



**Rice Outlook: September 2022**  
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Rice Outlook monthly tables, in Excel format, can be found on the Rice Outlook report page on USDA's Economic Research Service website.

## India's 2023 Export Forecast Lowered 2.0 Million Tons

There were several revisions this month to the U.S. 2022/23 and 2021/22 rice balance sheets. For 2022/23, the production forecast was lowered 10.9 million cwt to 165.1 million cwt, a result of a 6-percent drop in the harvested area estimate and a slightly lower yield forecast. The 2022/23 import forecast was raised 1.0 million cwt to a record 44.0 million. On the use side, 2022/23 exports were lowered 2.0 million cwt to 77.0 million, while the total domestic and residual use forecast was reduced 4.0 million cwt to 141.0 million. On balance, these revisions resulted in a 5.6-million cwt reduction in the ending stocks forecast to 30.9 million cwt. Season-average farm price (SAFP) forecasts for 2022/23 were raised for both classes of rice in both the South and California, with the U.S. 2022/23 SAFP forecast at a record \$19.40 per cwt.

For 2021/22, yearend Census-reported trade data and USDA, National Agricultural Statistics Service (NASS)-reported August 1 rice stocks data resulted in revised trade, domestic and residual use, and ending stocks estimates. In addition, SAFP estimates were lowered this month for both California and U.S. medium- and short-grain rice and for all-rice, largely based on the July NASS-reported cash prices and marketings.

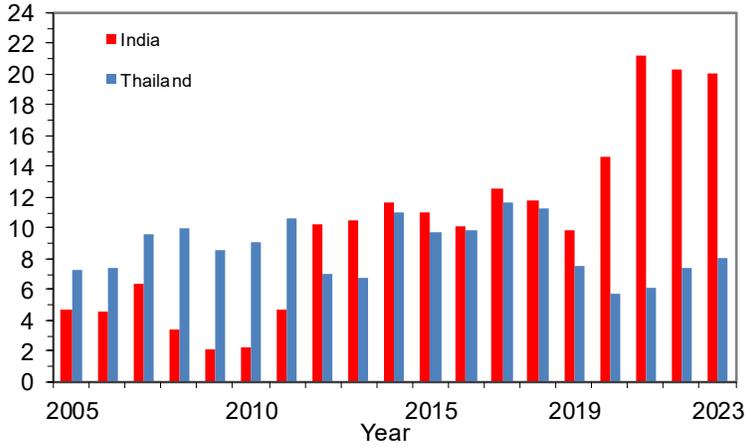
In the global rice market, the 2022/23 global rice production forecast was lowered 4.4 million tons to 508.0 million tons (milled basis), the first year-to-year decline since 2015/16. The month-to-month reduction is largely due to reduced production forecasts for China, India, Pakistan, Sri Lanka, and the United States. The 2022/23 global consumption and residual use forecast was raised 0.6 million tons this month to 519.3 million, the highest on record, with India accounting for the bulk of the upward revision. The 2022/23 global ending stocks forecast was lowered 5.0 million tons to 173.6 million tons, the second consecutive year of a decline.

The global rice trade forecast for calendar year 2023 was lowered 1.0 million tons to 53.7 million tons. India accounts for the bulk of the downward revision in global exports. In contrast, export forecasts were raised this month for Burma, Pakistan, Thailand, and Vietnam. Over the past month, quotes for Thailand's trading prices for most grades of regular (nonspecialty) milled rice increased 3-4 percent from a month earlier, while Vietnam's price quotes were unchanged. U.S. trading prices for long-grain milled rice continued to increase over the past month, while nominal price quotes (not actual sales) for California medium- and short-grain rice remain record high.

