons)								
Production	216	533	594	616	641	668	697	730	763	780	789
Beginning Stocks	182	105	221	288	286	243	186	133	99	89	90
Domestic Supply	398	638	815	903	927	910	884	863	862	869	879
Consumption	377	368	366	363	362	358	357	356	356	355	359
Ending Stocks	105	221	288	286	243	186	133	99	89	90	91
Domestic Use	482	589	653	649	604	544	491	454	445	445	450
Net Trade	-84	49	161	255	322	366	393	409	417	424	429

**Table 6 Bangladesh Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	12,000	11,919	11,874	11,832	11,818	11,838	11,857	11,861	11,868	11,857	11,850
	(Metric Tons per Hectare)										
Yield	2.88	2.96	3.02	3.06	3.09	3.14	3.18	3.22	3.26	3.29	3.32
	(Thousand Metric Tons)										
Production	34,600	35,258	35,800	36,188	36,564	37,116	37,685	38,191	38,685	39,030	39,351
Beginning Stocks	1,436	1,131	1,121	1,032	941	851	819	829	840	850	858
Domestic Supply	36,036	36,389	36,921	37,219	37,506	37,967	38,505	39,021	39,525	39,880	40,209
Consumption	35,551	36,052	36,585	37,068	37,528	37,965	38,473	38,998	39,523	39,901	40,300
Ending Stocks	1,131	1,121	1,032	941	851	819	829	840	850	858	866
Domestic Use	36,682	37,173	37,617	38,010	38,378	38,784	39,303	39,838	40,374	40,759	41,166
Net Trade	-646	-784	-695	-790	-873	-817	-798	-817	-848	-879	-957

**Table 7 Brazil Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	2,300	2,317	2,339	2,333	2,337	2,339	2,340	2,341	2,341	2,340	2,336
	(Metric Tons per Hectare)										
Yield	3.48	3.50	3.51	3.54	3.60	3.64	3.66	3.69	3.72	3.75	3.78
	(Thousand Metric Tons)										
Production	8,000	8,099	8,204	8,266	8,413	8,507	8,571	8,637	8,712	8,767	8,839
Beginning Stocks	654	551	555	566	583	602	620	638	656	674	692
Domestic Supply	8,654	8,650	8,759	8,832	8,996	9,109	9,191	9,274	9,367	9,441	9,531
Consumption	7,959	8,005	8,071	8,122	8,161	8,213	8,142	8,187	8,229	8,280	8,319
Ending Stocks	551	555	566	583	602	620	638	656	674	692	711
Domestic Use	8,510	8,560	8,636	8,705	8,763	8,833	8,779	8,843	8,903	8,972	9,030
Net Trade	144	90	123	126	234	276	411	432	465	469	501



**Table 8 Brunei Darussalam Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	5	5	5	5	5	5	5	5	5	5	5
	(Metric Tons per Hectare)										
Yield	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	(Thousand Metric Tons)										
Production	1	1	1	1	1	1	1	1	1	1	1
Beginning Stocks	0	0	0	0	0	0	0	0	0	0	0
Domestic Supply	1	1	1	1	1	1	1	1	1	1	1
Consumption	42	42	44	45	46	47	48	49	51	51	53
Ending Stocks	0	0	0	0	0	0	0	0	0	0	0
Domestic Use	42	42	44	45	46	47	48	49	51	51	53
Net Trade	-41	-41	-43	-44	-45	-46	-47	-48	-50	-50	-52

**Table 9 Cambodia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	2,900	2,944	3,013	3,082	3,166	3,234	3,290	3,340	3,376	3,402	3,416
	(Metric Tons per Hectare)										
Yield	1.50	1.64	1.72	1.79	1.84	1.89	1.94	2.00	2.05	2.08	2.13
	(Thousand Metric Tons)										
Production	4,350	4,819	5,178	5,530	5,839	6,127	6,371	6,672	6,920	7,083	7,292
Beginning Stocks	201	151	154	158	163	166	169	172	175	177	179
Domestic Supply	4,551	4,970	5,332	5,688	6,002	6,293	6,540	6,844	7,094	7,260	7,472
Consumption	3,602	3,700	3,800	3,937	4,017	4,090	4,165	4,231	4,291	4,344	4,396
Ending Stocks	151	154	158	163	166	169	172	175	177	179	181
Domestic Use	3,753	3,854	3,958	4,100	4,183	4,259	4,337	4,405	4,468	4,523	4,577
Net Trade	798	1,116	1,374	1,588	1,819	2,035	2,203	2,439	2,627	2,736	2,894

**Table 10 Cameroon Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	140	145	151	158	166	176	184	192	200	207	214
	(Metric Tons per Hectare)										
Yield	0.91	0.97	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.17	1.19
	(Thousand Metric Tons)										
Production	128	141	154	165	176	190	203	215	228	242	256
Beginning Stocks	0	3	9	15	16	17	18	19	19	20	21
Domestic Supply	128	144	162	180	192	207	221	233	248	262	277
Consumption	671	707	779	829	888	935	967	1,009	1,049	1,096	1,143
Ending Stocks	3	9	15	16	17	18	19	19	20	21	22
Domestic Use	674	716	794	845	905	952	985	1,028	1,069	1,117	1,165
Net Trade	-546	-572	-631	-665	-712	-745	-765	-795	-822	-855	-888

**Table 11 Canada Rice Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Consumption	361	366	383	396	404	414	422	430	438	446	454
Ending Stocks	0	0	0	0	0	0	0	0	0	0	0
Domestic Use	361	366	383	396	404	414	422	430	438	446	454
Net Trade	-361	-366	-383	-396	-404	-414	-422	-430	-438	-446	-454

**Table 12 People's Republic of China Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	30,210	29,907	29,977	29,881	29,818	29,750	29,459	29,359	29,237	28,983	28,629
	(Metric Tons per Hectare)										
Yield	4.83	4.81	4.84	4.85	4.88	4.90	4.93	4.97	4.98	4.98	5.00
	(Thousand Metric Tons)										
Production	145,770	143,988	144,977	144,933	145,409	145,879	145,322	145,827	145,623	144,428	143,061
Beginning Stocks	47,660	47,607	46,395	45,996	45,574	46,471	48,106	49,392	51,233	52,836	53,207
Domestic Supply	193,430	191,595	191,372	190,929	190,983	192,349	193,428	195,218	196,856	197,264	196,267
Consumption	150,085	148,758	148,761	148,690	147,810	147,509	147,272	147,192	147,199	147,229	146,672
Ending Stocks	47,607	46,395	45,996	45,574	46,471	48,106	49,392	51,233	52,836	53,207	52,763
Domestic Use	197,692	195,153	194,757	194,264	194,281	195,614	196,664	198,425	200,035	200,435	199,435
Net Trade	-4,262	-3,558	-3,385	-3,335	-3,298	-3,265	-3,236	-3,206	-3,178	-3,171	-3,168

**Table 13 Colombia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	425	426	431	433	436	440	443	446	448	449	450
	(Metric Tons per Hectare)										
Yield	3.12	3.15	3.15	3.18	3.21	3.24	3.27	3.30	3.33	3.36	3.39
	(Thousand Metric Tons)										
Production	1,326	1,341	1,358	1,379	1,402	1,424	1,447	1,470	1,490	1,509	1,527
Beginning Stocks	162	164	139	115	92	71	52	31	10	-14	-43
Domestic Supply	1,488	1,506	1,498	1,494	1,494	1,495	1,499	1,501	1,500	1,495	1,484
Consumption	1,671	1,702	1,733	1,757	1,780	1,799	1,826	1,854	1,883	1,917	1,939
Ending Stocks	164	139	115	92	71	52	31	10	-14	-43	-73
Domestic Use	1,836	1,841	1,848	1,849	1,851	1,851	1,857	1,863	1,869	1,873	1,866
Net Trade	-348	-336	-351	-355	-358	-356	-358	-363	-369	-378	-383

**Table 14 Cote D'Ivoire Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	1,077	1,071	1,093	1,078	1,068	1,073	1,071	1,093	1,097	1,097	1,118
			(Metric Tons per Hectare)								
Yield	1.30	1.32	1.33	1.34	1.36	1.37	1.39	1.40	1.42	1.43	1.45
			(Thousand Metric Tons)								
Production	1,400	1,411	1,450	1,446	1,449	1,472	1,485	1,532	1,554	1,571	1,617
Beginning Stocks	476	341	346	355	364	373	383	389	399	408	417
Domestic Supply	1,876	1,752	1,797	1,801	1,813	1,844	1,867	1,921	1,953	1,979	2,034
Consumption	2,377	2,425	2,496	2,567	2,634	2,708	2,766	2,840	2,909	2,981	3,051
Ending Stocks	341	346	355	364	373	383	389	399	408	417	426
Domestic Use	2,718	2,771	2,852	2,931	3,006	3,090	3,156	3,239	3,317	3,398	3,477
Net Trade	-842	-1,019	-1,055	-1,130	-1,193	-1,246	-1,289	-1,318	-1,364	-1,419	-1,443

**Table 15 Egypt Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	800	700	703	700	701	706	705	708	709	711	709
			(Metric Tons per Hectare)								
Yield	5.00	6.85	6.88	6.90	6.91	6.92	6.94	6.95	6.96	6.97	6.98
			(Thousand Metric Tons)								
Production	4,000	4,797	4,837	4,830	4,846	4,887	4,895	4,919	4,937	4,954	4,951
Beginning Stocks	916	522	818	1,015	1,115	1,152	1,139	1,084	1,012	941	850
Domestic Supply	4,916	5,318	5,655	5,844	5,961	6,039	6,034	6,003	5,949	5,895	5,801
Consumption	4,023	4,100	4,202	4,266	4,328	4,410	4,459	4,504	4,525	4,567	4,575
Ending Stocks	522	818	1,015	1,115	1,152	1,139	1,084	1,012	941	850	758
Domestic Use	4,544	4,918	5,216	5,380	5,480	5,549	5,543	5,515	5,466	5,417	5,333
Net Trade	372	400	439	464	481	490	491	488	483	478	468

**Table 16 EU-28 Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	431	434	439	441	443	444	445	445	447	447	447
			(Metric Tons per Hectare)								
Yield	4.65	4.58	4.63	4.68	4.73	4.77	4.82	4.86	4.90	4.94	4.98
			(Thousand Metric Tons)								
Production	2,005	1,988	2,034	2,066	2,095	2,121	2,141	2,162	2,189	2,207	2,225
Beginning Stocks	1,231	1,119	992	886	794	718	661	620	605	610	634
Domestic Supply	3,236	3,107	3,026	2,952	2,888	2,839	2,803	2,782	2,794	2,817	2,860
Consumption	3,300	3,306	3,347	3,382	3,410	3,441	3,470	3,483	3,511	3,530	3,547
Ending Stocks	1,119	992	886	794	718	661	620	605	610	634	680
Domestic Use	4,419	4,298	4,233	4,176	4,128	4,102	4,090	4,088	4,121	4,165	4,226
Net Trade	-1,183	-1,191	-1,207	-1,224	-1,240	-1,264	-1,287	-1,306	-1,327	-1,347	-1,367

**Table 17 Ghana Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	200	195	191	187	186	185	184	183	183	182	181
			(Metric Tons per Hectare)								
Yield	1.50	1.67	1.73	1.79	1.82	1.85	1.88	1.91	1.94	1.97	2.01
			(Thousand Metric Tons)								
Production	300	325	330	336	338	342	346	351	355	359	363
Beginning Stocks	61	32	39	48	57	61	68	75	80	88	95
Domestic Supply	361	357	369	384	395	403	414	425	435	447	459
Consumption	935	969	1,013	1,061	1,079	1,115	1,149	1,177	1,214	1,252	1,287
Ending Stocks	32	39	48	57	61	68	75	80	88	95	102
Domestic Use	967	1,008	1,061	1,118	1,140	1,183	1,223	1,257	1,302	1,348	1,389
Net Trade	-606	-651	-693	-734	-745	-780	-809	-832	-867	-901	-931

**Table 18 Guinea Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	1,000	1,004	1,010	1,024	1,041	1,058	1,075	1,093	1,111	1,129	1,147
	(Metric Tons per Hectare)										
Yield	1.32	1.35	1.38	1.40	1.43	1.46	1.49	1.52	1.55	1.58	1.61
	(Thousand Metric Tons)										
Production	1,320	1,352	1,389	1,437	1,491	1,546	1,602	1,660	1,720	1,782	1,845
Beginning Stocks	51	53	55	58	60	63	65	68	71	74	77
Domestic Supply	1,371	1,405	1,444	1,495	1,551	1,608	1,667	1,728	1,791	1,856	1,922
Consumption	1,627	1,690	1,763	1,824	1,892	1,962	2,036	2,106	2,184	2,259	2,335
Ending Stocks	53	55	58	60	63	65	68	71	74	77	80
Domestic Use	1,680	1,745	1,821	1,884	1,955	2,027	2,105	2,177	2,258	2,336	2,415
Net Trade	-309	-340	-377	-389	-404	-419	-438	-449	-467	-481	-493

**Table 19 China-Hong Kong Rice Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Metric Tons)										
Consumption	364	373	379	391	393	397	400	404	407	411	414
Ending Stocks	0	0	0	0	0	0	0	0	0	0	0
Domestic Use	364	373	379	391	393	397	400	404	407	411	414
Net Trade	-364	-373	-379	-391	-393	-397	-400	-404	-407	-411	-414

**Table 20 India Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	43,000	43,175	43,325	43,332	43,336	43,341	43,364	43,376	43,363	43,274	43,175
			(Metric Tons per Hectare)								
Yield	2.33	2.46	2.50	2.53	2.57	2.62	2.65	2.68	2.71	2.76	2.80
			(Thousand Metric Tons)								
Production	100,000	106,112	108,179	109,572	111,318	113,552	114,952	116,304	117,688	119,560	120,927
Beginning Stocks	17,686	11,093	8,698	7,305	6,165	5,556	5,761	6,128	6,554	7,081	7,982
Domestic Supply	117,686	117,205	116,877	116,877	117,483	119,108	120,712	122,432	124,242	126,641	128,909
Consumption	98,069	99,375	100,669	102,047	103,396	104,769	106,161	107,556	108,988	110,517	112,088
Ending Stocks	11,093	8,698	7,305	6,165	5,556	5,761	6,128	6,554	7,081	7,982	8,583
Domestic Use	109,162	108,073	107,975	108,212	108,952	110,529	112,289	114,110	116,069	118,499	120,672
Net Trade	8,524	9,132	8,902	8,666	8,530	8,579	8,423	8,322	8,174	8,142	8,237

**Table 21 Indonesia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	12,160	12,163	12,163	12,177	12,204	12,216	12,212	12,216	12,217	12,216	12,207
			(Metric Tons per Hectare)								
Yield	2.99	3.00	3.03	3.06	3.08	3.11	3.14	3.17	3.20	3.24	3.27
			(Thousand Metric Tons)								
Production	36,300	36,533	36,876	37,217	37,594	38,045	38,333	38,732	39,137	39,545	39,877
Beginning Stocks	3,861	3,821	4,011	4,175	4,274	4,376	4,490	4,566	4,607	4,626	4,635
Domestic Supply	40,161	40,354	40,887	41,392	41,868	42,420	42,824	43,298	43,744	44,172	44,512
Consumption	38,406	38,418	38,821	39,193	39,511	39,880	40,200	40,558	40,877	41,165	41,399
Ending Stocks	3,821	4,011	4,175	4,274	4,376	4,490	4,566	4,607	4,626	4,635	4,638
Domestic Use	42,227	42,429	42,996	43,468	43,887	44,370	44,766	45,165	45,503	45,800	46,037
Net Trade	-2,066	-2,075	-2,109	-2,075	-2,019	-1,950	-1,942	-1,867	-1,759	-1,628	-1,525

**Table 22 Iran Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	625	625	624	624	623	624	623	623	623	623	622
			(Metric Tons per Hectare)								
Yield	2.85	2.88	2.91	2.93	2.96	2.98	3.01	3.03	3.06	3.08	3.11
			(Thousand Metric Tons)								
Production	1,782	1,801	1,815	1,830	1,844	1,861	1,874	1,890	1,905	1,920	1,933
Beginning Stocks	591	634	668	690	715	736	761	779	798	817	843
Domestic Supply	2,373	2,434	2,483	2,520	2,559	2,597	2,634	2,669	2,703	2,737	2,776
Consumption	3,420	3,407	3,443	3,534	3,591	3,683	3,726	3,789	3,857	3,960	4,009
Ending Stocks	634	668	690	715	736	761	779	798	817	843	863
Domestic Use	4,054	4,075	4,134	4,249	4,327	4,444	4,505	4,587	4,674	4,803	4,872
Net Trade	-1,681	-1,640	-1,651	-1,729	-1,768	-1,847	-1,871	-1,918	-1,971	-2,066	-2,097

**Table 23 Iraq Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	48	50	55	60	64	68	72	74	76	77	79
			(Metric Tons per Hectare)								
Yield	2.29	2.29	2.31	2.33	2.34	2.36	2.37	2.38	2.40	2.41	2.42
			(Thousand Metric Tons)								
Production	110	116	128	139	150	161	170	177	182	187	190
Beginning Stocks	162	103	103	115	128	140	150	159	167	174	188
Domestic Supply	272	218	231	254	278	301	319	336	349	361	378
Consumption	1,370	1,511	1,603	1,688	1,756	1,833	1,902	1,963	2,085	2,182	2,292
Ending Stocks	103	103	115	128	140	150	159	167	174	188	202
Domestic Use	1,473	1,613	1,718	1,816	1,896	1,982	2,061	2,130	2,259	2,369	2,494
Net Trade	-1,201	-1,395	-1,488	-1,562	-1,618	-1,681	-1,742	-1,795	-1,910	-2,009	-2,116



**Table 24 Japan Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	1,610	1,546	1,528	1,500	1,476	1,463	1,442	1,438	1,437	1,437	1,434
			(Metric Tons per Hectare)								
Yield	4.91	4.91	4.92	4.93	4.94	4.95	4.96	4.96	4.97	4.97	4.97
			(Thousand Metric Tons)								
Production	7,900	7,590	7,518	7,399	7,296	7,244	7,148	7,137	7,141	7,140	7,129
Beginning Stocks	3,212	3,322	3,253	3,253	3,314	3,272	3,272	3,251	3,285	3,378	3,547
Domestic Supply	11,112	10,912	10,771	10,652	10,609	10,516	10,420	10,388	10,425	10,518	10,677
Consumption	8,392	8,261	8,120	7,940	7,940	7,846	7,771	7,705	7,649	7,573	7,513
Ending Stocks	3,322	3,253	3,253	3,314	3,272	3,272	3,251	3,285	3,378	3,547	3,766
Domestic Use	11,714	11,514	11,373	11,254	11,211	11,118	11,022	10,990	11,027	11,120	11,279
Net Trade	-602	-602	-602	-602	-602	-602	-602	-602	-602	-602	-602

**Table 25 Kenya Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	35	35	35	36	36	37	38	38	39	40	41
			(Metric Tons per Hectare)								
Yield	2.83	2.90	2.94	2.98	3.01	3.05	3.09	3.12	3.15	3.19	3.22
			(Thousand Metric Tons)								
Production	99	102	104	107	110	113	116	120	124	128	132
Beginning Stocks	101	114	116	121	130	133	138	142	148	154	160
Domestic Supply	200	216	221	228	240	246	254	262	272	282	291
Consumption	608	617	637	671	684	703	720	746	768	791	809
Ending Stocks	114	116	121	130	133	138	142	148	154	160	164
Domestic Use	722	733	759	800	816	840	862	894	923	950	973
Net Trade	-522	-517	-538	-572	-577	-594	-608	-632	-650	-668	-682

**Table 26 Lao PDR Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	925	948	960	970	979	989	1,003	1,016	1,028	1,039	1,049
			(Metric Tons per Hectare)								
Yield	1.89	1.95	1.97	1.98	1.99	2.00	2.02	2.05	2.08	2.12	2.14
			(Thousand Metric Tons)								
Production	1,750	1,844	1,891	1,921	1,951	1,983	2,021	2,079	2,136	2,200	2,243
Beginning Stocks	411	362	360	360	360	360	360	361	361	362	362
Domestic Supply	2,161	2,206	2,251	2,281	2,311	2,343	2,381	2,440	2,497	2,562	2,605
Consumption	1,912	1,879	1,866	1,867	1,880	1,876	1,896	1,904	1,916	1,936	1,967
Ending Stocks	362	360	360	360	360	360	361	361	362	362	364
Domestic Use	2,274	2,239	2,226	2,227	2,240	2,237	2,256	2,265	2,278	2,298	2,330
Net Trade	-113	-33	25	54	71	107	125	175	219	264	274

**Table 27 Liberia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	250	249	249	249	250	251	253	254	256	258	260
			(Metric Tons per Hectare)								
Yield	0.63	0.64	0.65	0.67	0.70	0.72	0.74	0.75	0.77	0.79	0.80
			(Thousand Metric Tons)								
Production	158	159	162	167	174	181	186	191	196	204	207
Beginning Stocks	17	26	31	32	33	34	35	36	37	38	39
Domestic Supply	175	185	193	199	207	215	221	227	233	242	247
Consumption	510	537	566	591	617	648	675	707	735	764	795
Ending Stocks	26	31	32	33	34	35	36	37	38	39	41
Domestic Use	536	568	597	624	650	683	711	745	773	803	836
Net Trade	-361	-383	-405	-425	-444	-468	-490	-518	-540	-561	-589