Figure 1

**India's 2023 rice exports projected to decline; Thailand's 2023 exports projected to increase 8 percent**

Million tons



Notes: Rice exports are reported on a milled basis; 2022 and 2023 are forecasts.  
Source: USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Table A - U.S. all-rice supply and use at a glance, 2021/22 and 2022/23								
Balance sheet item	2021/22 August	2021/22 September	2021/22 Changes from previous month	2021/22 Comments and analysis	2022/23 August	2022/23 September	2022/23 Changes from previous month	2022/23 Comments and analysis
<b>Supply</b> August–July marketing year								
Beginning stocks	43.7	43.7	0.0		41.5	39.7	-1.7	August 1 rice stocks reported by USDA's National Agricultural Statistics Service (NASS).
Production	191.8	191.8	0.0		176.0	165.1	-10.9	Smaller planted area and lower yield reported by NASS in its September <i>Crop Production</i> report.
Imports	38.0	37.8	-0.2	Yearend Census import data.	43.0	44.0	1.0	Smaller U.S. crop forecast.
Total Supply	273.5	273.2	-0.2	Smaller imports.	260.5	248.9	-11.6	A reduced crop forecast and a smaller carryin.
<b>Demand</b> August–July marketing year								
Domestic and residual use	148.5	151.4	2.9	Balance total supply and total use.	145.0	141.0	-4.0	Smaller crop forecast.
Exports	83.5	82.2	-1.3	Yearend Census export data.	79.0	77.0	-2.0	Smaller U.S. supplies and higher expected prices.
Rough	30.0	28.3	-1.7	Yearend Census export data.	32.0	29.0	-3.0	Smaller U.S. rice supplies, higher prices, and greater competition in Latin America from South American exporters.
Milled	53.5	53.9	0.4	Yearend Census export data.	47.0	48.0	1.0	Slight increase in expected sales to key U.S. milled-rice buyers.
Total use	232	233.524	1.5	Stronger domestic and residual use offset weaker exports.	224.0	218.0	-6.0	Weaker domestic and residual use and smaller exports.
Ending stocks	41.5	39.7	-1.7	NASS August 1 stocks data.	36.5	30.9	-5.6	A reduced crop forecast more than offset both weaker exports and smaller domestic and residual use.
<b>Price</b> August–July marketing year								
Season-average farm price (SAFP)	15.80	15.70	-0.10	NASS <i>Quick Stat</i> database.	18.80	19.40	0.6	Higher expected prices for both U.S. long-grain and medium- and short-grain rice due to tighter supplies.

Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

Table B - U.S. rice supply and use at a glance, by class, 2021/22 and 2022/23								
Balance sheet item	2021/22 August	2021/22 September	2021/22 Changes from previous month	2021/22 Comments and analysis	2022/23 August	2022/23 September	2022/23 Changes from previous month	2022/23 Comments and analysis
<b>LONG-GRAIN</b>								
<b>Supply</b> August–July marketing year								
Beginning stocks	29.7	29.7	0.0		25.4	24.6	-0.7	August 1 rice stocks reported by USDA's National Agricultural Statistics Service (NASS).
Production	144.6	144.6	0.0		140.3	132.3	-8.0	Smaller crop reported by NASS.
Imports	31.0	30.7	-0.3	Yearend Census import data.	33.0	34.0	1.0	A smaller U.S. crop forecast.
Total supply	205.4	205.1	-0.3	Smaller imports.	198.7	190.9	-7.7	A smaller crop more than offset a higher import forecast.
<b>Demand</b> August–July marketing year								
Domestic and residual use	118.0	119.8	1.8	Balance total supply and total use.	115.0	112.0	-3.0	Smaller U.S. crop.
Exports	62.0	60.6	-1.4	Yearend Census export data.	60.0	58.0	-2.0	Tighter U.S. supplies and higher expected prices.
Total use	180.0	180.4	0.4	Larger domestic and residual use offset weaker exports.	175.0	170.0	-5.0	Weaker domestic and residual use and smaller exports.
Ending stocks	25.4	24.6	-0.7	NASS August 1 rice stocks data.	23.7	20.9	-2.7	A smaller crop forecast more than offset larger imports and weaker exports.
<b>Price</b> August–July marketing year								
Season-average farm price (SAFP)	13.70	13.70	0.00		16.00	16.50	0.50	Tighter U.S. supplies.
<b>MEDIUM- AND SHORT-GRAIN</b>								
<b>Supply</b> August–July marketing year								
Beginning stocks	11.5	11.5	0.0		13.6	13.0	-0.6	NASS-reported August 1 stocks.
Production	47.2	47.2	0.0		35.7	32.8	-2.9	Smaller crop reported by NASS.
Imports	7.0	7.1	0.1	Yearend Census import data.	10.0	10.0	0.0	
Total Supply	65.6	66.2	0.5		59.3	55.9	-3.4	Smaller crop and a reduced carryin.
<b>Demand</b> August–July marketing year								
Domestic and residual use	30.5	31.6	1.1	Balance total supply and total use.	30.0	29.0	-1.0	Smaller crop.
Exports	21.5	21.5	0.0		19.0	19.0	0.0	
Total use	52.0	53.1	1.1	Stronger domestic and residual use.	49.0	48.0	-1.0	Smaller domestic and residual use.
Ending stocks	13.6	13.0	-0.6	NASS August 1 rice stocks data.	10.3	7.9	-2.4	Smaller supplies more than offset weaker domestic and residual use.
<b>Season-Average Farm Price (SAFP)</b> August–July marketing year								
Southern medium- and short-grain	14.10	14.10	0.00		16.50	17.00	0.50	Stronger southern long-grain and California medium- and short-grain price forecasts.
California medium- and short-grain	26.00	25.70	-0.30	NASS-reported monthly cash prices and marketings through July and expectations for August-September.	32.00	33.00	1.00	Tighter supplies of California rice.
U.S. medium- and short-grain	22.20	22.00	-0.20	Lower California SAFPs.	27.00	27.90	0.90	Higher expected prices for medium- and short-grain rice in both California and the South.