**Table 28 Malaysia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	690	692	693	692	692	692	695	696	697	698	698
			(Metric Tons per Hectare)								
Yield	2.62	2.64	2.65	2.66	2.69	2.73	2.75	2.79	2.82	2.85	2.89
			(Thousand Metric Tons)								
Production	1,810	1,826	1,834	1,840	1,865	1,888	1,913	1,941	1,967	1,991	2,017
Beginning Stocks	552	543	597	624	644	647	652	655	659	664	670
Domestic Supply	2,362	2,369	2,431	2,464	2,509	2,535	2,565	2,596	2,626	2,655	2,687
Consumption	2,821	2,833	2,850	2,880	2,909	2,929	2,955	2,986	3,024	3,061	3,094
Ending Stocks	543	597	624	644	647	652	655	659	664	670	675
Domestic Use	3,363	3,430	3,474	3,524	3,556	3,581	3,610	3,645	3,688	3,731	3,769
Net Trade	-1,001	-1,062	-1,044	-1,060	-1,047	-1,045	-1,045	-1,049	-1,062	-1,076	-1,083

**Table 29 Mali Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	743	778	815	831	845	858	873	887	902	922	932
			(Metric Tons per Hectare)								
Yield	2.14	2.07	2.12	2.18	2.24	2.29	2.34	2.39	2.44	2.50	2.55
			(Thousand Metric Tons)								
Production	1,593	1,613	1,725	1,812	1,896	1,965	2,044	2,123	2,206	2,303	2,375
Beginning Stocks	144	189	185	183	181	178	177	174	172	171	169
Domestic Supply	1,737	1,802	1,911	1,995	2,076	2,143	2,220	2,297	2,378	2,474	2,544
Consumption	1,714	1,747	1,832	1,887	1,961	2,041	2,115	2,192	2,287	2,378	2,461
Ending Stocks	189	185	183	181	178	177	174	172	171	169	168
Domestic Use	1,903	1,933	2,015	2,068	2,140	2,218	2,290	2,364	2,458	2,548	2,628
Net Trade	-166	-130	-104	-73	-63	-74	-69	-67	-80	-73	-84

**Table 30 Mexico Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	34	39	41	42	42	42	42	42	42	42	42
			(Metric Tons per Hectare)								
Yield	3.97	3.97	3.98	3.98	3.99	4.01	4.03	4.05	4.08	4.10	4.12
			(Thousand Metric Tons)								
Production	135	154	165	168	168	169	170	171	172	173	174
Beginning Stocks	152	131	153	168	178	185	193	194	196	198	203
Domestic Supply	287	284	318	336	346	354	363	365	368	371	377
Consumption	875	891	915	936	953	972	989	1,002	1,015	1,028	1,041
Ending Stocks	131	153	168	178	185	193	194	196	198	203	207
Domestic Use	1,005	1,044	1,083	1,114	1,138	1,165	1,183	1,197	1,213	1,231	1,248
Net Trade	-718	-760	-765	-778	-792	-811	-820	-832	-845	-860	-871

**Table 31 Mozambique Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	240	240	241	241	242	243	245	246	248	250	252
			(Metric Tons per Hectare)								
Yield	0.95	0.99	1.01	1.03	1.04	1.05	1.07	1.09	1.11	1.14	1.17
			(Thousand Metric Tons)								
Production	228	239	244	249	252	256	262	268	275	285	295
Beginning Stocks	0	4	4	6	7	8	9	11	12	14	15
Domestic Supply	228	243	248	255	259	263	271	279	287	299	311
Consumption	757	761	796	822	846	897	928	970	1,005	1,044	1,076
Ending Stocks	4	4	6	7	8	9	11	12	14	15	16
Domestic Use	761	765	802	829	854	906	939	982	1,019	1,059	1,092
Net Trade	-533	-523	-554	-574	-595	-643	-667	-703	-732	-760	-782

**Table 32 Myanmar Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	6,800	6,916	6,987	7,027	7,061	7,095	7,080	7,075	7,086	7,098	7,118
			(Metric Tons per Hectare)								
Yield	1.79	1.83	1.85	1.87	1.89	1.90	1.93	1.96	1.99	2.01	2.04
			(Thousand Metric Tons)								
Production	12,200	12,649	12,918	13,110	13,335	13,494	13,697	13,872	14,103	14,291	14,494
Beginning Stocks	572	319	453	464	469	474	479	483	487	491	496
Domestic Supply	12,772	12,968	13,371	13,573	13,805	13,968	14,176	14,356	14,590	14,782	14,990
Consumption	10,691	10,774	10,959	11,059	11,150	11,238	11,305	11,374	11,455	11,538	11,602
Ending Stocks	319	453	464	469	474	479	483	487	491	496	500
Domestic Use	11,009	11,227	11,422	11,528	11,625	11,718	11,788	11,861	11,946	12,034	12,101
Net Trade	1,763	1,741	1,949	2,045	2,180	2,251	2,388	2,495	2,644	2,748	2,889

**Table 33 Nigeria Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	2,400	2,605	2,738	2,839	2,892	2,961	3,028	3,099	3,145	3,185	3,212
			(Metric Tons per Hectare)								
Yield	1.13	1.17	1.22	1.26	1.29	1.30	1.32	1.34	1.36	1.40	1.42
			(Thousand Metric Tons)								
Production	2,709	3,055	3,333	3,581	3,718	3,848	3,994	4,146	4,284	4,447	4,563
Beginning Stocks	1,192	554	537	578	615	645	667	683	695	703	710
Domestic Supply	3,901	3,609	3,870	4,159	4,333	4,493	4,660	4,829	4,979	5,151	5,273
Consumption	5,869	6,209	6,439	6,659	6,896	7,200	7,507	7,794	8,089	8,356	8,585
Ending Stocks	554	537	578	615	645	667	683	695	703	710	714
Domestic Use	6,423	6,746	7,017	7,275	7,541	7,867	8,190	8,489	8,792	9,066	9,300
Net Trade	-2,522	-3,137	-3,147	-3,116	-3,208	-3,374	-3,530	-3,660	-3,813	-3,915	-4,026

**Table 34 Pakistan Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	2,850	2,838	2,851	2,857	2,859	2,864	2,862	2,863	2,867	2,867	2,862
	(Metric Tons per Hectare)										
Yield	2.42	2.43	2.48	2.52	2.54	2.56	2.60	2.63	2.65	2.67	2.68
	(Thousand Metric Tons)										
Production	6,900	6,910	7,076	7,195	7,264	7,321	7,435	7,526	7,600	7,646	7,680
Beginning Stocks	1,564	1,084	1,020	1,025	1,058	1,042	1,044	1,023	1,064	1,108	1,191
Domestic Supply	8,464	7,994	8,096	8,220	8,322	8,363	8,479	8,549	8,664	8,754	8,872
Consumption	2,831	2,881	2,937	2,984	3,037	3,101	3,149	3,204	3,261	3,322	3,371
Ending Stocks	1,084	1,020	1,025	1,058	1,042	1,044	1,023	1,064	1,108	1,191	1,298
Domestic Use	3,915	3,900	3,962	4,042	4,079	4,145	4,172	4,267	4,368	4,514	4,669
Net Trade	4,549	4,093	4,134	4,178	4,243	4,218	4,307	4,282	4,295	4,240	4,202

**Table 35 Philippines Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	4,650	4,653	4,672	4,682	4,702	4,727	4,758	4,777	4,805	4,825	4,841
	(Metric Tons per Hectare)										
Yield	2.47	2.55	2.56	2.57	2.58	2.61	2.63	2.67	2.70	2.73	2.76
	(Thousand Metric Tons)										
Production	11,500	11,870	11,965	12,026	12,135	12,316	12,536	12,746	12,954	13,150	13,364
Beginning Stocks	2,210	2,469	2,253	2,127	2,072	2,070	2,087	2,155	2,276	2,459	2,663
Domestic Supply	13,710	14,339	14,218	14,153	14,207	14,387	14,622	14,902	15,230	15,609	16,027
Consumption	13,318	13,490	13,693	13,790	13,956	14,110	14,180	14,270	14,441	14,579	14,777
Ending Stocks	2,469	2,253	2,127	2,072	2,070	2,087	2,155	2,276	2,459	2,663	2,868
Domestic Use	15,787	15,743	15,819	15,862	16,026	16,196	16,336	16,546	16,900	17,242	17,645
Net Trade	-2,077	-1,404	-1,602	-1,709	-1,819	-1,809	-1,713	-1,645	-1,670	-1,633	-1,618

**Table 36 Saudi Arabia Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Metric Tons)										
Beginning Stocks	310	361	343	345	348	351	354	357	361	364	367
Domestic Supply	310	361	343	345	348	351	354	357	361	364	367
Consumption	1,506	1,529	1,559	1,590	1,622	1,657	1,692	1,727	1,762	1,796	1,829
Ending Stocks	361	343	345	348	351	354	357	361	364	367	371
Domestic Use	1,866	1,872	1,905	1,939	1,973	2,011	2,050	2,088	2,126	2,163	2,199
Net Trade	-1,556	-1,511	-1,562	-1,593	-1,625	-1,660	-1,695	-1,731	-1,765	-1,799	-1,832

**Table 37 Senegal Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	155	164	172	174	175	176	177	177	177	177	176
	(Metric Tons per Hectare)										
Yield	2.63	2.72	2.72	2.83	2.90	3.06	3.17	3.24	3.31	3.37	3.44
	(Thousand Metric Tons)										
Production	408	445	467	492	509	539	559	574	586	596	606
Beginning Stocks	305	201	208	217	226	235	244	253	262	272	281
Domestic Supply	713	647	675	709	735	774	803	827	848	867	886
Consumption	1,505	1,539	1,586	1,631	1,675	1,721	1,765	1,811	1,858	1,904	1,950
Ending Stocks	201	208	217	226	235	244	253	262	272	281	290
Domestic Use	1,706	1,747	1,803	1,857	1,910	1,965	2,018	2,073	2,130	2,185	2,240
Net Trade	-993	-1,100	-1,128	-1,148	-1,175	-1,191	-1,214	-1,246	-1,282	-1,317	-1,354

**Table 38 Sierra Leone Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	625	637	647	657	665	673	681	689	697	704	710
	(Metric Tons per Hectare)										
Yield	1.11	1.27	1.33	1.38	1.42	1.45	1.46	1.51	1.54	1.56	1.58
	(Thousand Metric Tons)										
Production	693	811	857	907	941	973	995	1,038	1,071	1,098	1,125
Beginning Stocks	0	4	4	4	5	5	6	6	7	7	8
Domestic Supply	693	815	861	911	946	978	1,001	1,044	1,078	1,106	1,133
Consumption	964	979	1,006	1,031	1,056	1,086	1,109	1,140	1,169	1,193	1,225
Ending Stocks	4	4	4	5	5	6	6	7	7	8	9
Domestic Use	967	983	1,010	1,036	1,062	1,091	1,115	1,147	1,177	1,200	1,234
Net Trade	-274	-168	-149	-124	-115	-113	-114	-103	-99	-95	-101

**Table 39 Singapore Rice Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Metric Tons)										
Consumption	303	307	313	315	316	319	320	322	323	324	325
Ending Stocks	0	0	0	0	0	0	0	0	0	0	0
Domestic Use	303	307	313	315	316	319	320	322	323	324	325
Net Trade	-303	-307	-313	-315	-316	-319	-320	-322	-323	-324	-325

**Table 40 South Africa Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Metric Tons)										
Beginning Stocks	12	14	14	20	22	25	28	32	33	37	36
Domestic Supply	12	14	14	20	22	25	28	32	33	37	36
Consumption	869	872	902	912	923	941	959	967	985	980	1,005
Ending Stocks	14	14	20	22	25	28	32	33	37	36	41
Domestic Use	883	886	922	935	948	969	990	1,000	1,022	1,016	1,046
Net Trade	-871	-872	-908	-915	-925	-944	-962	-968	-988	-979	-1,010



**Table 41 South Korea Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	799	780	775	766	760	756	753	749	747	745	739
	(Metric Tons per Hectare)										
Yield	5.42	5.21	5.23	5.25	5.26	5.28	5.29	5.31	5.32	5.34	5.36
	(Thousand Metric Tons)										
Production	4,327	4,068	4,055	4,019	4,001	3,991	3,983	3,973	3,976	3,976	3,962
Beginning Stocks	1,140	1,549	1,673	1,760	1,824	1,887	1,954	2,024	2,095	2,181	2,263
Domestic Supply	5,467	5,617	5,727	5,779	5,825	5,878	5,937	5,996	6,071	6,157	6,225
Consumption	4,389	4,354	4,376	4,364	4,346	4,332	4,322	4,310	4,299	4,303	4,305
Ending Stocks	1,549	1,673	1,760	1,824	1,887	1,954	2,024	2,095	2,181	2,263	2,329
Domestic Use	5,938	6,026	6,136	6,188	6,233	6,287	6,346	6,405	6,480	6,566	6,634
Net Trade	-471	-409	-409	-409	-409	-409	-409	-409	-409	-409	-409

**Table 42 Taiwan Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	260	259	258	257	255	254	253	251	250	248	246
	(Metric Tons per Hectare)										
Yield	4.50	4.49	4.49	4.50	4.51	4.51	4.52	4.53	4.54	4.55	4.56
	(Thousand Metric Tons)										
Production	1,170	1,163	1,160	1,157	1,150	1,148	1,141	1,135	1,133	1,130	1,120
Beginning Stocks	275	299	320	340	356	363	367	364	357	349	341
Domestic Supply	1,445	1,462	1,480	1,497	1,506	1,511	1,509	1,499	1,491	1,479	1,462
Consumption	1,252	1,248	1,246	1,247	1,249	1,249	1,251	1,248	1,247	1,244	1,226
Ending Stocks	299	320	340	356	363	367	364	357	349	341	342
Domestic Use	1,551	1,568	1,586	1,603	1,612	1,617	1,615	1,605	1,597	1,585	1,568
Net Trade	-106	-106	-106	-106	-106	-106	-106	-106	-106	-106	-106

**Table 43 Tanzania Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	950	990	1,000	1,013	1,030	1,049	1,070	1,094	1,119	1,147	1,165
			(Metric Tons per Hectare)								
Yield	1.81	1.84	1.87	1.91	1.94	1.97	2.01	2.04	2.07	2.10	2.14
			(Thousand Metric Tons)								
Production	1,716	1,822	1,874	1,932	1,997	2,068	2,146	2,230	2,319	2,413	2,490
Beginning Stocks	0	6	8	9	10	11	13	14	16	18	19
Domestic Supply	1,716	1,827	1,882	1,940	2,007	2,080	2,159	2,244	2,335	2,431	2,510
Consumption	1,850	1,957	2,019	2,072	2,155	2,245	2,311	2,387	2,472	2,558	2,635
Ending Stocks	6	8	9	10	11	13	14	16	18	19	21
Domestic Use	1,855	1,965	2,028	2,082	2,166	2,258	2,325	2,403	2,489	2,577	2,656
Net Trade	-139	-138	-146	-142	-159	-178	-166	-159	-155	-146	-146

**Table 44 Thailand Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	9,650	9,889	10,158	10,199	10,262	10,337	10,370	10,379	10,379	10,383	10,384
			(Metric Tons per Hectare)								
Yield	1.70	1.89	1.93	1.97	1.99	2.01	2.04	2.06	2.09	2.11	2.15
			(Thousand Metric Tons)								
Production	16,400	18,670	19,592	20,117	20,387	20,766	21,146	21,369	21,643	21,949	22,305
Beginning Stocks	10,074	5,161	3,134	2,084	1,524	1,293	1,498	1,955	2,188	2,398	2,489
Domestic Supply	26,474	23,831	22,726	22,201	21,911	22,059	22,644	23,324	23,831	24,347	24,794
Consumption	11,516	11,548	11,498	11,485	11,400	11,307	11,136	11,080	11,021	10,914	10,863
Ending Stocks	5,161	3,134	2,084	1,524	1,293	1,498	1,955	2,188	2,398	2,489	2,558
Domestic Use	16,677	14,682	13,581	13,009	12,693	12,805	13,091	13,268	13,419	13,402	13,421
Net Trade	9,797	9,149	9,145	9,192	9,218	9,254	9,553	10,056	10,412	10,945	11,373

**Table 45 Turkey Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	98	100	103	104	105	106	107	107	108	109	109
			(Metric Tons per Hectare)								
Yield	5.10	5.19	5.25	5.31	5.37	5.43	5.48	5.54	5.60	5.66	5.72
			(Thousand Metric Tons)								
Production	500	521	539	554	564	574	584	595	605	616	624
Beginning Stocks	215	208	206	197	188	179	171	167	166	165	163
Domestic Supply	715	728	745	751	752	753	755	761	771	781	787
Consumption	772	783	785	784	785	786	793	805	818	827	835
Ending Stocks	208	206	197	188	179	171	167	166	165	163	159
Domestic Use	979	990	982	972	964	957	959	971	983	990	994
Net Trade	-264	-261	-236	-221	-212	-204	-204	-209	-212	-209	-207

**Table 46 Uruguay Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	160	164	169	172	174	177	178	176	175	173	170
			(Metric Tons per Hectare)								
Yield	5.81	5.85	5.91	5.96	6.00	6.05	6.09	6.17	6.25	6.33	6.41
			(Thousand Metric Tons)								
Production	930	958	998	1,022	1,046	1,068	1,082	1,085	1,094	1,092	1,092
Beginning Stocks	137	57	60	63	66	69	72	76	80	84	88
Domestic Supply	1,067	1,015	1,057	1,084	1,112	1,137	1,154	1,161	1,174	1,177	1,181
Consumption	62	58	55	53	53	53	53	53	53	53	53
Ending Stocks	57	60	63	66	69	72	76	80	84	88	93
Domestic Use	119	118	117	119	122	125	129	133	137	142	146
Net Trade	948	897	940	965	990	1,012	1,025	1,028	1,037	1,035	1,034

**Table 47 Vietnam Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	7,660	7,601	7,593	7,587	7,575	7,577	7,584	7,589	7,594	7,605	7,615
			(Metric Tons per Hectare)								
Yield	3.68	3.71	3.73	3.75	3.78	3.83	3.83	3.86	3.88	3.90	3.91
			(Thousand Metric Tons)								
Production	28,200	28,170	28,310	28,416	28,647	28,998	29,060	29,275	29,458	29,630	29,746
Beginning Stocks	1,334	726	456	376	368	386	449	377	430	376	372
Domestic Supply	29,534	28,897	28,766	28,792	29,015	29,384	29,509	29,651	29,888	30,007	30,118
Consumption	22,031	21,834	21,823	21,711	21,814	21,879	22,105	22,233	22,356	22,495	22,656
Ending Stocks	726	456	376	368	386	449	377	430	376	372	359
Domestic Use	22,757	22,290	22,199	22,078	22,200	22,328	22,481	22,662	22,732	22,868	23,014
Net Trade	6,777	6,606	6,567	6,714	6,815	7,055	7,028	6,989	7,155	7,139	7,104

**Table 48 Cuba Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	215	216	217	218	219	220	221	222	222	223	223
			(Metric Tons per Hectare)								
Yield	1.84	1.91	1.94	1.95	1.97	1.97	1.99	2.00	2.01	2.03	2.05
			(Thousand Metric Tons)								
Production	395	413	422	425	431	434	439	443	446	451	457
Beginning Stocks	0	0	2	2	2	2	3	3	3	3	3
Domestic Supply	395	413	424	427	433	437	441	446	449	455	460
Consumption	900	928	945	950	957	969	980	989	998	1,013	1,022
Ending Stocks	0	2	2	2	2	3	3	3	3	3	4
Domestic Use	900	930	947	952	959	972	983	992	1,001	1,016	1,026
Net Trade	-505	-517	-523	-525	-526	-535	-542	-546	-552	-562	-566

**Table 49 Costa Rica Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	65	64	66	66	66	67	67	68	68	68	68
	(Metric Tons per Hectare)										
Yield	2.23	2.24	2.23	2.24	2.24	2.23	2.23	2.24	2.24	2.24	2.24
	(Thousand Metric Tons)										
Production	145	144	147	147	149	150	151	151	152	152	152
Beginning Stocks	63	61	58	57	54	49	46	44	43	44	45
Domestic Supply	208	205	205	204	203	199	197	195	195	196	197
Consumption	251	255	258	260	262	264	267	269	271	274	276
Ending Stocks	61	58	57	54	49	46	44	43	44	45	47
Domestic Use	311	313	315	314	311	310	310	312	315	318	323
Net Trade	-103	-108	-110	-110	-108	-111	-114	-117	-120	-122	-126

**Table 50 Dominican Republic Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	160	161	160	160	160	161	161	161	161	161	161
	(Metric Tons per Hectare)										
Yield	3.25	3.38	3.41	3.45	3.51	3.51	3.54	3.56	3.58	3.61	3.63
	(Thousand Metric Tons)										
Production	520	544	547	553	562	565	569	573	577	582	585
Beginning Stocks	199	186	191	192	193	194	194	195	195	196	196
Domestic Supply	719	730	738	745	755	759	764	768	773	777	782
Consumption	551	557	564	571	577	582	586	591	596	601	606
Ending Stocks	186	191	192	193	194	194	195	195	196	196	196
Domestic Use	737	748	756	763	771	776	781	787	792	797	802
Net Trade	-18	-18	-18	-19	-16	-17	-17	-19	-19	-20	-21

**Table 51 Guatemala Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	10	10	10	10	10	10	10	11	11	11	11
	(Metric Tons per Hectare)										
Yield	2.20	2.40	2.43	2.46	2.49	2.51	2.54	2.56	2.58	2.60	2.62
	(Thousand Metric Tons)										
Production	22	24	25	25	26	26	27	27	28	28	29
Beginning Stocks	0	0	2	2	2	2	2	3	3	3	3
Domestic Supply	22	24	27	27	28	28	29	30	30	31	32
Consumption	100	102	105	108	111	115	118	122	126	130	134
Ending Stocks	0	2	2	2	2	2	3	3	3	3	3
Domestic Use	100	104	107	110	113	117	121	125	129	133	137
Net Trade	-78	-79	-80	-83	-86	-89	-92	-95	-99	-102	-105

**Table 52 Honduras Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	24	24	25	26	26	27	28	28	29	29	30
	(Metric Tons per Hectare)										
Yield	2.71	2.79	2.87	2.95	3.03	3.11	3.20	3.28	3.37	3.45	3.54
	(Thousand Metric Tons)										
Production	65	68	71	75	80	84	88	93	97	101	105
Beginning Stocks	55	60	61	61	61	61	62	62	63	63	64
Domestic Supply	120	128	132	136	141	145	150	155	160	164	169
Consumption	210	212	217	220	223	230	237	244	251	259	267
Ending Stocks	60	61	61	61	61	62	62	63	63	64	64
Domestic Use	270	272	277	281	285	292	299	306	314	323	331
Net Trade	-150	-144	-145	-145	-144	-147	-149	-152	-155	-159	-163

**Table 53 Nicaragua Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	103	103	104	105	106	106	107	107	108	108	108
			(Metric Tons per Hectare)								
Yield	2.82	2.81	2.84	2.87	2.90	2.93	2.96	2.98	3.01	3.04	3.07
			(Thousand Metric Tons)								
Production	290	289	296	301	307	312	316	320	324	328	331
Beginning Stocks	115	111	111	111	112	113	114	115	116	117	118
Domestic Supply	405	400	407	413	419	425	430	435	440	445	450
Consumption	363	364	369	373	378	385	391	397	404	411	418
Ending Stocks	111	111	111	112	113	114	115	116	117	118	120
Domestic Use	474	475	480	486	491	499	506	514	521	529	537
Net Trade	-69	-75	-74	-73	-72	-74	-76	-78	-81	-84	-87

**Table 54 Panama Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	85	85	82	80	78	77	76	76	75	74	74
			(Metric Tons per Hectare)								
Yield	1.76	1.79	1.83	1.86	1.90	1.90	1.93	1.96	1.99	2.01	2.04
			(Thousand Metric Tons)								
Production	150	152	149	149	149	147	147	148	149	150	152
Beginning Stocks	14	9	12	12	11	12	13	13	13	13	14
Domestic Supply	164	161	161	160	160	159	160	161	162	163	165
Consumption	236	236	238	240	242	244	246	248	250	252	253
Ending Stocks	9	12	12	11	12	13	13	13	13	14	14
Domestic Use	245	247	250	251	254	257	259	261	263	265	267
Net Trade	-81	-86	-89	-91	-94	-98	-99	-100	-102	-102	-102

**Table 55 Chile Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	25	25	25	25	26	26	27	27	27	27	28
			(Metric Tons per Hectare)								
Yield	4.40	3.90	3.92	3.97	4.03	4.06	4.09	4.12	4.15	4.18	4.20
			(Thousand Metric Tons)								
Production	110	97	97	100	105	107	109	111	113	115	116
Beginning Stocks	57	52	56	56	56	57	58	58	59	60	61
Domestic Supply	167	150	154	157	161	164	167	169	172	174	177
Consumption	236	239	242	244	248	252	256	260	266	270	275
Ending Stocks	52	56	56	56	57	58	58	59	60	61	61
Domestic Use	289	295	298	300	305	309	314	320	325	331	336
Net Trade	-122	-146	-144	-143	-144	-145	-147	-150	-153	-156	-159

**Table 56 Paraguay Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	140	143	148	154	160	166	172	177	183	188	193
			(Metric Tons per Hectare)								
Yield	4.00	4.07	4.04	4.06	4.08	4.05	4.04	4.07	4.12	4.16	4.20
			(Thousand Metric Tons)								
Production	560	583	599	624	652	672	693	721	751	782	812
Beginning Stocks	105	129	140	139	137	135	126	119	110	102	93
Domestic Supply	665	711	739	763	789	807	819	840	861	884	905
Consumption	21	21	21	21	21	22	23	23	24	25	26
Ending Stocks	129	140	139	137	135	126	119	110	102	93	86
Domestic Use	150	161	161	158	156	148	141	133	126	119	112
Net Trade	515	551	578	605	632	659	678	707	735	765	793



**Table 57 Peru Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	400	398	406	414	420	427	432	437	441	445	449
			(Metric Tons per Hectare)								
Yield	5.38	5.42	5.47	5.55	5.64	5.69	5.76	5.83	5.90	5.97	6.03
			(Thousand Metric Tons)								
Production	2,153	2,156	2,222	2,297	2,370	2,431	2,490	2,546	2,601	2,655	2,707
Beginning Stocks	155	140	82	72	83	100	114	117	111	99	87
Domestic Supply	2,308	2,296	2,304	2,369	2,453	2,531	2,604	2,663	2,712	2,753	2,794
Consumption	2,320	2,381	2,428	2,487	2,556	2,612	2,672	2,734	2,796	2,857	2,911
Ending Stocks	140	82	72	83	100	114	117	111	99	87	82
Domestic Use	2,460	2,463	2,500	2,569	2,655	2,726	2,789	2,844	2,894	2,943	2,993
Net Trade	-152	-167	-196	-200	-202	-195	-185	-181	-183	-190	-199

**Table 58 Africa Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	11,189	11,439	11,727	11,916	12,072	12,268	12,447	12,657	12,850	12,999	13,163
			(Metric Tons per Hectare)								
Yield	1.64	1.76	1.80	1.83	1.85	1.87	1.89	1.91	1.93	1.96	1.98
			(Thousand Metric Tons)								
Production	18,372	20,170	21,086	21,767	22,319	22,933	23,494	24,135	24,771	25,424	26,029
Beginning Stocks	3,420	2,204	2,526	2,821	3,006	3,108	3,164	3,166	3,149	3,134	3,092
Domestic Supply	21,792	22,374	23,612	24,589	25,325	26,041	26,658	27,300	27,920	28,558	29,121
Consumption	32,049	33,165	34,508	35,567	36,590	37,830	38,921	40,060	41,220	42,351	43,461
Ending Stocks	2,204	2,526	2,821	3,006	3,108	3,164	3,166	3,149	3,134	3,092	3,052
Domestic Use	34,253	35,691	37,329	38,573	39,699	40,994	42,087	43,209	44,355	45,443	46,513
Net Trade	-12,461	-13,317	-13,717	-13,984	-14,374	-14,953	-15,429	-15,909	-16,434	-16,885	-17,392

**Table 59 African Aggregate of Countries with Individual AGRM Models – Rice Supply, Utilization, and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	9,072	9,274	9,511	9,665	9,791	9,961	10,117	10,305	10,451	10,593	10,719
	(Metric Tons per Hectare)										
Yield	1.70	1.83	1.85	1.88	1.90	1.92	1.94	1.96	1.98	2.01	2.03
	(Thousand Metric Tons)										
Production	15,433	16,964	17,628	18,184	18,652	19,166	19,651	20,217	20,737	21,296	21,771
Beginning Stocks	3,312	2,099	2,417	2,707	2,889	2,990	3,043	3,042	3,023	3,006	2,961
Domestic Supply	18,745	19,063	20,045	20,891	21,541	22,156	22,694	23,259	23,760	24,302	24,733
Consumption	26,448	27,381	28,443	29,359	30,291	31,391	32,373	33,384	34,415	35,423	36,361
Ending Stocks	2,099	2,417	2,707	2,889	2,990	3,043	3,042	3,023	3,006	2,961	2,918
Domestic Use	28,547	29,799	31,150	32,248	33,281	34,434	35,415	36,408	37,421	38,384	39,278
Net Trade	-9,802	-10,735	-11,105	-11,357	-11,740	-12,279	-12,721	-13,148	-13,661	-14,082	-14,546

**Table 60 African Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	2,117	2,166	2,216	2,251	2,281	2,308	2,330	2,352	2,398	2,405	2,444
	(Metric Tons per Hectare)										
Yield	1.39	1.48	1.56	1.59	1.61	1.63	1.65	1.67	1.68	1.72	1.74
	(Thousand Metric Tons)										
Production	2,939	3,206	3,458	3,583	3,667	3,767	3,842	3,917	4,034	4,127	4,258
Beginning Stocks	108	105	109	114	117	119	121	123	126	128	131
Domestic Supply	3,047	3,311	3,567	3,697	3,784	3,885	3,964	4,041	4,160	4,256	4,389
Consumption	5,600	5,783	6,065	6,208	6,299	6,439	6,548	6,676	6,805	6,929	7,100
Ending Stocks	105	109	114	117	119	121	123	126	128	131	134
Domestic Use	5,706	5,892	6,179	6,325	6,418	6,560	6,672	6,802	6,934	7,059	7,234
Net Trade	-2,659	-2,581	-2,612	-2,627	-2,634	-2,675	-2,708	-2,761	-2,774	-2,803	-2,846

**Table 61 Western Hemisphere Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	6,384	6,454	6,533	6,559	6,591	6,617	6,634	6,644	6,651	6,669	6,717
	(Metric Tons per Hectare)										
Yield	3.79	3.85	3.89	3.94	3.98	4.02	4.05	4.08	4.12	4.15	4.21
	(Thousand Metric Tons)										
Production	24,211	24,859	25,410	25,812	26,264	26,600	26,870	27,125	27,379	27,688	28,247
Beginning Stocks	4,290	3,811	3,609	3,540	3,472	3,371	3,306	3,262	3,219	3,173	3,216
Domestic Supply	28,501	28,670	29,019	29,352	29,736	29,970	30,176	30,387	30,598	30,861	31,463
Consumption	23,265	23,624	23,909	24,224	24,501	24,748	24,866	25,127	25,368	25,620	25,857
Ending Stocks	3,811	3,609	3,540	3,472	3,371	3,306	3,262	3,219	3,173	3,216	3,565
Domestic Use	27,076	27,233	27,449	27,696	27,872	28,054	28,128	28,346	28,541	28,836	29,423
Net Trade	1,425	1,438	1,570	1,656	1,864	1,916	2,048	2,041	2,057	2,025	2,041

**Table 62 Western Hemisphere Aggregate of Countries with Individual AGRM Models – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	5,403	5,469	5,544	5,568	5,597	5,620	5,635	5,644	5,649	5,664	5,711
	(Metric Tons per Hectare)										
Yield	4.04	4.11	4.15	4.20	4.26	4.30	4.33	4.37	4.41	4.45	4.50
	(Thousand Metric Tons)										
Production	21,838	22,483	23,009	23,391	23,823	24,149	24,405	24,644	24,884	25,179	25,720
Beginning Stocks	3,968	3,446	3,240	3,169	3,096	2,993	2,926	2,876	2,824	2,774	2,811
Domestic Supply	25,806	25,929	26,249	26,560	26,919	27,143	27,331	27,520	27,708	27,952	28,531
Consumption	20,441	20,779	21,056	21,344	21,615	21,850	21,934	22,154	22,369	22,595	22,792
Ending Stocks	3,446	3,240	3,169	3,096	2,993	2,926	2,876	2,824	2,774	2,811	3,152
Domestic Use	23,887	24,019	24,225	24,441	24,609	24,776	24,810	24,979	25,143	25,407	25,944
Net Trade	1,919	1,911	2,024	2,119	2,310	2,367	2,521	2,541	2,565	2,546	2,587

**Table 63 Western Hemisphere Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	981	985	989	992	995	996	998	1,000	1,002	1,004	1,006
	(Metric Tons per Hectare)										
Yield	2.42	2.41	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.50	2.51
	(Thousand Metric Tons)										
Production	2,373	2,376	2,401	2,421	2,441	2,450	2,466	2,481	2,495	2,509	2,527
Beginning Stocks	322	365	369	371	376	377	380	386	395	400	405
Domestic Supply	2,695	2,741	2,770	2,792	2,817	2,827	2,845	2,867	2,890	2,909	2,932
Consumption	2,824	2,845	2,853	2,879	2,886	2,898	2,932	2,973	2,998	3,024	3,065
Ending Stocks	365	369	371	376	377	380	386	395	400	405	413
Domestic Use	3,189	3,214	3,224	3,255	3,263	3,278	3,318	3,367	3,398	3,429	3,478
Net Trade	-494	-473	-454	-463	-446	-451	-473	-500	-508	-520	-546

**Table 64 Asian Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	140,898	140,982	141,609	141,676	141,834	142,024	141,884	141,902	141,874	141,601	141,210
	(Metric Tons per Hectare)										
Yield	3.02	3.08	3.11	3.13	3.16	3.19	3.21	3.24	3.27	3.29	3.32
	(Thousand Metric Tons)										
Production	425,315	433,861	439,961	443,581	447,844	453,177	456,146	460,274	463,734	466,439	468,539
Beginning Stocks	94,719	82,083	76,366	73,580	71,644	71,784	74,113	76,372	79,283	82,042	84,004
Domestic Supply	520,034	515,943	516,328	517,161	519,488	524,961	530,259	536,646	543,017	548,481	552,543
Consumption	425,215	426,244	429,326	432,064	434,169	436,832	439,544	442,533	445,617	448,620	451,300
Ending Stocks	82,083	76,366	73,580	71,644	71,784	74,113	76,372	79,283	82,042	84,004	84,877
Domestic Use	507,298	502,610	502,906	503,707	505,953	510,945	515,916	521,816	527,660	532,625	536,176
Net Trade	12,736	13,333	13,422	13,454	13,535	14,015	14,343	14,830	15,357	15,857	16,366

**Table 65 Asian Aggregate of Countries with Individual Models in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	136,940	137,013	137,616	137,633	137,762	137,936	137,786	137,795	137,764	137,490	137,077
	(Metric Tons per Hectare)										
Yield	3.03	3.09	3.12	3.15	3.17	3.21	3.23	3.26	3.29	3.31	3.34
	(Thousand Metric Tons)										
Production	415,570	423,909	429,810	433,163	437,315	442,465	445,371	449,443	452,859	455,473	457,316
Beginning Stocks	93,466	80,941	75,219	72,426	70,485	70,620	72,943	75,196	78,102	80,858	82,817
Domestic Supply	509,036	504,850	505,029	505,588	507,800	513,085	518,314	524,639	530,961	536,331	540,133
Consumption	412,642	413,357	416,130	418,608	420,451	422,803	425,224	427,908	430,848	433,672	435,987
Ending Stocks	80,941	75,219	72,426	70,485	70,620	72,943	75,196	78,102	80,858	82,817	83,682
Domestic Use	493,583	488,575	488,556	489,093	491,072	495,746	500,420	506,009	511,706	516,489	519,669
Net Trade	15,453	16,275	16,473	16,496	16,728	17,340	17,894	18,630	19,255	19,842	20,464

**Table 66 Asian Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2013-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	3,958	3,969	3,993	4,044	4,072	4,088	4,098	4,107	4,110	4,111	4,132
	(Metric Tons per Hectare)										
Yield	2.46	2.51	2.54	2.58	2.59	2.62	2.63	2.64	2.65	2.67	2.72
	(Thousand Metric Tons)										
Production	9,745	9,952	10,151	10,419	10,529	10,712	10,775	10,831	10,874	10,966	11,222
Beginning Stocks	1,253	1,142	1,148	1,154	1,159	1,164	1,170	1,175	1,181	1,184	1,187
Domestic Supply	10,998	11,093	11,299	11,573	11,688	11,876	11,944	12,007	12,056	12,150	12,410
Consumption	12,573	12,887	13,196	13,456	13,717	14,030	14,321	14,625	14,769	14,948	15,313
Ending Stocks	1,142	1,148	1,154	1,159	1,164	1,170	1,175	1,181	1,184	1,187	1,194
Domestic Use	13,714	14,035	14,350	14,614	14,881	15,200	15,496	15,806	15,953	16,135	16,507
Net Trade	-2,716	-2,942	-3,052	-3,042	-3,194	-3,324	-3,552	-3,800	-3,898	-3,985	-4,097

**Table 67 European Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	434	437	442	445	446	447	448	448	450	450	450
			(Metric Tons per Hectare)								
Yield	4.64	4.57	4.62	4.67	4.72	4.76	4.81	4.85	4.89	4.93	4.97
			(Thousand Metric Tons)								
Production	2,015	1,998	2,044	2,077	2,105	2,132	2,153	2,173	2,201	2,219	2,236
Beginning Stocks	1,255	1,147	1,031	937	847	773	716	675	661	666	691
Domestic Supply	3,270	3,146	3,075	3,014	2,953	2,904	2,869	2,848	2,861	2,885	2,928
Consumption	3,409	3,419	3,473	3,523	3,558	3,592	3,623	3,638	3,669	3,691	3,710
Ending Stocks	1,147	1,031	937	847	773	716	675	661	666	691	737
Domestic Use	4,556	4,450	4,410	4,370	4,330	4,308	4,298	4,299	4,336	4,382	4,447
Net Trade	-1,286	-1,304	-1,335	-1,356	-1,378	-1,404	-1,429	-1,451	-1,474	-1,497	-1,520

**Table 68 European Aggregate of Countries Modeled Individually in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
			(Thousand Hectares)								
Area Harvested	431	434	439	441	443	444	445	445	447	447	447
			(Metric Tons per Hectare)								
Yield	4.65	4.58	4.63	4.68	4.73	4.77	4.82	4.86	4.90	4.94	4.98
			(Thousand Metric Tons)								
Production	2,005	1,988	2,034	2,066	2,095	2,121	2,141	2,162	2,189	2,207	2,225
Beginning Stocks	1,231	1,119	992	886	794	718	661	620	605	610	634
Domestic Supply	3,236	3,107	3,026	2,952	2,888	2,839	2,803	2,782	2,794	2,817	2,860
Consumption	3,300	3,306	3,347	3,382	3,410	3,441	3,470	3,483	3,511	3,530	3,547
Ending Stocks	1,119	992	886	794	718	661	620	605	610	634	680
Domestic Use	4,419	4,298	4,233	4,176	4,128	4,102	4,090	4,088	4,121	4,165	4,226
Net Trade	-1,183	-1,191	-1,207	-1,224	-1,240	-1,264	-1,287	-1,306	-1,327	-1,347	-1,367

**Table 69 European Aggregate of Other Countries Modeled as a Group in AGRM - Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	3	3	3	3	3	3	3	3	3	3	3
	(Metric Tons per Hectare)										
Yield	3.13	3.26	3.27	3.32	3.35	3.37	3.40	3.42	3.45	3.48	3.50
	(Thousand Metric Tons)										
Production	10	10	11	11	11	11	11	11	11	11	11
Beginning Stocks	24	28	39	51	53	55	55	55	56	56	57
Domestic Supply	34	39	49	62	64	66	66	67	67	68	68
Consumption	109	113	126	141	148	150	153	155	158	161	164
Ending Stocks	28	39	51	53	55	55	55	56	56	57	57
Domestic Use	137	152	177	194	202	205	208	211	214	218	221
Net Trade	-103	-113	-127	-133	-138	-140	-142	-145	-147	-150	-153

**Table 70 Oceania Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	30	75	83	85	87	90	93	96	100	101	101
	(Metric Tons per Hectare)										
Yield	7.20	7.09	7.16	7.24	7.33	7.41	7.50	7.58	7.66	7.75	7.85
	(Thousand Metric Tons)										
Production	216	533	594	616	641	668	697	730	763	780	789
Beginning Stocks	182	106	222	289	288	245	189	136	101	92	93
Domestic Supply	398	639	816	905	929	913	886	866	865	872	882
Consumption	436	442	455	467	480	490	501	510	519	526	536
Ending Stocks	106	222	289	288	245	189	136	101	92	93	95
Domestic Use	542	664	745	755	725	679	637	612	611	619	630
Net Trade	-144	-25	71	150	203	234	249	254	253	253	252

**Table 71 Oceania Aggregate of Countries Modeled individually in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	30	75	83	85	87	90	93	96	100	101	101
	(Metric Tons per Hectare)										
Yield	7.20	7.09	7.16	7.24	7.33	7.41	7.50	7.58	7.66	7.75	7.85
	(Thousand Metric Tons)										
Production	216	533	594	616	641	668	697	730	763	780	789
Beginning Stocks	182	105	221	288	286	243	186	133	99	89	90
Domestic Supply	398	638	815	903	927	910	884	863	862	869	879
Consumption	377	368	366	363	362	358	357	356	356	355	359
Ending Stocks	105	221	288	286	243	186	133	99	89	90	91
Domestic Use	482	589	653	649	604	544	491	454	445	445	450
Net Trade	-84	49	161	255	322	366	393	409	417	424	429

**Table 72 Oceania Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization, and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	0	0	0	0	0	0	0	0	0	0	0
	(Metric Tons per Hectare)										
Yield	0	0	0	0	0	0	0	0	0	0	0
	(Thousand Metric Tons)										
Production	0	0	0	0	0	0	0	0	0	0	0
Beginning Stocks	0	1	1	2	2	2	3	3	3	3	3
Domestic Supply	0	1	1	2	2	2	3	3	3	3	3
Consumption	59	74	89	104	119	132	144	154	163	171	177
Ending Stocks	1	1	2	2	2	3	3	3	3	3	3
Domestic Use	60	76	91	106	121	135	147	157	166	174	180
Net Trade	-60	-75	-90	-105	-119	-132	-144	-155	-163	-171	-177