Source: USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*.

**Table C - U.S. rice harvested area, yield, and production, by State and U.S. total**

Class and State	2018	2019	2020	2021	2022	Change from previous year	
						Quantity	Percent
	----- 1,000 acres -----						
<b>Harvested area</b>							
Arkansas	1,422	1,126	1,441	1,194	1,083	-111	-9.3
California	504	501	514	405	255	-150	-37.0
Louisiana	436	414	473	414	416	2	0.5
Mississippi	139	113	165	100	84	-16	-16.0
Missouri	220	173	214	194	149	-45	-23.2
Texas	189	150	179	181	190	9	5.0
U.S. total	2,910	2,477	2,986	2,488	2,177	-311	-12.5
South	2,406	1,976	2,472	2,083	1,922	-161	-7.7
	----- Pounds per acre -----						
<b>Yield</b>							
Arkansas	7,520	7,480	7,500	7,630	7,500	-130	-1.7
California	8,620	8,460	8,720	9,050	8,900	-150	-1.7
Louisiana	7,130	6,380	6,820	6,870	6,700	-170	-2.5
Mississippi	7,350	7,350	7,420	7,540	7,450	-90	-1.2
Missouri	7,770	7,370	7,250	8,040	7,600	-440	-5.5
Texas	7,970	7,350	8,150	6,860	8,300	1440	21.0
U.S. total	7,692	7,473	7,619	7,709	7,586	-123	-1.6
South	7,498	7,224	7,391	7,448	7,411	-37	-0.5
	----- 1,000 cwt -----						
<b>Production</b>							
Arkansas	106,947	84,257	108,107	91,136	81,225	-9911	-10.9
California	43,425	42,362	44,810	36,653	22,695	-13958	-38.1
Louisiana	31,094	26,408	32,237	28,447	27,872	-575	-2.0
Mississippi	10,217	8,302	12,241	7,540	6,258	-1282	-17.0
Missouri	17,090	12,747	15,522	15,599	11,324	-4275	-27.4
Texas	15,060	11,028	14,597	12,421	15,770	3349	27.0
U.S. total	223,833	185,104	227,514	191,796	165,144	-26652	-13.9
South	180,408	142,742	182,704	155,143	142,449	-12694	-8.2

These six States account for almost 100 percent of U.S. rice acreage and production. Production and yield are rough basis.  
Source: USDA, Economic Research Service; USDA, National Agricultural Statistics Service.