**Table 73 World Total Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	158,935	159,387	160,394	160,681	161,031	161,446	161,505	161,748	161,925	161,819	161,641
	(Metric Tons per Hectare)										
Yield	2.96	3.02	3.05	3.07	3.10	3.13	3.15	3.18	3.20	3.23	3.25
	(Thousand Metric Tons)										
Production	470,129	481,422	489,095	493,853	499,173	505,508	509,360	514,436	518,848	522,549	525,841
Beginning Stocks	103,866	89,351	83,755	81,167	79,257	79,281	81,488	83,611	86,413	89,108	91,097
Domestic Supply	573,995	570,773	572,850	575,020	578,430	584,789	590,848	598,048	605,261	611,658	616,938
Consumption	484,374	486,893	491,672	495,844	499,298	503,493	507,456	511,868	516,394	520,808	524,864
Ending Stocks	89,351	83,755	81,167	79,257	79,281	81,488	83,611	86,413	89,108	91,097	92,325
Domestic Use	573,725	570,648	572,839	575,101	578,579	584,981	591,067	598,281	605,503	611,905	617,189
Residual	270	125	11	-81	-149	-192	-219	-234	-241	-247	-252

**Table 74 World Aggregate of Countries Modeled individually in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	151,876	152,265	153,193	153,392	153,680	154,051	154,075	154,286	154,411	154,296	154,055
	(Metric Tons per Hectare)										
Yield	3.00	3.06	3.09	3.11	3.14	3.17	3.19	3.22	3.25	3.27	3.30
	(Thousand Metric Tons)										
Production	455,062	465,878	473,075	477,419	482,525	488,568	492,266	497,196	501,433	504,935	507,821
Beginning Stocks	102,159	87,710	82,089	79,476	77,550	77,564	79,760	81,868	84,653	87,337	89,314
Domestic Supply	557,221	553,587	555,164	556,895	560,075	566,132	572,026	579,063	586,086	592,272	597,135
Consumption	463,209	465,190	469,342	473,056	476,129	479,843	483,358	487,285	491,500	495,576	499,045
Ending Stocks	87,710	82,089	79,476	77,550	77,564	79,760	81,868	84,653	87,337	89,314	90,523
Domestic Use	550,919	547,279	548,818	550,606	553,694	559,603	565,226	571,938	578,836	584,890	589,568
Net Trade	6,302	6,308	6,347	6,289	6,381	6,530	6,800	7,125	7,249	7,383	7,567

**Table 75 World Aggregate of Other Countries Modeled as a Group in AGRM – Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	7,059	7,123	7,201	7,289	7,350	7,395	7,430	7,462	7,514	7,524	7,586
	(Metric Tons per Hectare)										
Yield	2.13	2.18	2.22	2.25	2.26	2.29	2.30	2.31	2.32	2.34	2.38
	(Thousand Metric Tons)										
Production	15,067	15,544	16,020	16,434	16,648	16,940	17,094	17,241	17,415	17,614	18,019
Beginning Stocks	1,707	1,641	1,666	1,691	1,707	1,717	1,728	1,743	1,761	1,772	1,783
Domestic Supply	16,774	17,185	17,686	18,125	18,355	18,656	18,822	18,984	19,176	19,386	19,802
Consumption	21,165	21,703	22,330	22,788	23,169	23,649	24,097	24,583	24,895	25,232	25,819
Ending Stocks	1,641	1,666	1,691	1,707	1,717	1,728	1,743	1,761	1,772	1,783	1,802
Domestic Use	22,806	23,369	24,021	24,496	24,885	25,378	25,841	26,344	26,666	27,016	27,621
Net Trade	-6,032	-6,184	-6,335	-6,370	-6,530	-6,721	-7,018	-7,359	-7,490	-7,630	-7,818

**Table 76 ECOWAS-7\* Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	457	460	466	476	493	514	532	551	568	585	601
	(Metric Tons per Hectare)										
Yield	1.49	1.51	1.51	1.52	1.53	1.53	1.54	1.55	1.56	1.56	1.57
	(Thousand Metric Tons)										
Production	681	692	702	723	754	787	819	852	883	914	944
Beginning Stocks	37	38	44	46	49	51	54	56	58	61	63
Domestic Supply	718	730	746	769	803	838	873	908	942	975	1,008
Consumption	2,170	2,272	2,408	2,536	2,657	2,783	2,907	3,036	3,165	3,301	3,429
Ending Stocks	38	44	46	49	51	54	56	58	61	63	66
Domestic Use	2,208	2,316	2,454	2,584	2,708	2,836	2,963	3,094	3,226	3,365	3,495
Net Trade	-1,490	-1,585	-1,709	-1,815	-1,905	-1,998	-2,090	-2,186	-2,284	-2,389	-2,487

\*(Benin, Burkina, Gambia, Guinea-Bissau, Niger, Togo, Cabo Verde); these West African countries are modeled as a group in AGRM

**Table 77 ECOWAS-8\*\* Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	6,450	6,703	6,915	7,040	7,123	7,235	7,342	7,476	7,567	7,654	7,736
	(Metric Tons per Hectare)										
Yield	1.33	1.37	1.40	1.45	1.48	1.50	1.53	1.55	1.58	1.61	1.64
	(Thousand Metric Tons)										
Production	8,581	9,172	9,714	10,179	10,516	10,865	11,210	11,613	11,971	12,360	12,702
Beginning Stocks	2,246	1,399	1,404	1,475	1,541	1,593	1,644	1,685	1,724	1,762	1,797
Domestic Supply	10,827	10,570	11,118	11,654	12,057	12,458	12,854	13,298	13,695	14,122	14,499
Consumption	15,501	16,095	16,701	17,251	17,811	18,480	19,123	19,767	20,445	21,087	21,690
Ending Stocks	1,399	1,404	1,475	1,541	1,593	1,644	1,685	1,724	1,762	1,797	1,830
Domestic Use	16,899	17,500	18,176	18,792	19,404	20,123	20,808	21,491	22,207	22,883	23,519
Net Trade	-6,072	-6,929	-7,058	-7,138	-7,347	-7,665	-7,953	-8,193	-8,512	-8,762	-9,021

\*\* (Cote d'Ivoire, Ghana, Guinea, Liberia, Mali, Nigeria, Senegal, Sierra Leone); these West African countries are modeled as individual countries in AGRM

**Table 78 ECOWAS-15 (sum of ECOWAS-7 and ECOWAS-8) Rice Supply, Utilization and Net Trade, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Thousand Hectares)										
Area Harvested	6,907	7,163	7,380	7,516	7,616	7,750	7,875	8,026	8,135	8,239	8,337
	(Metric Tons per Hectare)										
Yield	1.34	1.38	1.41	1.45	1.48	1.50	1.53	1.55	1.58	1.61	1.64
	(Thousand Metric Tons)										
Production	9,262	9,864	10,415	10,902	11,270	11,651	12,030	12,465	12,854	13,274	13,646
Beginning Stocks	2,283	1,436	1,448	1,522	1,590	1,645	1,697	1,741	1,782	1,822	1,860
Domestic Supply	11,545	11,301	11,864	12,423	12,860	13,296	13,727	14,206	14,636	15,097	15,507
Consumption	17,671	18,367	19,109	19,786	20,468	21,262	22,030	22,803	23,611	24,388	25,118
Ending Stocks	1,436	1,448	1,522	1,590	1,645	1,697	1,741	1,782	1,822	1,860	1,896
Domestic Use	19,107	19,815	20,630	21,376	22,112	22,959	23,770	24,585	25,433	26,248	27,014
Net Trade	-7,562	-8,515	-8,766	-8,953	-9,252	-9,664	-10,043	-10,379	-10,797	-11,151	-11,507

**Table 79 Projected Rice Milled Yields Per Hectare for the World and Selected Countries, 2015-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Metric Tons per Hectare)										
Argentina	4.3	4.4	4.4	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.8
Australia	7.2	7.1	7.2	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9
Bangladesh	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.3
Brazil	3.5	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.7	3.7	3.8
Brunei Darussalam	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Cambodia	1.5	1.6	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1
Cameroon	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2
Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
People's Republic of China	4.8	4.8	4.8	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0
Colombia	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.4	3.4
Egypt	5.0	6.8	6.9	6.9	6.9	6.9	6.9	7.0	7.0	7.0	7.0
European Union-28	4.7	4.6	4.6	4.7	4.7	4.8	4.8	4.9	4.9	4.9	5.0
Ghana	1.5	1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0
Guinea	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6
China - Hong Kong	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
India	2.3	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.8	2.8
Indonesia	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.3
Iran	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.1
Iraq	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4
Cote d'Ivoire	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Japan	4.9	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0	5.0	5.0
Kenya	2.8	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.2
Lao PDR	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1
Liberia	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Malaysia	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9
Mali	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5
Mexico	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1
Mozambique	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2
Myanmar (Burma)	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
Nigeria	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4

Pakistan	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.7
Philippines	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.8
Saudi Arabia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senegal	2.6	2.7	2.7	2.8	2.9	3.1	3.2	3.2	3.3	3.4	3.4
Sierra Leone	1.1	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6
Singapore	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Korea	5.4	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.3	5.4
Taiwan	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.6
Tanzania	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1
Thailand	1.7	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1
Turkey	5.1	5.2	5.2	5.3	5.4	5.4	5.5	5.5	5.6	5.7	5.7
United States	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.5	6.5	6.6	6.6
Uruguay	5.8	5.9	5.9	6.0	6.0	6.0	6.1	6.2	6.3	6.3	6.4
Vietnam	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.9	3.9	3.9	3.9
ECOWAS-7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6
Cuba	1.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Costa Rica	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Dominican Republic	3.3	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6
Guatemala	2.2	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6
Honduras	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.5
Nicaragua	2.8	2.8	2.8	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.1
Panama	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
Chile	4.4	3.9	3.9	4.0	4.0	4.1	4.1	4.1	4.2	4.2	4.2
Paraguay	4.0	4.1	4.0	4.1	4.1	4.1	4.0	4.1	4.1	4.2	4.2
Peru	5.4	5.4	5.5	5.6	5.6	5.7	5.8	5.8	5.9	6.0	6.0
Rest of World	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4
<u>World</u>	3.0	3.0	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.3

**Table 80 Projected Per Capita Rice Utilization for the World and Selected Countries, 2013-2025**

	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
	(Kilograms)										
Argentina	10.1	10.3	10.3	10.5	10.6	10.6	10.7	10.7	10.7	10.8	10.8
Australia	15.7	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.4	13.3	13.3
Bangladesh	220.8	221.3	222.0	222.3	222.6	222.7	223.3	224.1	224.9	224.9	225.1
Brazil	38.3	38.2	38.2	38.2	38.1	38.0	37.4	37.4	37.3	37.4	37.3
Brunei Darussalam	98.8	98.5	100.2	101.6	102.8	105.2	106.4	107.5	108.6	109.3	111.0
Cambodia	231.2	233.8	236.3	241.2	242.4	243.3	244.3	244.9	245.1	245.1	245.0
Cameroon	28.7	29.6	31.8	33.0	34.5	35.5	35.9	36.6	37.2	38.0	38.7
Canada	10.1	10.1	10.4	10.7	10.8	11.0	11.1	11.2	11.2	11.3	11.4
People's Republic of China	109.2	107.7	107.3	106.8	105.8	105.3	104.8	104.6	104.4	104.3	103.8
Colombia	34.7	35.0	35.3	35.5	35.7	35.8	36.1	36.4	36.7	37.2	37.4
Cote d'Ivoire	104.7	104.3	104.8	105.3	105.5	105.9	105.7	106.0	106.1	106.2	106.2
Egypt	44.0	43.9	44.1	44.0	43.8	43.9	43.6	43.3	42.8	42.6	42.0
European Union-28	6.5	6.5	6.5	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.8
Ghana	34.2	34.6	35.5	36.4	36.3	36.8	37.2	37.4	37.9	38.4	38.8
Guinea	129.5	131.3	133.7	135.2	137.1	139.1	141.3	143.1	145.4	147.5	149.6
China - Hong Kong	49.9	50.8	51.1	52.4	52.4	52.5	52.7	52.8	52.9	53.1	53.2
India	74.8	74.9	75.0	75.1	75.3	75.4	75.6	75.8	76.0	76.3	76.7
Indonesia	149.1	147.4	147.3	147.1	146.8	146.7	146.4	146.4	146.2	145.9	145.5
Iran	43.2	42.6	42.5	43.2	43.5	44.2	44.3	44.7	45.2	46.1	46.4
Iraq	37.6	40.2	41.5	42.5	43.0	43.7	44.1	44.4	45.9	46.8	48.0
Japan	66.3	65.4	64.4	63.1	63.3	62.7	62.3	62.0	61.8	61.4	61.2
Kenya	13.2	13.0	13.1	13.5	13.4	13.5	13.5	13.6	13.7	13.8	13.8
Lao PDR	281.1	271.6	265.1	260.8	258.2	253.6	252.2	249.5	247.4	246.4	246.9
Liberia	113.2	116.5	119.8	122.4	125.0	128.6	131.3	134.9	137.5	140.2	143.4
Malaysia	93.0	92.1	91.5	91.2	91.0	90.5	90.2	90.0	90.1	90.2	90.1
Mali	97.4	96.4	98.0	98.0	98.8	99.8	100.4	101.0	102.3	103.3	103.8
Mexico	6.9	6.9	7.0	7.1	7.1	7.2	7.3	7.3	7.3	7.3	7.3
Mozambique	27.1	26.5	27.0	27.1	27.2	28.0	28.2	28.8	29.0	29.4	29.5
Myanmar (Burma)	163.5	161.5	161.1	160.9	160.8	161.0	160.6	160.4	160.3	160.3	160.1
Nigeria	32.0	32.9	33.2	33.4	33.7	34.3	34.8	35.2	35.5	35.8	35.8

Pakistan	15.0	14.9	14.9	14.9	14.8	14.9	14.8	14.8	14.8	14.9	14.8
Philippines	132.3	131.9	131.9	130.9	130.6	130.1	128.9	127.9	127.7	127.2	127.2
Saudi Arabia	47.7	47.5	47.6	47.8	47.9	48.2	48.5	48.8	49.1	49.4	49.6
Senegal	99.5	98.7	98.7	98.6	98.5	98.4	98.2	98.1	98.0	97.9	97.7
Sierra Leone	152.5	152.1	153.5	154.5	155.6	157.1	157.7	159.3	160.7	161.2	162.8
Singapore	54.1	54.0	54.1	53.7	53.1	53.0	52.8	52.6	52.5	52.3	52.2
South Africa	16.0	15.9	16.3	16.3	16.4	16.6	16.8	16.8	17.0	16.9	17.2
South Korea	87.3	86.2	86.3	85.7	85.1	84.5	84.1	83.6	83.1	83.0	82.8
Taiwan	53.4	53.1	52.9	52.8	52.8	52.7	52.6	52.4	52.3	52.0	51.2
Tanzania	34.6	35.5	35.5	35.3	35.7	36.0	36.0	36.1	36.4	36.5	36.6
Thailand	169.5	169.5	168.3	167.9	166.4	164.9	162.3	161.4	160.5	158.9	158.3
Turkey	9.8	9.8	9.8	9.7	9.6	9.6	9.6	9.7	9.8	9.8	9.8
United States	12.1	12.4	12.4	12.5	12.7	12.7	12.6	12.5	12.4	12.4	12.3
Uruguay	18.0	16.9	15.8	15.4	15.2	15.1	15.1	15.0	15.1	15.0	15.0
Vietnam	235.8	231.2	228.7	225.3	224.3	222.9	223.3	222.7	222.2	221.9	221.9
ECOWAS-7	35.8	36.4	37.3	38.1	38.7	39.3	39.8	40.3	40.8	41.3	41.6
Cuba	79.1	81.4	83.0	83.4	84.1	85.3	86.3	87.2	88.0	89.4	90.3
Costa Rica	52.1	52.6	52.6	52.5	52.4	52.4	52.4	52.5	52.5	52.5	52.6
Dominican Republic	52.3	52.3	52.4	52.4	52.4	52.4	52.2	52.2	52.2	52.1	52.1
Guatemala	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.5	6.5	6.6
Honduras	26.0	25.9	26.1	26.1	26.2	26.6	27.0	27.5	28.0	28.5	29.0
Nicaragua	59.7	59.2	59.3	59.4	59.5	59.9	60.3	60.7	61.1	61.5	62.0
Panama	60.0	59.0	58.7	58.4	58.0	57.7	57.4	57.1	56.7	56.4	56.0
Chile	13.2	13.2	13.2	13.2	13.3	13.4	13.5	13.6	13.7	13.9	14.0
Paraguay	3.2	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.3	3.4	3.5
Peru	73.9	74.9	75.5	76.4	77.6	78.4	79.3	80.2	81.2	82.1	82.8
Rest of World	16.0	16.1	16.4	16.5	16.5	16.6	16.6	26.8	16.7	16.7	16.9
World	65.4	65.0	64.9	64.8	64.5	64.4	64.2	64.2	64.1	64.0	64.0

**Table 81 Total World Rice Trade by Country, 2015-2025**

Country	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
<b>EXPORTERS</b>	(Thousand Metric Tons)										
United States	3273	3412	3490	3576	3655	3695	3714	3723	3734	3749	3783
Thailand	10197	9482	9489	9551	9564	9604	9905	10405	10762	11295	11723
Pakistan	4584	4125	4166	4212	4276	4250	4340	4314	4328	4273	4235
Myanmar	1763	1741	1949	2045	2180	2251	2388	2495	2644	2748	2889
Vietnam	7177	7006	6967	7114	7215	7455	7428	7389	7555	7539	7504
People's Republic of China	450	523	596	650	686	730	776	824	873	905	929
India	8524	9132	8902	8666	8530	8579	8423	8322	8174	8142	8237
Cambodia	798	1116	1374	1588	1819	2035	2203	2439	2627	2736	2894
Lao PDR	-113	-33	25	54	71	107	125	175	219	264	274
Australia	97	221	329	420	484	525	549	562	567	571	573
Egypt	397	425	464	489	506	515	516	513	508	503	493
Turkey	27	27	27	27	27	27	27	27	27	27	27
European Union 28	329	329	330	332	334	333	333	333	333	333	333
Brazil	886	902	929	906	912	916	911	913	913	913	913
Cote d'Ivoire	30	30	30	30	30	30	30	30	30	30	30
Senegal	10	10	10	10	10	10	10	10	10	10	10
Guinea	50	50	50	50	50	50	50	50	50	50	50
Tanzania	30	30	30	30	30	30	30	30	30	30	30
Japan	80	80	80	80	80	80	80	80	80	80	80
Argentina	514	538	539	540	540	538	540	540	540	541	544
Uruguay	948	897	940	965	990	1012	1025	1028	1037	1035	1034
Paraguay	517	553	580	607	634	661	680	709	737	767	795
Peru	68	75	80	83	87	88	90	91	92	93	94
ROW and Residual	1296	1225	1184	1141	1128	1094	1073	1024	980	935	925
Total Trade	41932	41895	42563	43165	43839	44614	45246	46027	46851	47568	48402
<b>IMPORTERS</b>											
United States	776	769	764	771	791	815	821	820	824	828	828
Thailand	400	333	344	359	346	350	352	349	350	350	350
Pakistan	35	32	32	33	33	33	33	33	33	33	33
Vietnam	400	400	400	400	400	400	400	400	400	400	400
People's Republic of China	4712	4081	3982	3985	3984	3995	4013	4030	4051	4076	4097
China-Hong Kong	364	373	379	391	393	397	400	404	407	411	414
Egypt	25	25	25	25	25	25	25	25	25	25	25
Japan	682	682	682	682	682	682	682	682	682	682	682
Bangladesh	646	784	695	790	873	817	798	817	848	879	957
Indonesia	2066	2075	2109	2075	2019	1950	1942	1867	1759	1628	1525
Iraq	1201	1395	1488	1562	1618	1681	1742	1795	1910	2009	2116



Iran	1681	1640	1651	1729	1768	1847	1871	1918	1971	2066	2097
Malaysia	1001	1062	1044	1060	1047	1045	1045	1049	1062	1076	1083
Philippines	2077	1404	1602	1709	1819	1809	1713	1645	1670	1633	1618
Saudi Arabia	1556	1511	1562	1593	1625	1660	1695	1731	1765	1799	1832
European Union 28	1512	1520	1537	1555	1574	1597	1621	1639	1660	1680	1700
Singapore	303	307	313	315	316	319	320	322	323	324	325
Brunei Darussalam	41	41	43	44	45	46	47	48	50	50	52
Turkey	291	288	263	248	239	231	231	236	239	236	234
South Korea	471	409	409	409	409	409	409	409	409	409	409
Taiwan	126	126	126	126	126	126	126	126	126	126	126
Australia	181	171	168	165	162	159	156	153	150	147	144
Brazil	742	812	807	779	679	640	500	482	449	444	412
Mexico	720	762	767	780	794	813	822	834	847	862	873
Canada	361	366	383	396	404	414	422	430	438	446	454
Cote d'Ivoire	872	1049	1085	1160	1223	1276	1319	1348	1394	1449	1473
Nigeria	2522	3137	3147	3116	3208	3374	3530	3660	3813	3915	4026
South Africa	989	990	1026	1033	1043	1062	1080	1086	1106	1097	1128
Senegal	1003	1110	1138	1158	1185	1201	1224	1256	1292	1327	1364
Ghana	606	651	693	734	745	780	809	832	867	901	931
Cameroon	546	572	631	665	712	745	765	795	822	855	888
Mozambique	533	523	554	574	595	643	667	703	732	760	782
Guinea	359	390	427	439	454	469	488	499	517	531	543
Kenya	522	517	538	572	577	594	608	632	650	668	682
Tanzania	169	168	176	172	189	208	196	189	185	176	176
Sierra Leone	274	168	149	124	115	113	114	103	99	95	101
Mali	166	130	104	73	63	74	69	67	80	73	84
Liberia	361	383	405	425	444	468	490	518	540	561	589
Colombia	348	336	351	355	358	356	358	363	369	378	383
Ecowas 7	1490	1585	1709	1815	1905	1998	2090	2186	2284	2389	2487
Cuba	505	517	523	525	526	535	542	546	552	562	566
Costa Rica	103	108	110	110	108	111	114	117	120	122	126
Dominican Republic	18	18	18	19	16	17	17	19	19	20	21
Guatemala	78	79	80	83	86	89	92	95	99	102	105
Honduras	150	144	145	145	144	147	149	152	155	159	163
Nicaragua	74	80	79	78	77	79	81	83	86	89	92
Panama	81	86	89	91	94	98	99	100	102	102	102
Chile	122	146	144	143	144	145	147	150	153	156	159
Paraguay	2	2	2	2	2	2	2	2	2	2	2
Peru	221	242	276	283	289	284	275	272	275	283	294
ROW and Residual	7447	7394	7391	7290	7369	7484	7733	8009	8089	8178	8352