# Domestic Outlook

## U.S. 2022/23 Rice Crop Forecast Reduced 6 Percent

The U.S. 2022/23 rice production forecast was lowered 10.9 million cwt to 165.1 million based on a reduced harvested area estimate and a lower yield forecast. Production is 14 percent below a year earlier and the smallest since 1993/94. The projected yield of 7,586 pounds per acre is 41 pounds below the previous forecast and nearly 2 percent below the year-earlier record. The revised area, yield, and production estimates were reported by USDA's National Agricultural Statistics Service (NASS) in its *Crop Production* report released on September 12. The revised planted and harvested area estimates included information reported by the Farm Service Agency on acreage enrolled in USDA's farm programs. This is the second survey-based yield forecast for the 2022/23 crop and is based on a survey of rice producers conducted by NASS between August 25 and September 7. These growers will continue to be surveyed throughout the August-November growing season to provide indications of average yields.

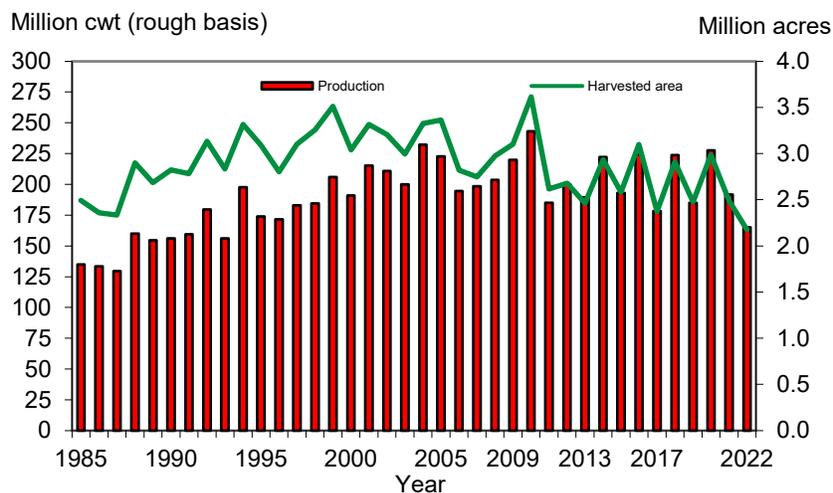
Long-grain 2022/23 production was lowered 8.0 million cwt to 132.3 million, nearly 9 percent below a year earlier and the smallest since 2019/20. Medium- and short-grain production was lowered 2.9 million cwt to 32.8 million cwt, 30 percent smaller than a year earlier and the lowest since at least 1972/73 when NASS first reported U.S. rice production by class.

Total harvested area is estimated at 2.177 million acres, 131,000 below the previous estimate, 12.5 percent below a year earlier, and the lowest since 1973/74. Harvested area is estimated to be less than a year earlier in all reported States except Louisiana and Texas, with California accounting for the largest annual decline in rice area. At 255,000 acres, California's total 2022/23 rice harvested area is the smallest since 1958/59. This is the second consecutive year of a sharp decline in California rice acreage, a result of a severe and prolonged drought, with low reservoir levels and water restrictions. California grows mostly medium- and short-grain rice, typically accounting for around 75 percent of U.S. medium- and short-grain acreage. Much of the area decline in the Delta was due to extremely high corn and soybean prices just prior to planting and the historically high input costs for rice production this year. Early-season adverse weather in parts of the Delta further reduced plantings.

Average yields in 2022/23 are projected to be lower than a year earlier in all reported rice producing States except Texas, which is expecting a near-record yield. Missouri's yield is projected to show the sharpest decline, while the California yield is second only to the year-earlier record. California's recent high yields have been supported by the small amount of acreage planted and harvested. Production is projected to be smaller than a year earlier in all reported States except for Texas, where production is projected to be the highest since 1998/99 due to a 21-percent increase in the yield and a 5-percent expansion in harvested area. California's rice production is projected to decline 38 percent to 22.7 million cwt, mostly due to the substantial area drop. This is the smallest rice crop in California since 1977/78.

Figure 2

### Reduced harvested area is projected to pull U.S. 2022/23 rice production down 14 percent



Cwt = Hundredweight. 2022 is forecast.

Source: USDA, Economic Research Service, *Rice Yearbook* dataset; 1985/86–2019/20; USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, 2020/21–2022/23.