**Table 82 Total World Long Grain Rice Trade by Country, 2015-2025**

Country	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>EXPORTERS</b>	39755	39594	40107	40556	41122	41825	42400	43147	43942	44625	45409
United States	2221	2392	2495	2576	2649	2683	2694	2696	2702	2707	2715
Thailand	10197	9482	9489	9551	9564	9604	9905	10405	10762	11295	11723
Pakistan	4584	4125	4166	4212	4276	4250	4340	4314	4328	4273	4235
Myanmar	1763	1741	1949	2045	2180	2251	2388	2495	2644	2748	2889
Vietnam	7177	7006	6967	7114	7215	7455	7428	7389	7555	7539	7504
India	8524	9132	8902	8666	8530	8579	8423	8322	8174	8142	8237
Cambodia	798	1116	1374	1588	1819	2035	2203	2439	2627	2736	2894
Laos	0	0	0	0	0	0	0	0	0	0	0
European Union 28	81	86	88	91	93	93	94	94	95	95	95
Argentina	514	538	539	540	540	538	540	540	540	541	544
Uruguay	948	897	940	965	990	1012	1025	1028	1037	1035	1034
People's Republic of China	87	150	192	211	226	253	274	304	330	336	328
Paraguay	517	553	580	607	634	661	680	709	737	767	795
Peru	68	75	80	83	87	88	90	91	92	93	94
Residual	2276	2301	2346	2308	2318	2324	2316	2319	2320	2319	2319
<b>IMPORTERS</b>	39755	39594	40107	40556	41122	41825	42400	43147	43942	44625	45409
United States	776	769	764	771	791	815	821	820	824	828	828
Thailand	400	333	344	359	346	350	352	349	350	350	350
Vietnam	400	400	400	400	400	400	400	400	400	400	400
People's Republic of China	4712	4081	3982	3985	3984	3995	4013	4030	4051	4076	4097
China-Hong Kong	364	373	379	391	393	397	400	404	407	411	414
Indonesia	2066	2075	2109	2075	2019	1950	1942	1867	1759	1628	1525
Malaysia	1001	1062	1044	1060	1047	1045	1045	1049	1062	1076	1083
Philippines	2077	1404	1602	1709	1819	1809	1713	1645	1670	1633	1618
Bangladesh	646	784	695	790	873	817	798	817	848	879	957
Iraq	1201	1395	1488	1562	1618	1681	1742	1795	1910	2009	2116
Iran	1681	1640	1651	1729	1768	1847	1871	1918	1971	2066	2097
Saudi Arabia	1556	1511	1562	1593	1625	1660	1695	1731	1765	1799	1832
European Union 28	1347	1361	1383	1422	1434	1464	1487	1504	1525	1544	1562

Cambodia	0	0	0	0	0	0	0	0	0	0	0
Laos	113	33	-25	-54	-71	-107	-125	-175	-219	-264	-274
Singapore	303	307	313	315	316	319	320	322	323	324	325
Brunei Darussalam	41	41	43	44	45	46	47	48	50	50	52
Australia	181	171	168	165	162	159	156	153	150	147	144
Brazil	742	812	807	779	679	640	500	482	449	444	412
Mexico	720	762	767	780	794	813	822	834	847	862	873
Canada	361	366	383	396	404	414	422	430	438	446	454
Cote d'Ivoire	872	1049	1085	1160	1223	1276	1319	1348	1394	1449	1473
Nigeria	2522	3137	3147	3116	3208	3374	3530	3660	3813	3915	4026
Senegal	1003	1110	1138	1158	1185	1201	1224	1256	1292	1327	1364
Ghana	606	651	693	734	745	780	809	832	867	901	931
Cameroon	546	572	631	665	712	745	765	795	822	855	888
Mozambique	533	523	554	574	595	643	667	703	732	760	782
Guinea	359	390	427	439	454	469	488	499	517	531	543
Kenya	522	517	538	572	577	594	608	632	650	668	682
Tanzania	169	168	176	172	189	208	196	189	185	176	176
Sierra Leone	274	168	149	124	115	113	114	103	99	95	101
Mali	166	130	104	73	63	74	69	67	80	73	84
South Africa	989	990	1026	1033	1043	1062	1080	1086	1106	1097	1128
Liberia	361	383	405	425	444	468	490	518	540	561	589
Colombia	348	336	351	355	358	356	358	363	369	378	383
ECOWAS-7	1490	1585	1709	1815	1905	1998	2090	2186	2284	2389	2487
Cuba	505	517	523	525	526	535	542	546	552	562	566
Costa Rica	103	108	110	110	108	111	114	117	120	122	126
Dominican Republic	18	18	18	19	16	17	17	19	19	20	21
Guatemala	78	79	80	83	86	89	92	95	99	102	105
Honduras	150	144	145	145	144	147	149	152	155	159	163
Nicaragua	74	80	79	78	77	79	81	83	86	89	92
Panama	81	86	89	91	94	98	99	100	102	102	102
Chile	122	146	144	143	144	145	147	150	153	156	159
Paraguay	2	2	2	2	2	2	2	2	2	2	2
Peru	221	242	276	283	289	284	275	272	275	283	294
Rest of World	6953	6781	6652	6391	6376	6441	6652	6950	7048	7145	7280

**Table 83 Total World Medium Grain Rice Trade by Country, 2015-2025**

Country	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>EXPORTERS</b>	2176	2301	2456	2609	2717	2789	2845	2881	2909	2943	2993
United States	1052	1020	996	1000	1006	1012	1019	1027	1032	1042	1068
Australia	97	221	329	420	484	525	549	562	567	571	573
Egypt	397	425	464	489	506	515	516	513	508	503	493
European Union 28	188	183	182	181	181	180	179	179	178	178	178
Japan	80	80	80	80	80	80	80	80	80	80	80
People's Republic of China	363	372	404	439	460	477	502	520	543	569	601
<b>IMPORTERS</b>	2176	2301	2456	2609	2717	2789	2845	2881	2909	2943	2993
United States	115	114	112	113	114	114	114	115	116	116	117
Turkey	291	288	263	248	239	231	231	236	239	236	234
Japan	682	682	682	682	682	682	682	682	682	682	682
South Korea	471	409	409	409	409	409	409	409	409	409	409
Taiwan	126	126	126	126	126	126	126	126	126	126	126
European Union 28	165	159	155	133	139	133	134	135	136	136	138
Australia	181	171	168	165	162	159	156	153	150	147	144
Others (residual)	145	352	540	733	846	935	994	1025	1053	1091	1143

**Table 84 World Rice Prices and Price Relationships, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Long Grain Rice, High Quality											
International Reference Price, long grain <i>Real International Reference Price</i> (2000=100)	369	458	472	496	518	522	530	534	539	541	545
Thai 5% fob	358	446	460	483	505	508	516	520	525	527	530
Thai 100% fob	369	458	472	496	518	522	530	534	539	541	545
US No. 2, fob Houston	508	540	552	559	575	581	583	585	590	603	610
US No. 2 fob – Int’l Reference Price	139	82	80	63	56	60	53	51	51	61	65
Long Grain Rice, Low Quality											
Thai 35% fob	319	374	383	405	422	426	432	433	436	437	439
US Wheat No. 2, fob Gulf	185	188	190	199	203	206	207	205	205	205	205
Corn, fob price	168	175	179	183	184	185	186	186	184	185	185
Soybean, fob price	329	333	354	356	367	372	375	374	374	374	374
'Wheat/Thai35% Price Ratio	0.58	0.50	0.50	0.49	0.48	0.48	0.48	0.47	0.47	0.47	0.47
Rice/Wheat	2.75	2.87	2.91	2.82	2.83	2.83	2.82	2.85	2.87	2.94	2.97
Rice/Corn	3.03	3.09	3.09	3.06	3.12	3.14	3.13	3.15	3.20	3.25	3.29
Rice/Soybean	1.54	1.62	1.56	1.57	1.57	1.56	1.56	1.56	1.58	1.61	1.63
Medium Grain Rice											
U.S. No.2 MG Rice fob CA	799	828	831	832	834	835	837	839	840	842	845
MG fob CA - LG fob Houston	291	288	279	273	259	253	254	254	250	239	235

**Table 85 Detailed U.S. Rice Supply and Utilization (in English Units), 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>YIELDS</b> Actual (rough basis)	7469.5	7701.3	7798.4	7893.1	7984.6	8070.2	8146.6	8223.5	8301.7	8377.7	8444.5
Program-Direct Payment	4818.0	4818.0	4818.0	4818.0	4818.0	4818.0	4818.0	4818.0	4818.0	4818.0	4818.0
Program-Counter-Cyclical Payment	5131.0	5131.0	5131.0	5131.0	5131.0	5131.0	5131.0	5131.0	5131.0	6282.0	6282.0
<b>HARVESTED ACREAGE</b>											
Program Area/Contract Area	4760.0	4760.0	4760.0	4760.0	4760.0	4760.0	4760.0	4760.0	4760.0	4760.0	4760.0
Total Harvested Area	2575.0	2662.5	2718.9	2742.6	2747.8	2747.8	2736.8	2722.4	2704.3	2716.9	2819.2
<b>SUPPLY</b> (rough basis)	265.3	269.2	271.4	274.5	275.9	275.5	274.5	273.8	273.0	274.7	286.2
Production	192.3	205.0	212.0	216.5	219.4	221.8	223.0	223.9	224.5	227.6	238.1
Beginning Stocks	48.5	39.9	35.3	33.8	31.6	28.1	25.7	24.1	22.6	21.0	22.1
Imports	24.4	24.2	24.1	24.3	24.9	25.7	25.9	25.8	26.0	26.1	26.1
<b>DOMESTIC USE</b> (rough basis)	122.4	126.4	127.8	130.3	132.7	133.5	133.5	134.0	134.4	134.6	135.0
Food	106.3	107.3	108.5	109.8	110.9	112.1	113.8	115.8	117.8	119.8	121.7
Seed	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.4	3.5
Brewing	18.9	18.9	19.1	19.2	19.3	19.4	19.5	19.6	19.6	19.4	19.5
Residual	-6.0	-3.2	-3.2	-2.1	-1.0	-1.4	-3.3	-4.8	-6.3	-8.0	-9.7
<b>EXPORTS</b>	103.1	107.5	109.9	112.6	115.1	116.4	117.0	117.3	117.6	118.1	119.2
<b>TOTAL USE</b>	225.4	233.8	237.7	242.9	247.8	249.9	250.4	251.2	252.0	252.7	254.1
<b>ENDING STOCKS</b>	39.9	35.3	33.8	31.6	28.1	25.7	24.1	22.6	21.0	22.1	32.1
<i>S-T-U</i>	0.18	0.15	0.14	0.13	0.11	0.10	0.10	0.09	0.08	0.09	0.13
<b>PRICES</b>											
Loan Rate	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Season Ave. Farm Price	13.20	13.69	13.84	13.93	14.15	14.22	14.09	14.16	15.23	17.17	17.77
<i>Long Grain Farm Price</i>	11.53	12.60	12.86	13.12	13.40	13.51	13.38	13.48	14.45	16.26	16.85
<i>Medium Grain Farm Price</i>	17.10	17.20	17.24	16.97	17.13	17.16	17.03	17.08	18.42	20.79	21.50
Target Price	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Export Price, FOB Houston (U.S. No. 2)	23.03	24.49	25.04	25.36	26.06	26.38	26.44	26.54	26.76	27.34	27.67
Medium Grain Price, FOB CA (U.S. No. 2)	36.25	37.56	37.68	37.72	37.82	37.87	37.98	38.06	38.11	38.17	38.31
Direct Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLC Payment	2.2	1.2	1.0	0.8	0.5	0.5	0.6	0.5	0.0	0.0	0.0
Average World Price (US\$/cwt)	9.4	10.1	10.5	10.8	11.3	11.5	11.7	11.8	12.0	12.2	12.3
<b>INCOME FACTORS</b>											
Production Market Value	2547.3	2858.2	2991.9	3074.9	3166.0	3216.2	3203.9	3234.6	3482.9	3973.8	4300.0
PLC Payment	428.4	247.5	202.7	164.8	118.8	101.1	122.7	105.4	5.5	0.0	0.0
Total Income	2975.8	3105.7	3194.6	3239.7	3284.8	3317.3	3326.6	3339.9	3488.4	3973.8	4300.0
Market Returns Above Variable Cost	472.8	574.0	595.9	598.1	610.6	494.1	478.6	481.0	566.7	727.8	777.0
Total Returns Above Variable Cost	639.2	666.9	670.4	658.2	653.9	494.1	478.6	481.0	566.7	727.8	777.0

**Table 86 U.S. Long Grain Rice Supply and Utilization (in English Units), 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
YIELD (rough basis)	7193.1	7494.0	7594.1	7699.3	7802.0	7896.6	7978.1	8060.2	8143.6	8225.2	8297.6
HARVESTED ACREAGE	1849.0	1938.2	1992.8	2020.8	2034.2	2041.8	2037.2	2028.3	2017.9	2033.0	2124.0
SUPPLY (rough basis)	180.3	187.5	191.1	194.2	195.7	195.3	194.1	193.2	192.3	193.5	203.2
Production	133.0	145.3	151.3	155.6	158.7	161.2	162.5	163.5	164.3	167.2	176.2
Beginning Stocks	26.5	21.6	19.2	17.9	15.6	12.0	9.3	7.5	5.7	3.9	4.5
Imports	20.8	20.6	20.5	20.7	21.3	22.1	22.3	22.2	22.3	22.4	22.4
DOMESTIC USE + Residual	88.8	92.9	94.6	97.5	100.2	101.5	101.8	102.6	103.3	103.8	104.5
EXPORTS	69.9	75.3	78.6	81.1	83.4	84.5	84.9	84.9	85.1	85.2	85.5
TOTAL USE + Residual	158.7	168.3	173.2	178.6	183.7	186.0	186.7	187.5	188.4	189.0	190.0
ENDING STOCKS	21.6	19.2	17.9	15.6	12.0	9.3	7.5	5.7	3.9	4.5	13.2
PRICES											
Season Average Farm Price	11.53	12.60	12.86	13.12	13.40	13.51	13.38	13.48	14.45	16.26	16.85
Export Price, FOB Houston (U.S. No. 2)	23.0	24.5	25.0	25.4	26.1	26.4	26.4	26.5	26.8	27.3	27.7
PRODUCTION MARKET VALUE	1533.5	1829.5	1945.5	2041.9	2126.7	2177.5	2174.8	2203.3	2374.4	2718.3	2970.6

**Table 87 U.S. Medium Grain Rice Supply and Utilization (in English Units), 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
YIELD (rough basis)	8168.0	8256.3	8359.3	8435.8	8505.1	8572.1	8637.3	8700.8	8766.3	8831.2	8893.4
HARVESTED ACREAGE	726.0	724.2	726.0	721.8	713.5	706.0	699.6	694.1	686.4	683.9	695.1
SUPPLY (rough basis)	83.1	79.8	78.5	78.4	78.4	78.4	78.5	78.7	78.8	79.3	81.2
Production	59.3	59.8	60.7	60.9	60.7	60.5	60.4	60.4	60.2	60.4	61.8
Beginning Stocks	20.2	16.4	14.3	14.0	14.1	14.3	14.5	14.7	15.0	15.2	15.7
Imports	3.6	3.6	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.7
DOMESTIC USE + Residual	33.6	33.4	33.2	32.8	32.4	32.0	31.7	31.4	31.1	30.8	30.5
EXPORTS	33.1	32.1	31.4	31.5	31.7	31.9	32.1	32.3	32.5	32.8	33.6
TOTAL USE + Residual	66.7	65.6	64.5	64.3	64.1	63.9	63.8	63.7	63.6	63.6	64.1
ENDING STOCKS	16.4	14.3	14.0	14.1	14.3	14.5	14.7	15.0	15.2	15.7	17.0
PRICES											
Japonica Farm Price	20.5	20.2	20.2	19.8	19.9	19.8	19.7	19.6	21.0	23.5	24.2
Southern Medium Grain Farm Price	12.1	12.6	12.7	12.4	12.5	12.5	12.4	12.5	13.6	15.6	16.2
PRODUCTION MARKET VALUE	1013.8	1028.7	1046.5	1033.0	1039.3	1038.6	1029.1	1031.3	1108.5	1255.5	1329.4

**Table 88 Arkansas Rice Supply by Type, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Long Grain Area	1045.0	1123.5	1173.6	1202.4	1219.0	1225.1	1224.3	1222.5	1222.5	1227.7	1250.6
Long Grain Yield	7380.0	7678.9	7771.5	7893.6	7974.7	8055.4	8137.8	8220.6	8303.8	8386.9	8464.5
Long Grain Production	77.1	86.3	91.2	94.9	97.2	98.7	99.6	100.5	101.5	103.0	105.9
Medium Grain Area	241.0	205.9	184.8	173.9	166.9	162.1	158.8	156.7	154.1	151.4	151.3
Medium Grain Yield	7145.2	7610.2	7656.8	7720.7	7785.4	7850.0	7914.5	7979.1	8043.6	8108.2	8176.9
Medium Grain Production	17.2	15.7	14.2	13.4	13.0	12.7	12.6	12.5	12.4	12.3	12.4
Total Area	1286.0	1329.4	1358.5	1376.3	1386.0	1387.2	1383.0	1379.2	1376.5	1379.1	1401.9
Average Yield	7336.0	7668.3	7755.9	7871.7	7951.9	8031.4	8112.2	8193.1	8274.6	8356.3	8433.5
Total Production	94.3	101.9	105.4	108.3	110.2	111.4	112.2	113.0	113.9	115.2	118.2

**Table 89 Louisiana Rice Supply by Type, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Long Grain Area	351.0	357.5	363.3	364.3	362.7	365.3	365.2	361.7	351.8	356.0	399.3
Long Grain Yield	6990.0	7188.7	7295.0	7328.4	7509.6	7679.1	7753.9	7828.7	7903.4	7978.0	8048.6
Long Grain Production	24.5	25.7	26.5	26.7	27.2	28.1	28.3	28.3	27.8	28.4	32.1
Medium Grain Area	64.0	53.3	44.9	42.9	40.6	38.0	35.2	32.7	29.2	27.2	27.5
Medium Grain Yield	6650.0	7106.4	7164.8	7240.5	7312.8	7379.0	7437.1	7496.8	7558.5	7619.9	7679.6
Medium Grain Production	4.3	3.8	3.2	3.1	3.0	2.8	2.6	2.5	2.2	2.1	2.1
Total Area	415.0	410.8	408.2	407.2	403.3	403.3	400.4	394.4	381.0	383.2	426.9
Average Yield	6937.6	7178.0	7280.7	7319.1	7489.8	7650.8	7726.0	7801.2	7876.9	7952.6	8024.8
Total Production	28.8	29.5	29.7	29.8	30.2	30.9	30.9	30.8	30.0	30.5	34.3



**Table 90 Texas Rice Supply by Type, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Area	130.0	125.4	123.6	118.3	116.5	112.6	108.1	104.0	104.9	109.9	128.1
Average Yield	6895.4	7580.8	7647.4	7714.1	7780.7	7847.4	7914.0	7980.7	8047.3	8114.0	8180.7
Total Production	9.0	9.5	9.5	9.1	9.1	8.8	8.6	8.3	8.4	8.9	10.5

**Table 91 Missouri Rice Supply by Type, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Area	174.0	180.4	178.1	174.8	170.8	171.3	171.2	171.0	170.3	170.5	174.0
Average Yield	7018.4	6953.2	7085.1	7217.0	7298.9	7380.8	7462.7	7544.7	7626.6	7708.5	7790.4
Total Production	12.2	12.5	12.6	12.6	12.5	12.6	12.8	12.9	13.0	13.1	13.6

**Mississippi Rice Supply by Type, 2015-2025****Table 92 Mississippi Rice Supply by Type, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Area	149.0	151.4	154.2	161.0	165.3	167.5	168.4	169.1	168.4	169.0	172.0
Average Yield	7110.1	7415.1	7493.2	7599.7	7704.5	7770.4	7868.0	7966.4	8065.6	8164.6	8262.7
Total Production	10.6	11.2	11.6	12.2	12.7	13.0	13.3	13.5	13.6	13.8	14.2

**Table 93 California Rice Supply by Type, 2015-2025**

Variable	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Area	421.0	465.0	496.3	504.9	506.0	505.9	505.6	504.7	503.1	505.3	516.3
Average Yield	8893.3	8674.3	8728.9	8783.6	8838.3	8893.1	8947.9	9002.8	9057.8	9112.9	9168.1
Total Production	37.4	40.3	43.3	44.4	44.7	45.0	45.2	45.4	45.6	46.0	47.3

## **Estimates of the Stochastic Baseline Analysis**

***Charts of Selected Price and Trade Variables Showing the 10<sup>th</sup> and 90<sup>th</sup> Percentiles, the Stochastic Mean, and the C.V. of Future Probable Distributions Based on Outcomes from 300 Random Draws***

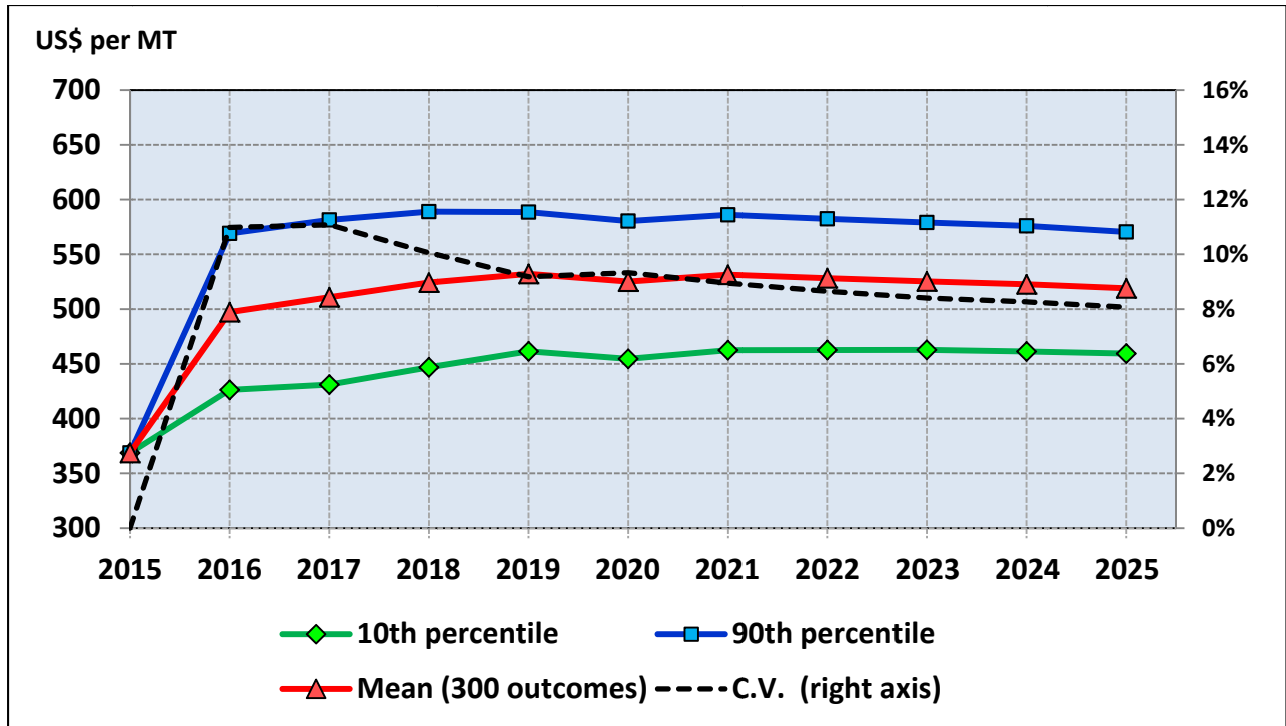


Figure 19 Stochastic Projection of Long Grain Rice International Reference Price, 2015-2025

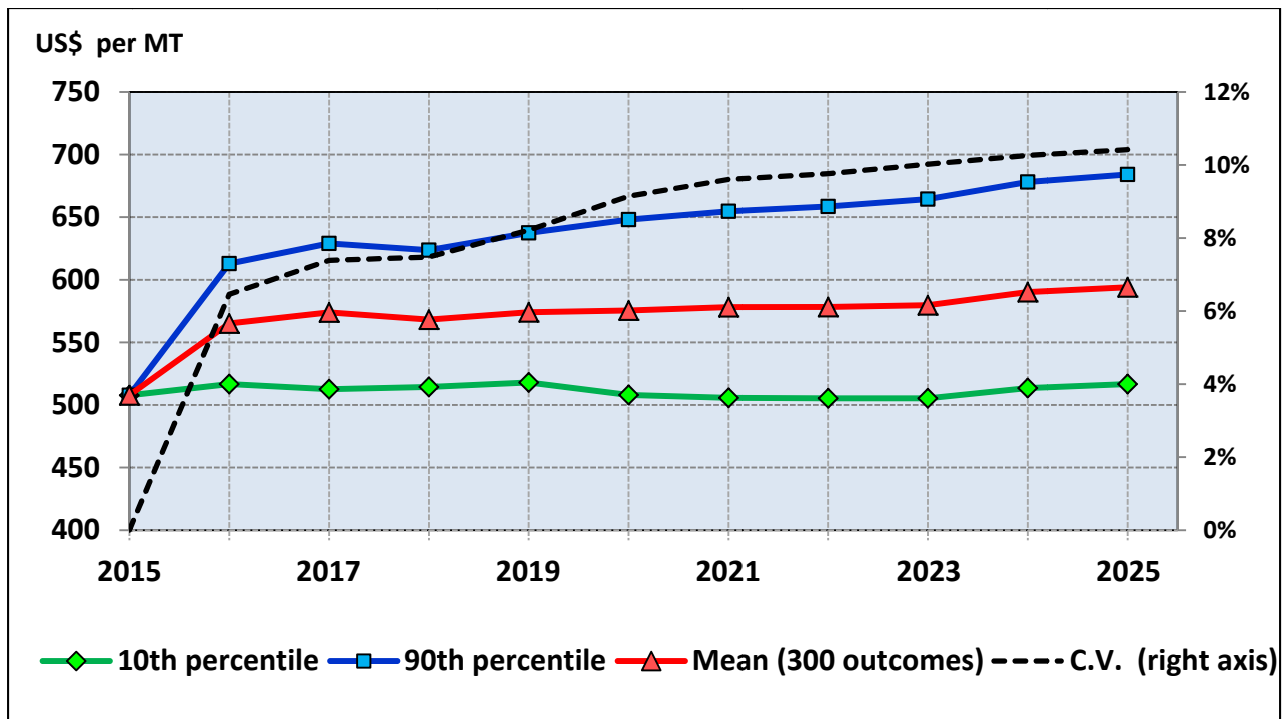


Figure 20 Stochastic Projection of U.S. Long Grain Rice FOB Export Price, 2015-2025

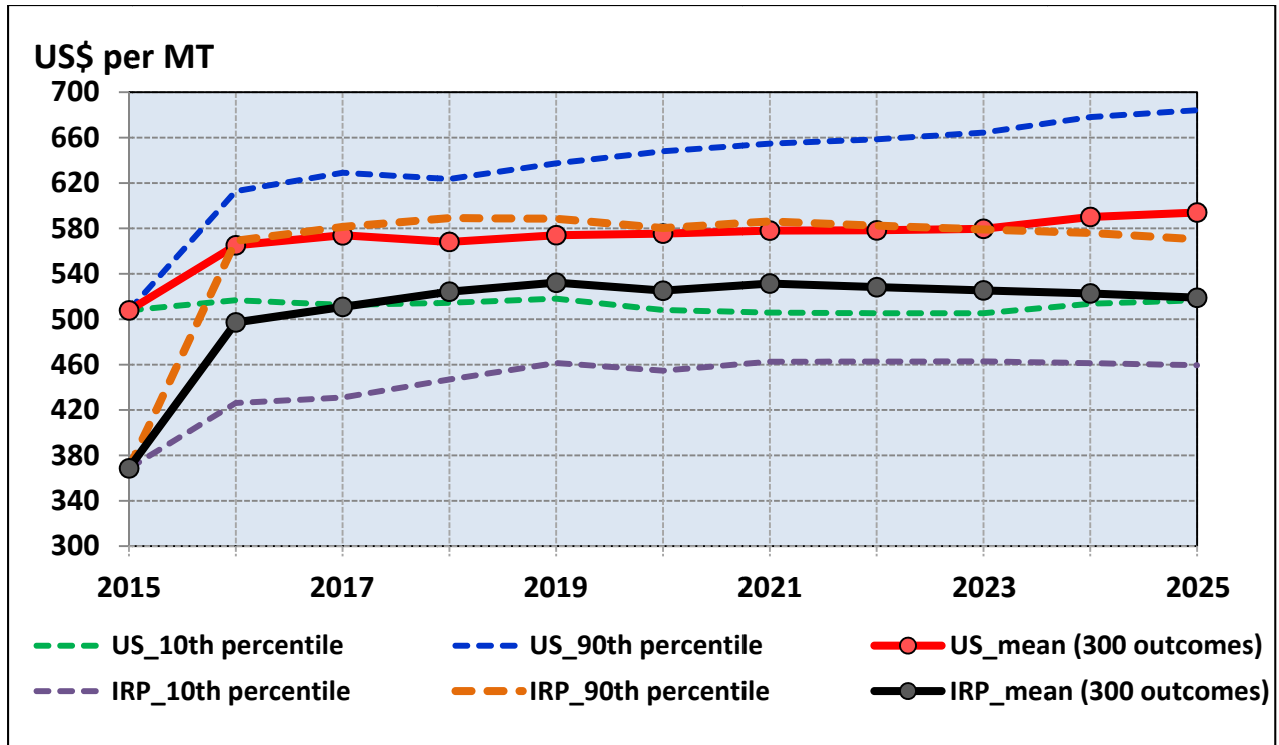


Figure 21 Stochastic Projection Comparisons of International Reference and U.S. Long Grain Rice Export Prices, 2015-2025

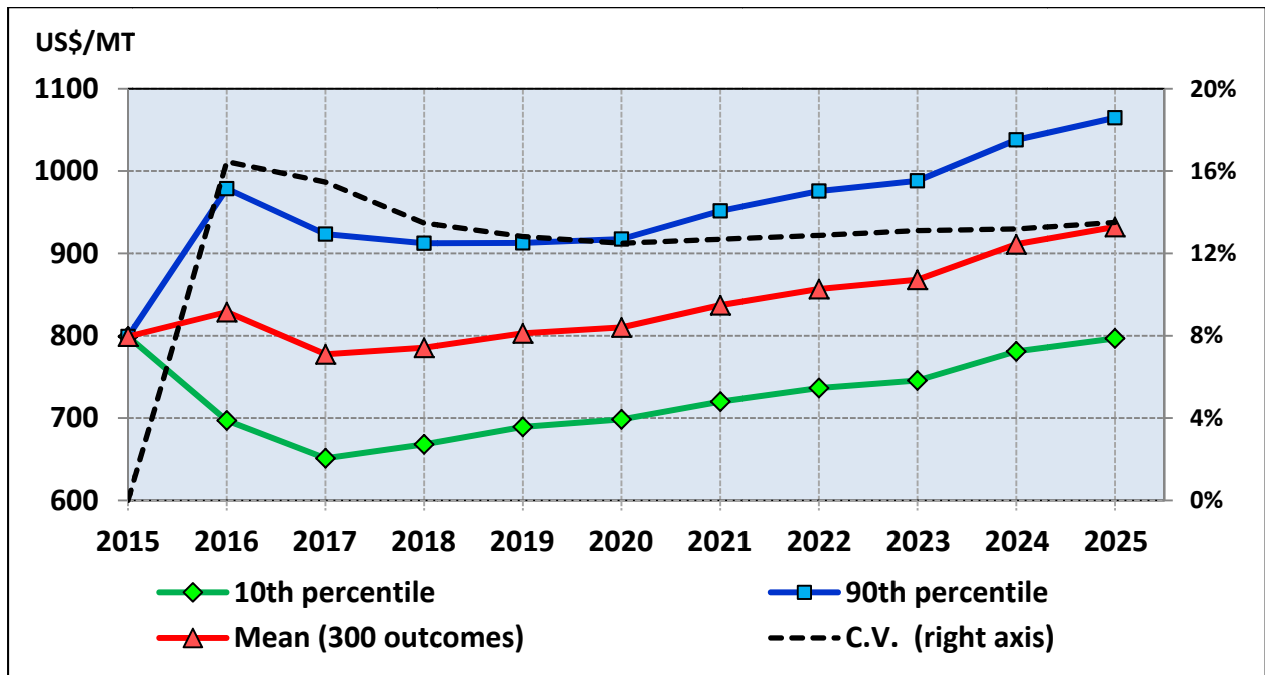


Figure 22 Stochastic Projection of Medium Grain Rice Price, FOB California, 2014-2025

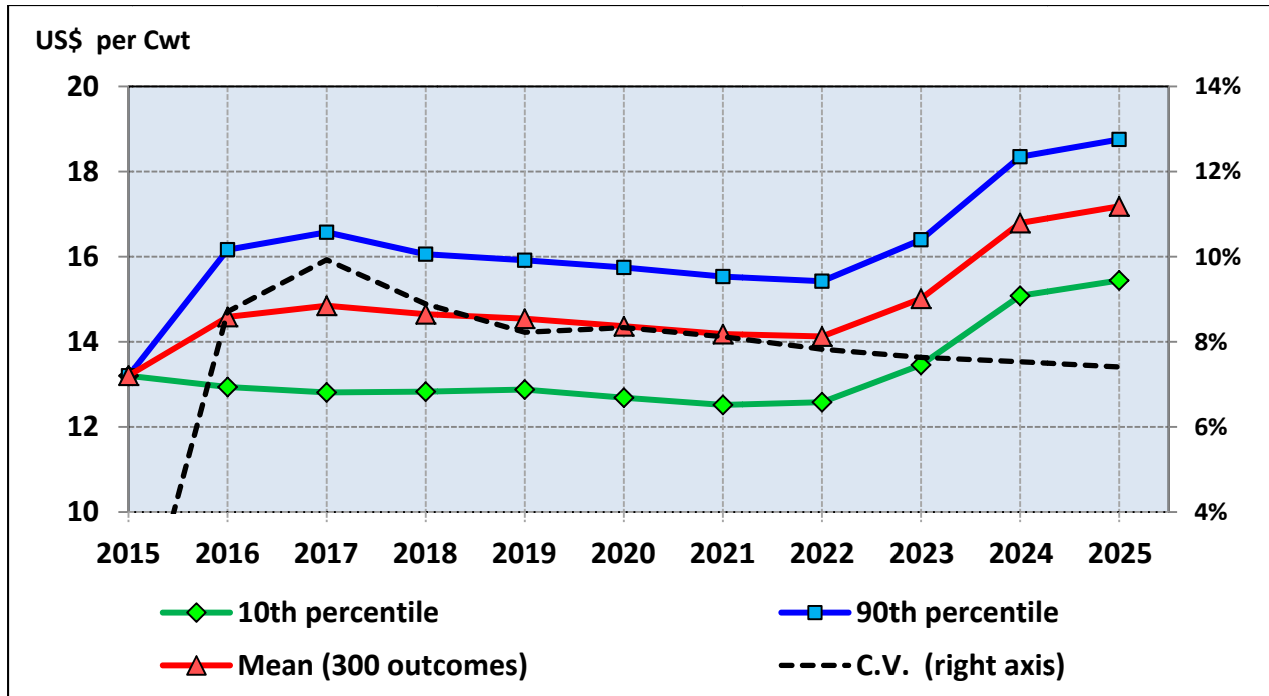


Figure 23 Stochastic Projection of U.S. Season Average All Rice Farm Price, 2015-2025

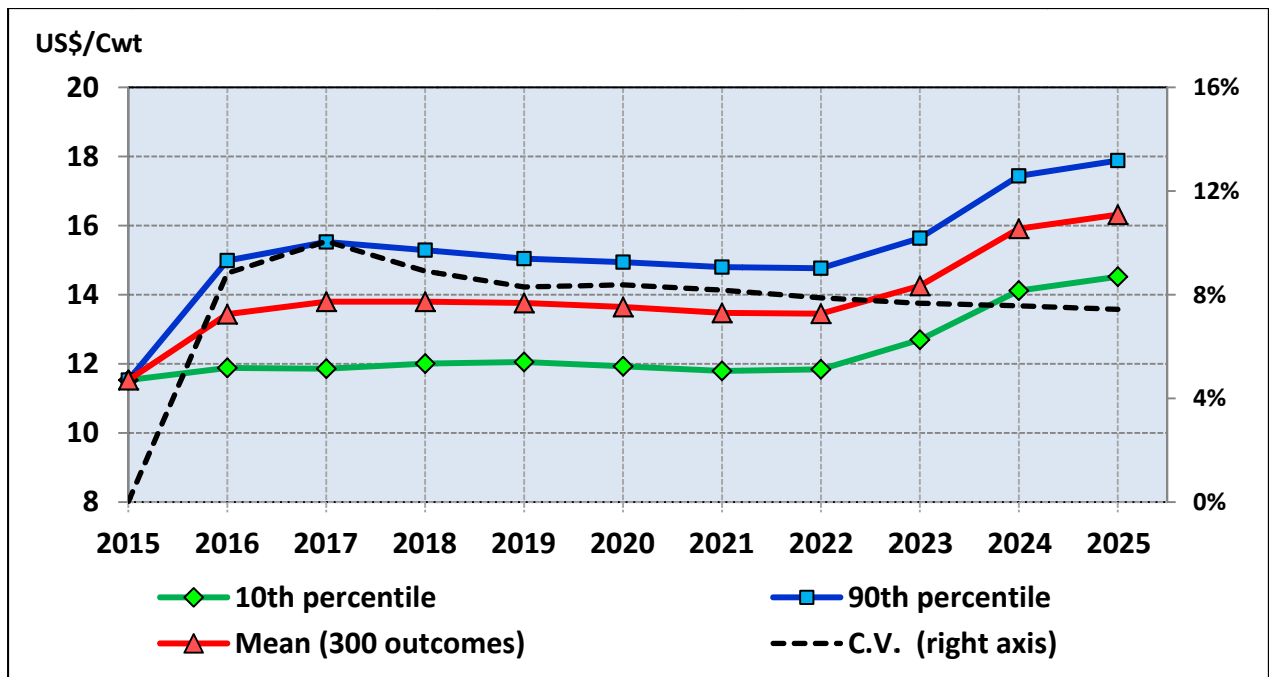


Figure 24 Stochastic Projection of U.S. Long Grain Average Farm Price, 2015-2025

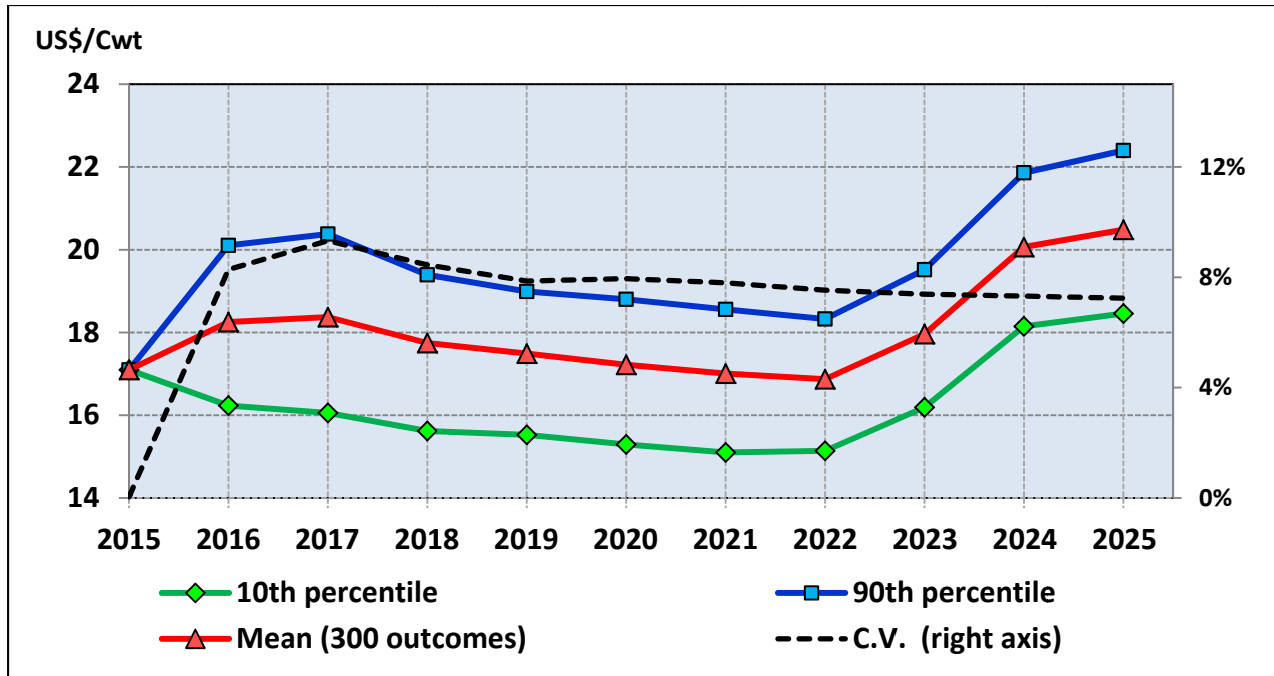


Figure 25 Stochastic Projection of U.S. Medium Grain Average Farm Price, 2015-2025

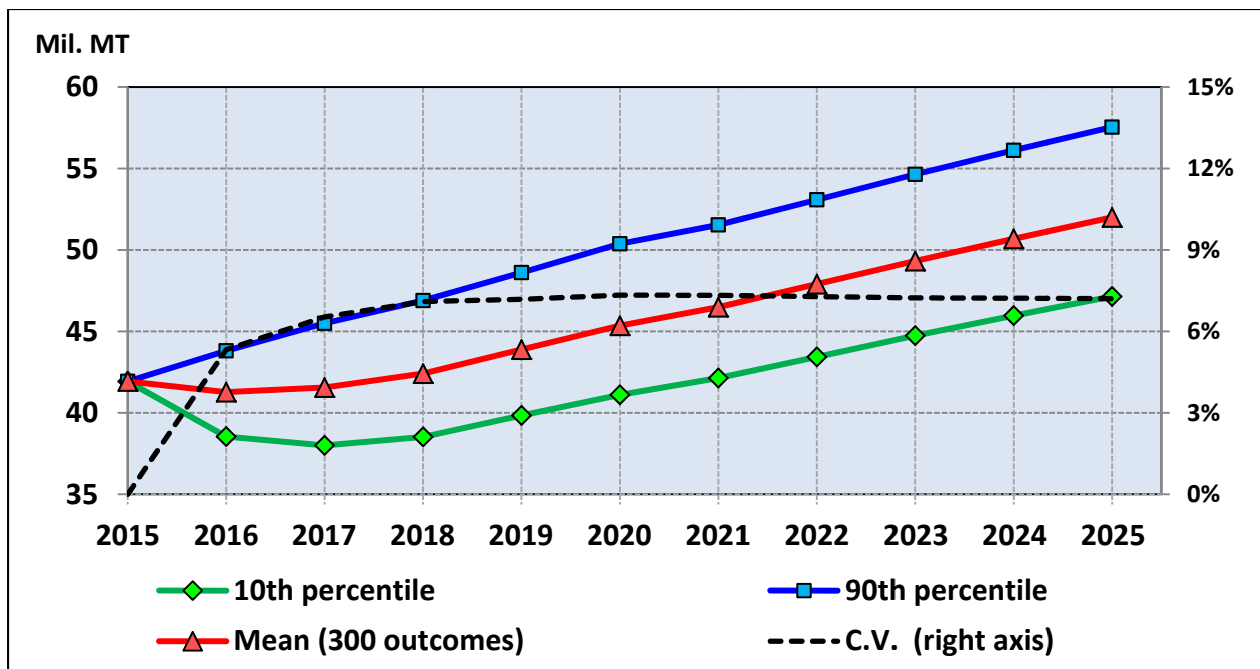


Figure 26 Stochastic Projection of World Rice Total Trade, 2015-2025

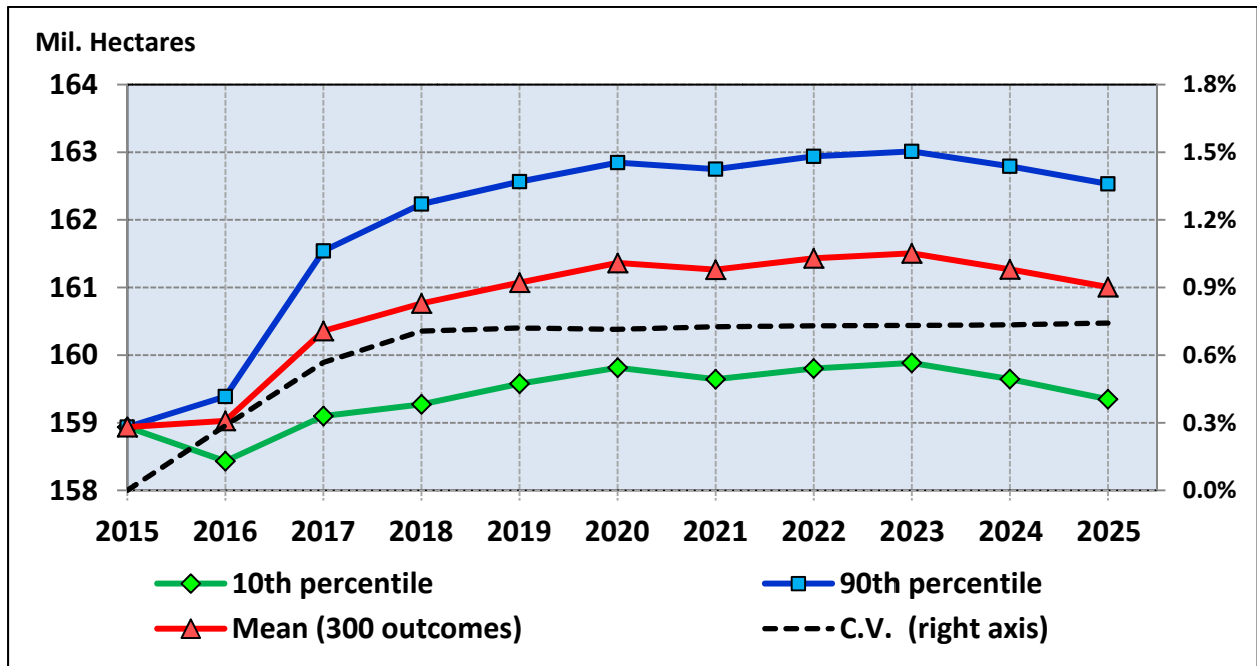


Figure 27 Stochastic Projection of World Rice Area Harvested, 2015-2025

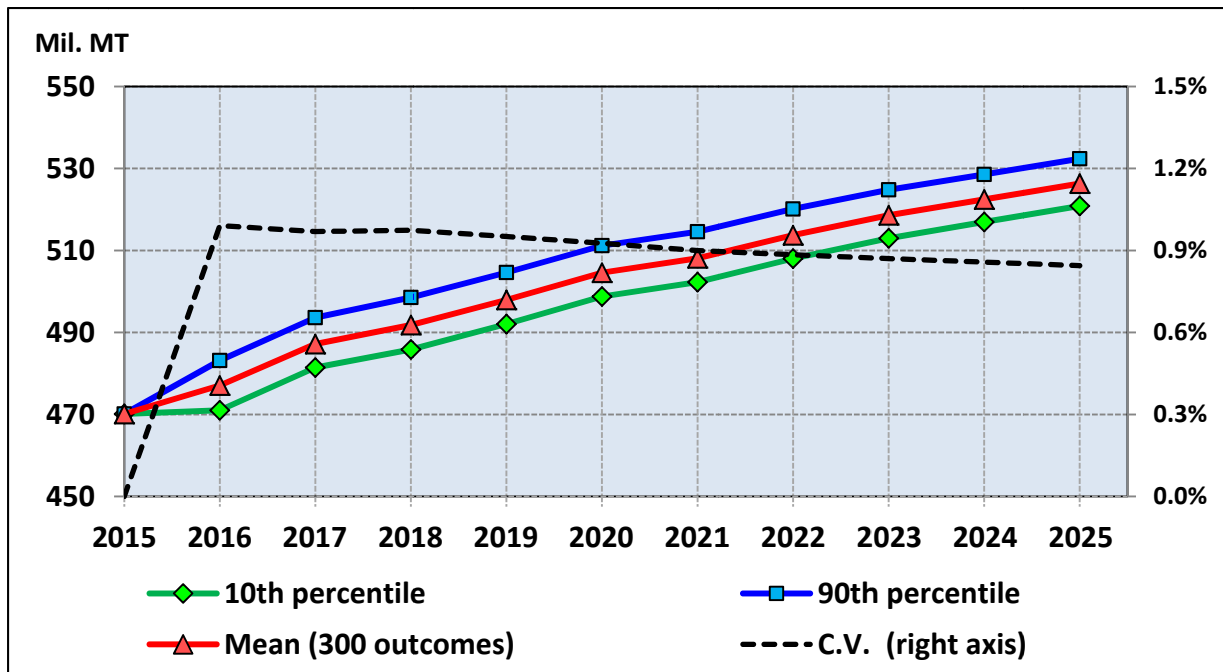


Figure 28 Stochastic Projection of World Rice Milled Production, 2015-2025

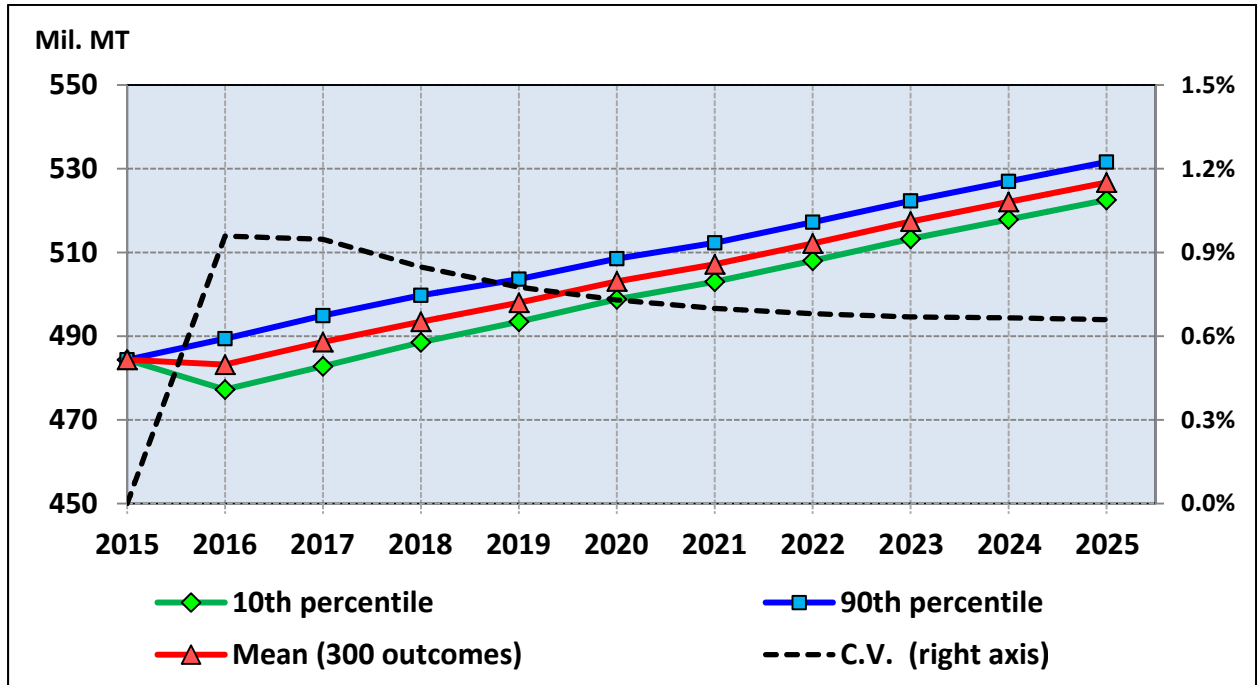


Figure 29 Stochastic Projection of World Total Rice Consumption, 2015-2025

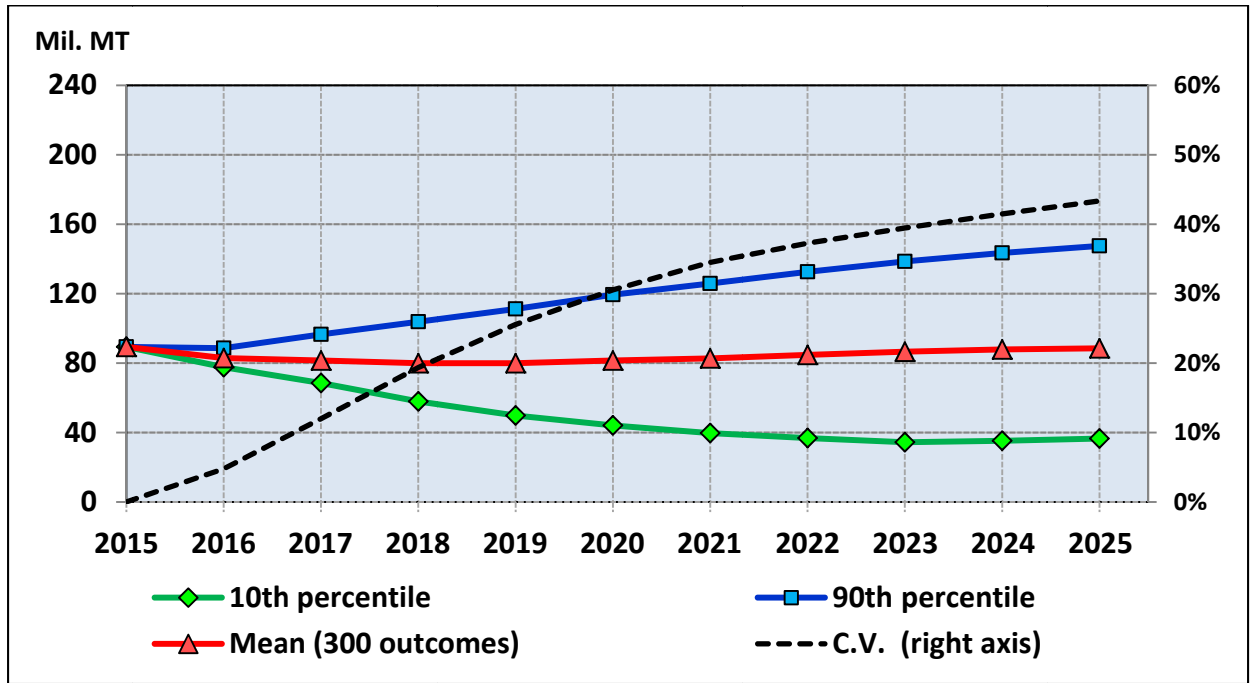


Figure 30 Stochastic Projection of World Rice Ending Stocks, 2015-2025



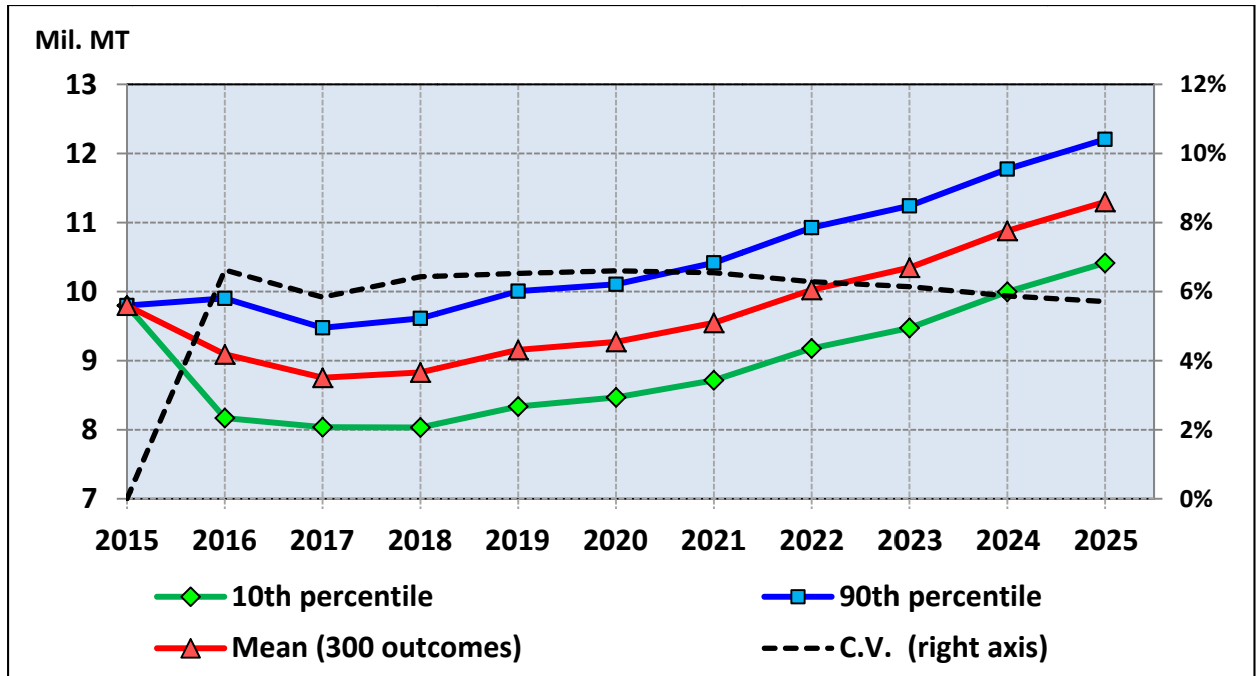


Figure 31 Stochastic Projections of Thailand Net Rice Exports, 2015-2025

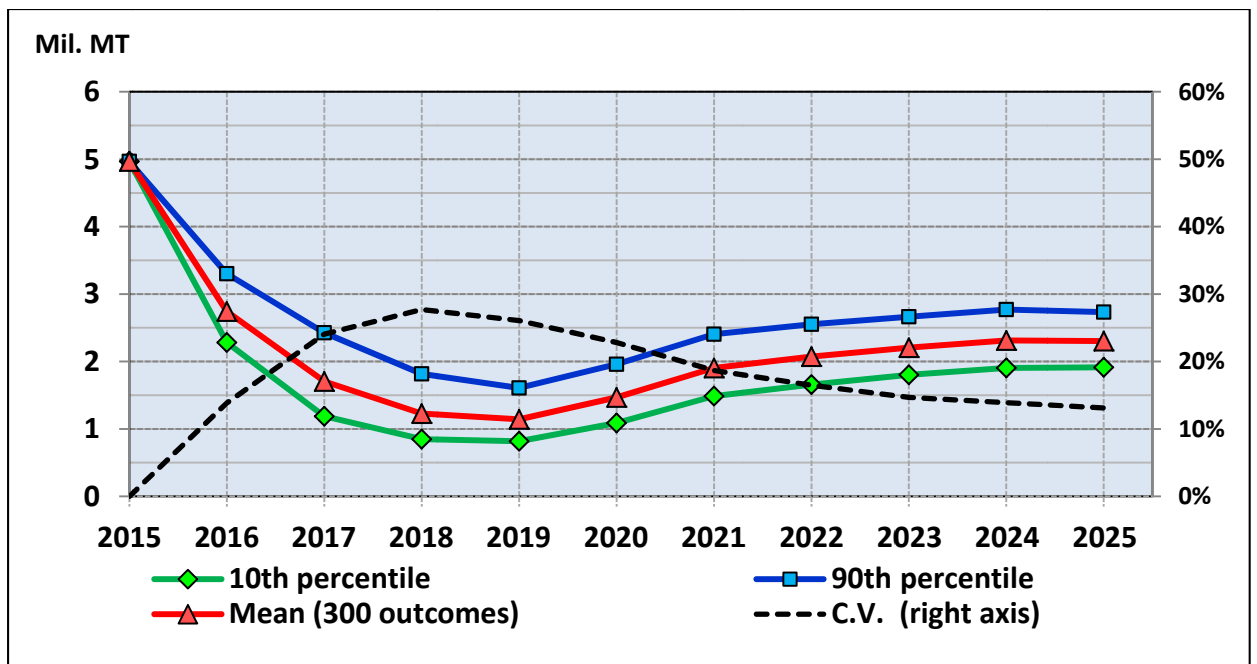


Figure 32 Stochastic Projection of Thailand Rice Ending Stocks, 2015-2025

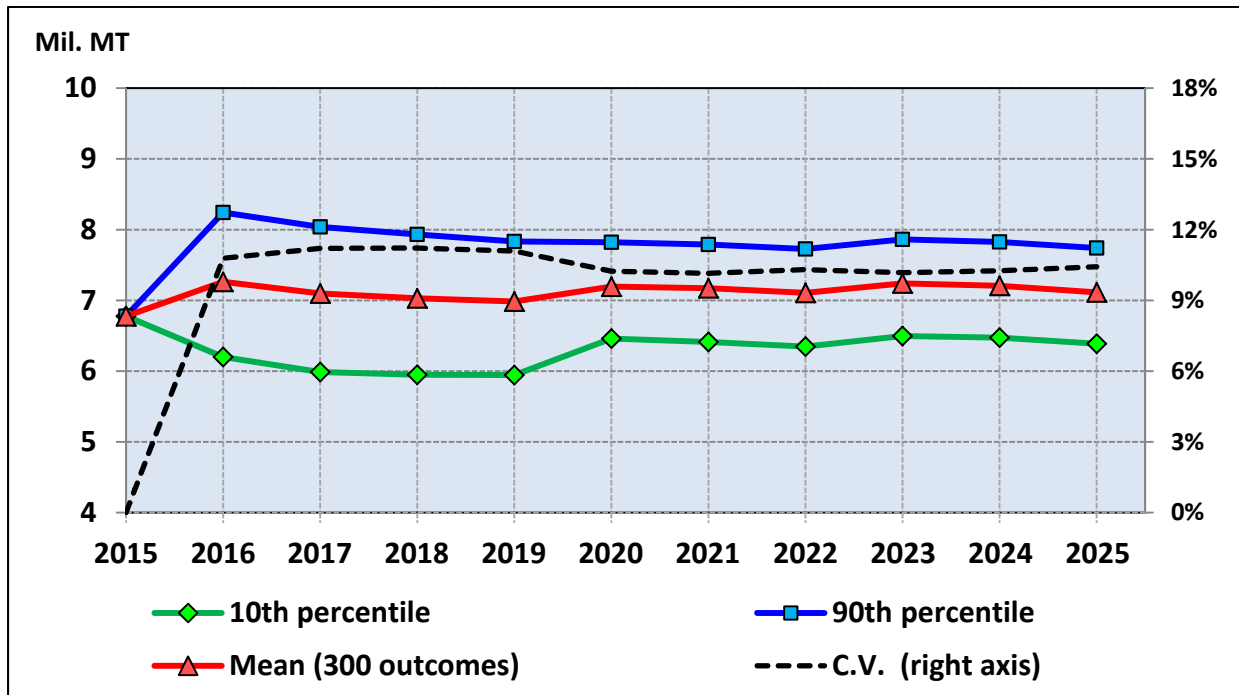


Figure 33 Stochastic Projections of Vietnam Net Rice Exports, 2015-2025

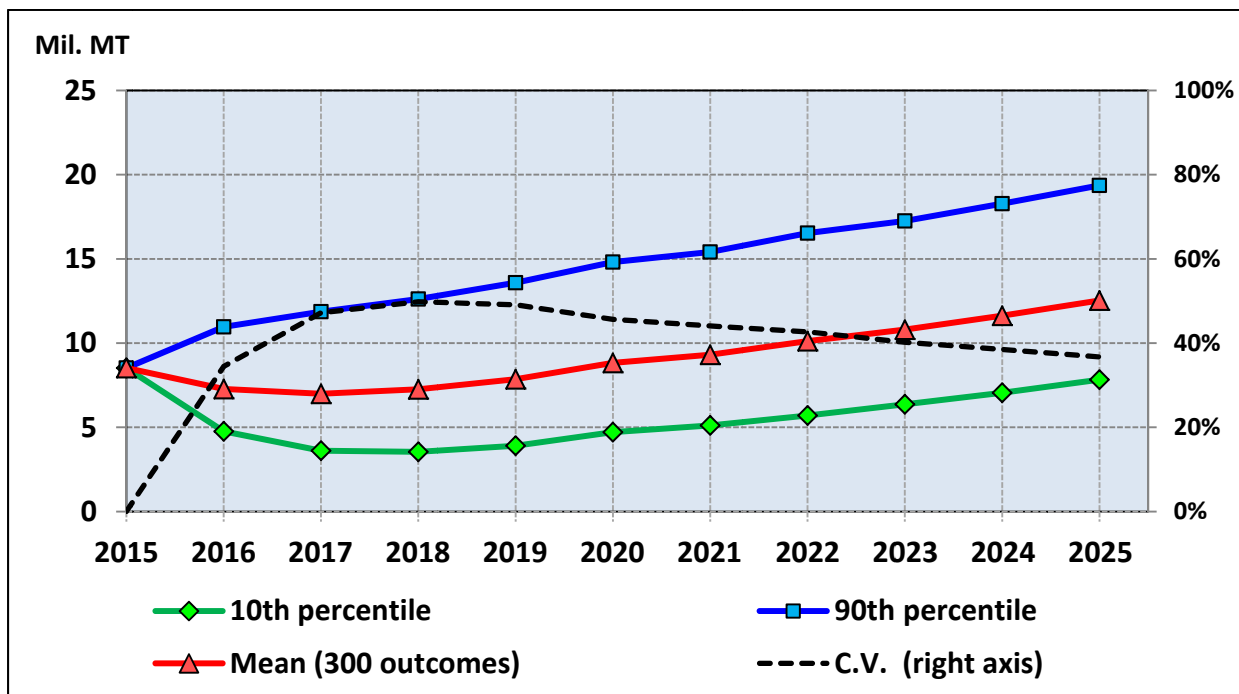


Figure 34 Stochastic Projections of India Net Rice Exports, 2015-2025

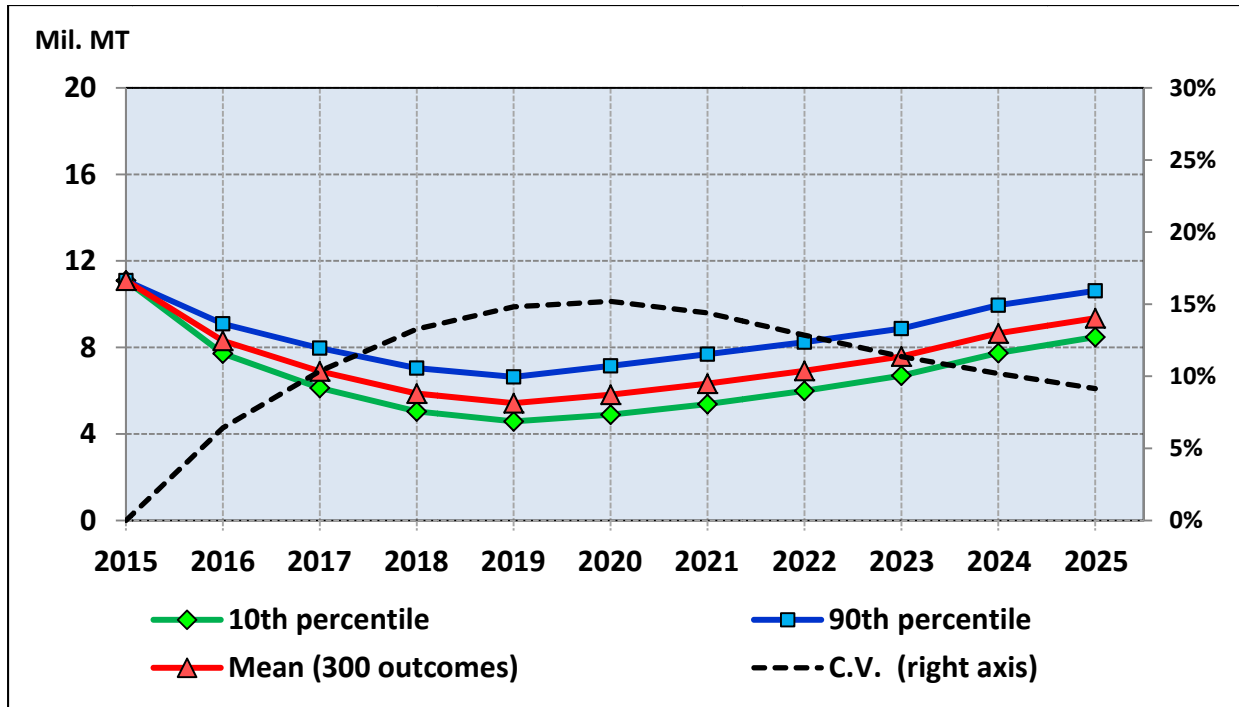


Figure 35 Stochastic Projection of India Rice Ending Stocks, 2015-2025

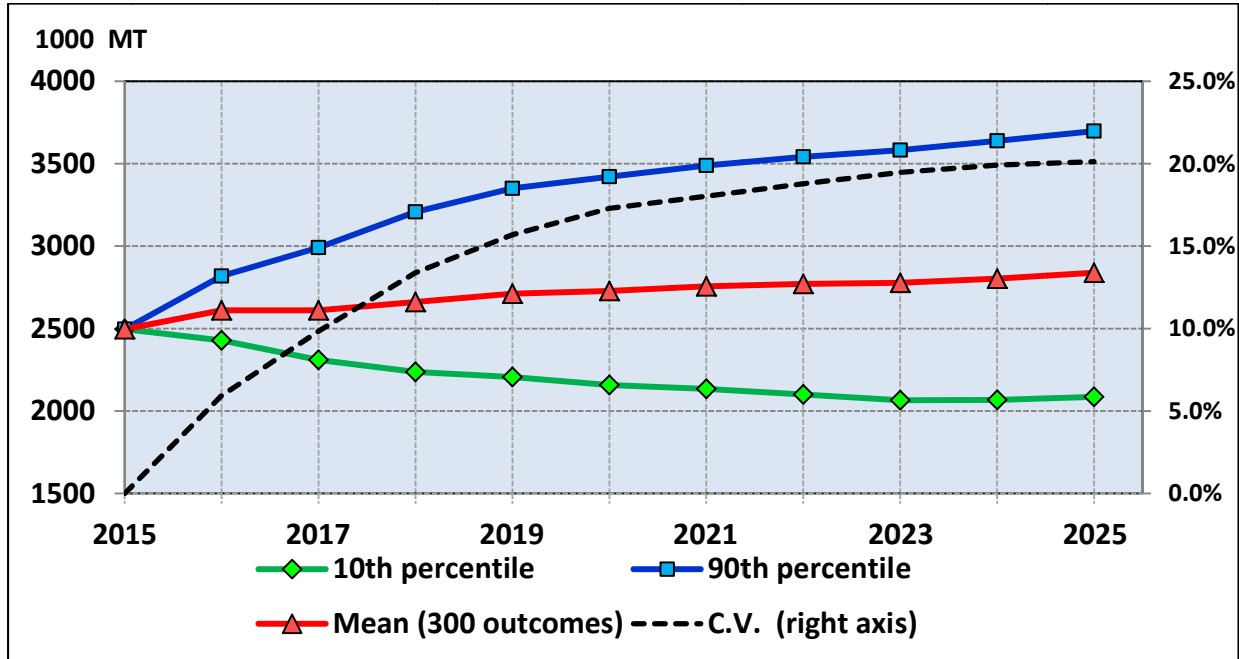


Figure 36 Stochastic Projections of U.S. Net Rice Exports, 2015-2025

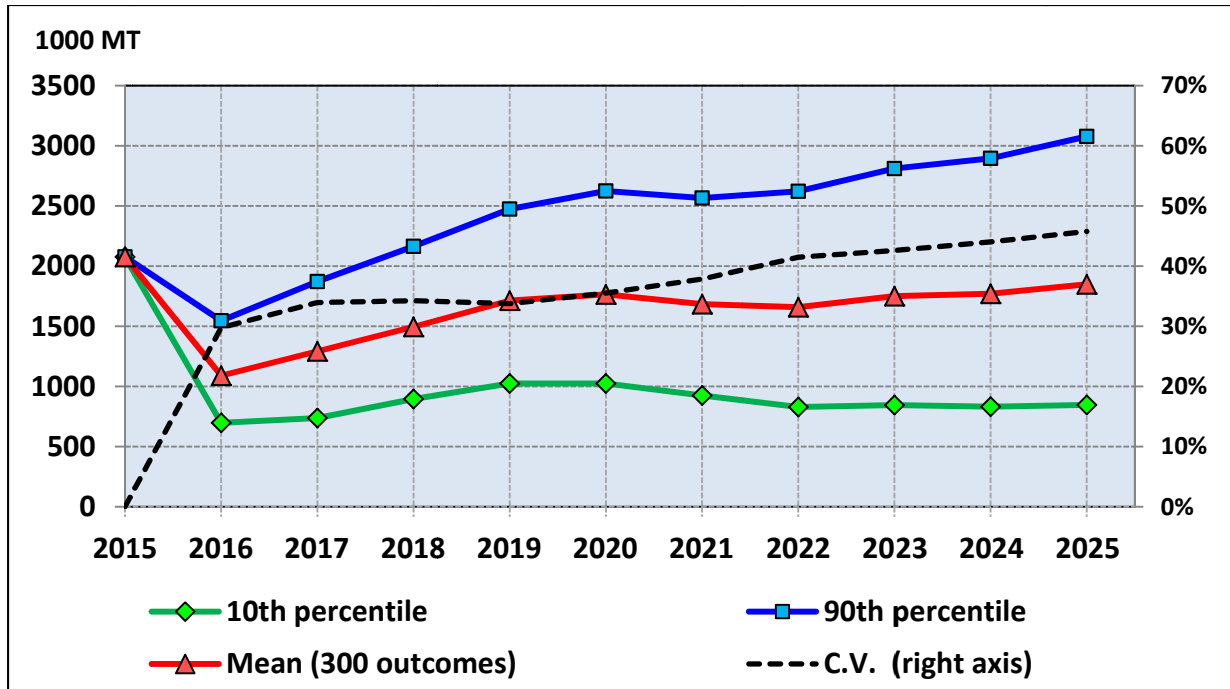


Figure 37 Stochastic Projections of Philippine Net Rice Imports, 2015-2025

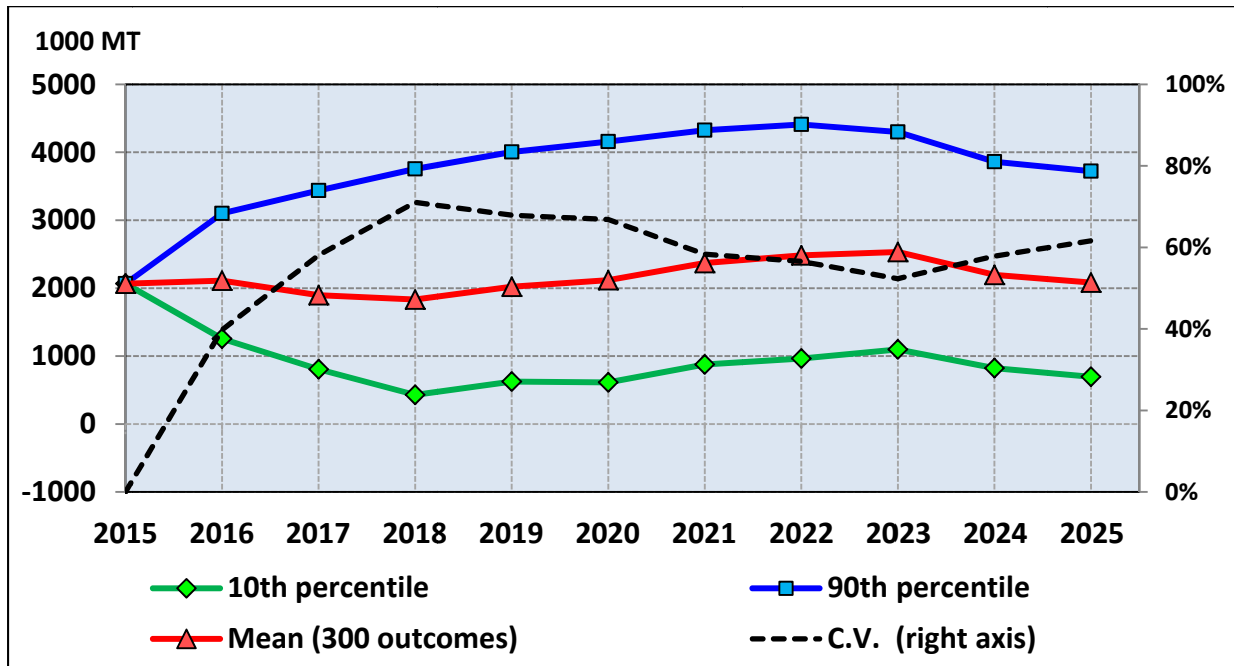


Figure 38 Stochastic Projections of Indonesia Net Rice Imports, 2015-2025

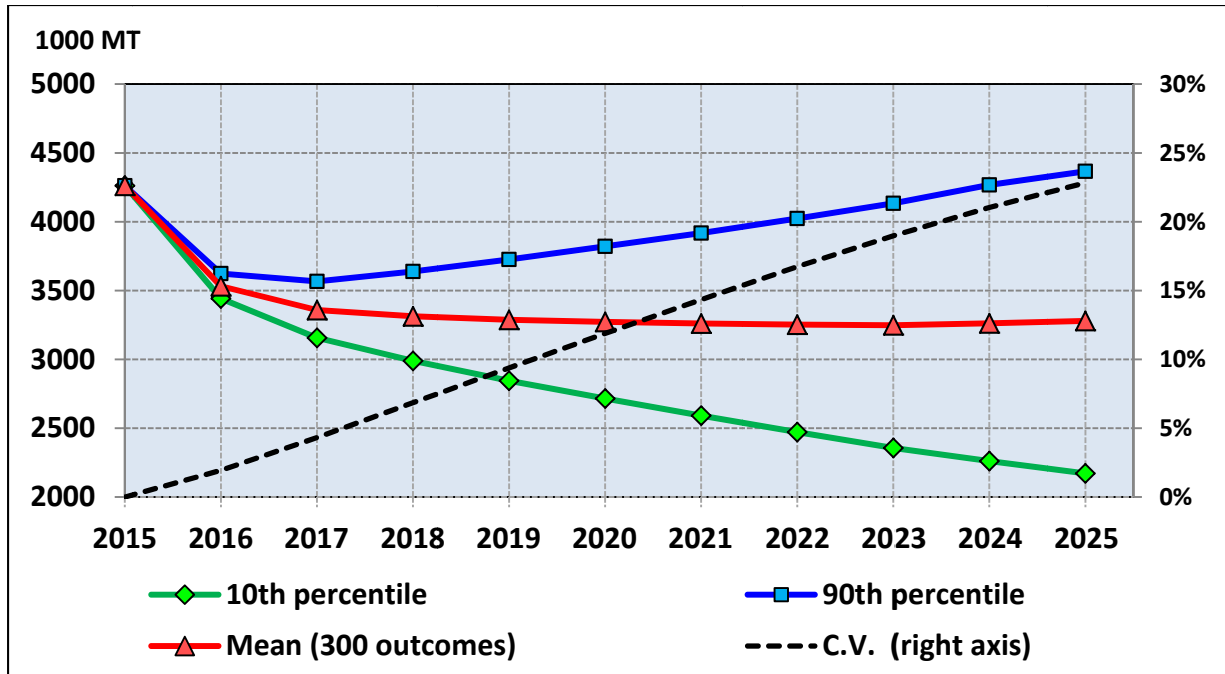


Figure 39 Stochastic Projections of People's Republic of China Net Rice Imports, 2015-2025

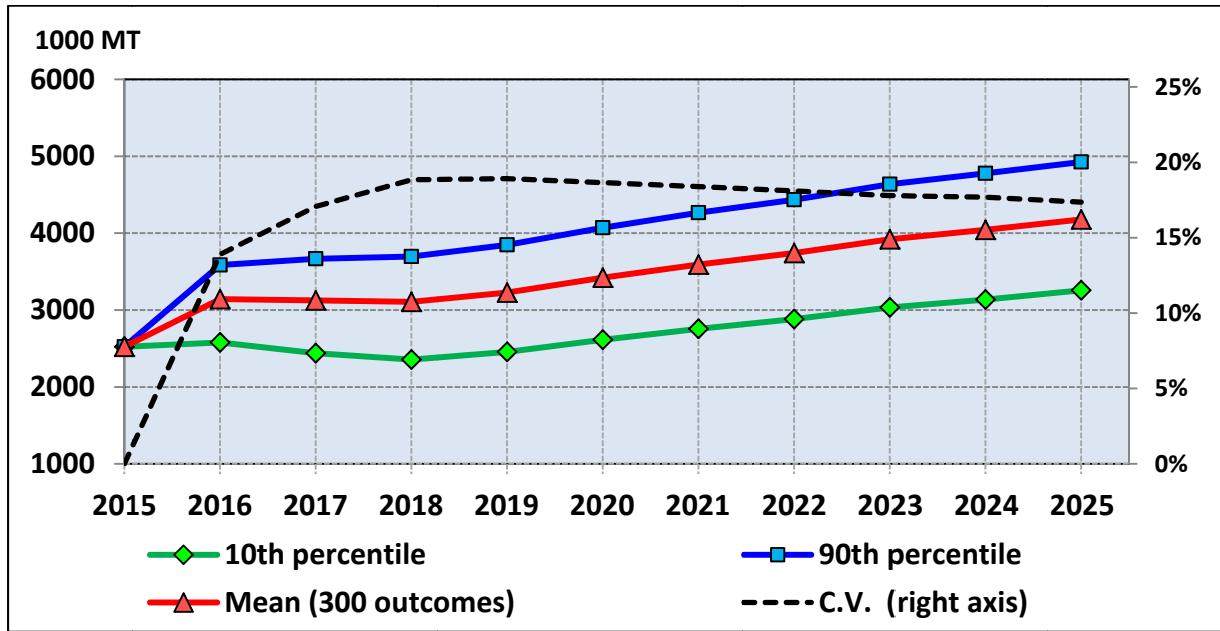


Figure 40 Stochastic Projections of Nigeria Net Rice Imports, 2015-2025

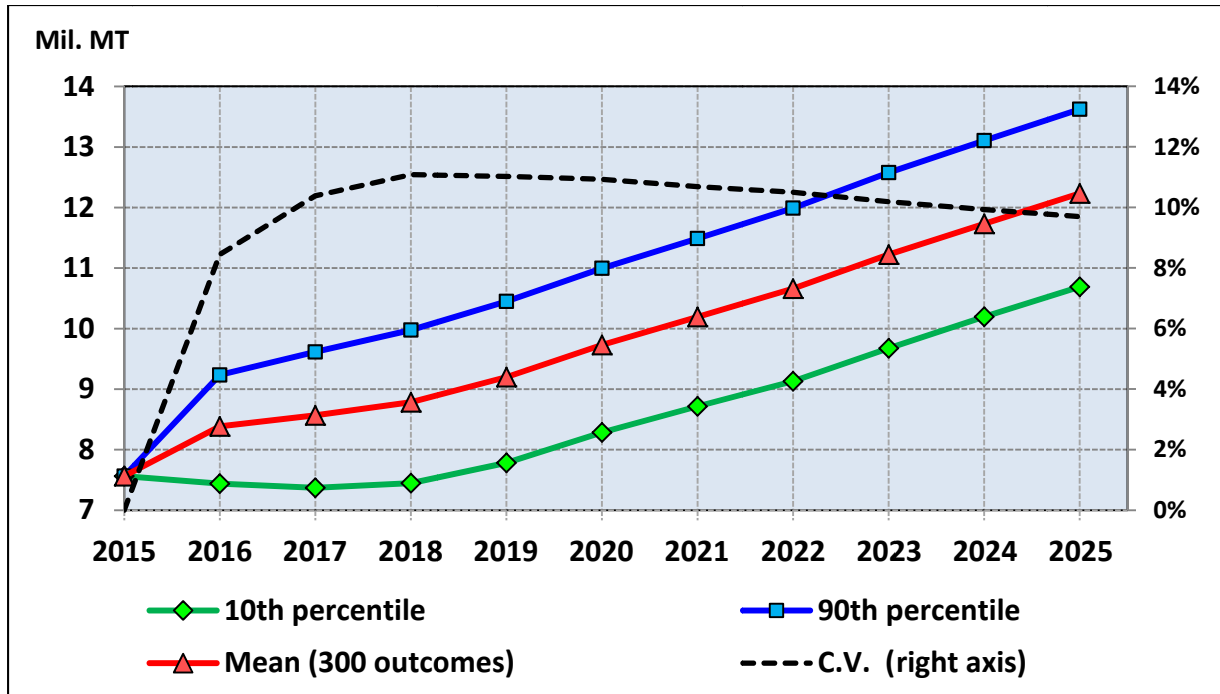


Figure 41 Stochastic Projections of ECOWAS-15 Net Rice Imports, 2015-2025

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