## Harvest of the 2022/23 Rice Crop Reported Behind Normal

Harvest of the 2022/23 rice crop was reported behind normal across the South for the week ending September 4, as persistent rainfall in many areas has slowed the harvest pace. In addition, the pace of planting this spring was behind normal in much of the region, especially in the Delta, causing the 2022/23 southern harvest to be spread over a longer period than normal. The California harvest does not typically begin in earnest until late September.

Table D - Weekly crop progress				
State	Week ending September 4, 2022	Previous week	A year earlier	State and U.S. 2017–2021 average
<b>Rice harvested</b>				
----- Percent -----				
Arkansas	11	4	16	17
California	0	0	3	1
Louisiana	75	67	79	83
Mississippi	23	2	16	28
Missouri	0	0	6	3
Texas	81	77	82	83
U.S. total	24	18	27	28
NA = Not available. These six States account for almost 100 percent of U.S. rice acreage.				
Source: USDA, National Agricultural Statistics Service; USDA, Economic Research Service.				

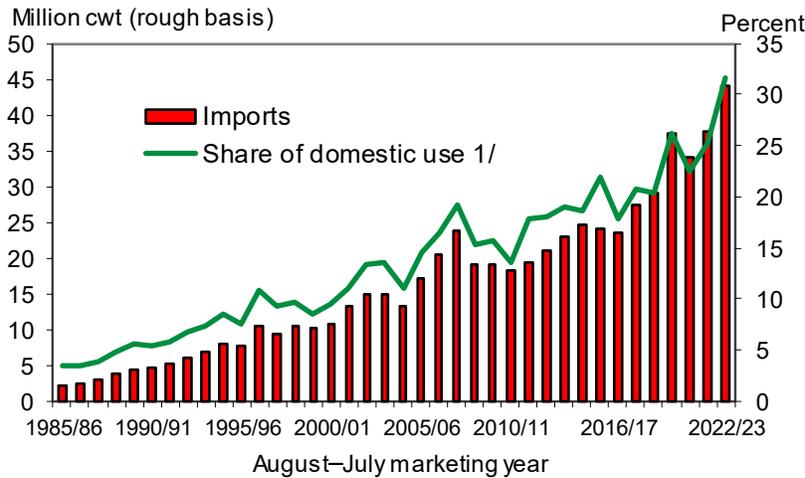
## U.S. 2022/23 Rice Import Forecast Raised 1.0 Million Cwt

U.S. rice imports in 2022/23 are forecast at a record 44.0 million cwt, up 1.0 million from the previous estimate and more than 16 percent above the year-earlier revised estimate. Imports are expected to account for almost 32 percent of domestic and residual use (excluding seed use) in 2022/23, the highest share on record. Long-grain imports are projected at a record 34.0 million cwt, up 1.0 million from the previous forecast and 11 percent larger than the year-earlier revised estimate. This month's 2022/23 upward revision was based on the smaller projected U.S. long-grain crop. Asian aromatics are again expected to account for the bulk of the shipments and most of the increase. Imports of regular milled long-grain white rice from South American suppliers are expected to continue, largely due to their lower prices. These shipments are much smaller than the aromatic rice imports from Asia. The United States is also expected to import broken-kernel rice based on the smaller U.S. crop, with Brazil typically the main source.

Medium- and short-grain imports remain forecast at a record 10.0 million cwt, up 41 percent from a year earlier, with most of the projected increase due to an extremely weak California harvest. Australia is a likely source of most of this additional rice. Thailand, India, China, and Italy are expected to continue supplying rice to the United States classified by the U.S. Census Bureau as medium- and short-grain, with almost all of the rice from China shipped to Puerto Rico, a U.S. territory. In 2021/22, China supplied four 21,000-ton shipments of medium- and short-grain rice to Puerto Rico, and India supplied one shipment of around 22,000 tons.

Figure 3

**U.S. rice imports in 2022/23 projected record high**



Cwt = Hundredweight. 2022/23 are forecasts. 1/ Does not include seed use.  
 Source: USDA, Economic Research Service, *Rice Yearbook* dataset 1985/86-2019/20; USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, 2020/21-2022/23.

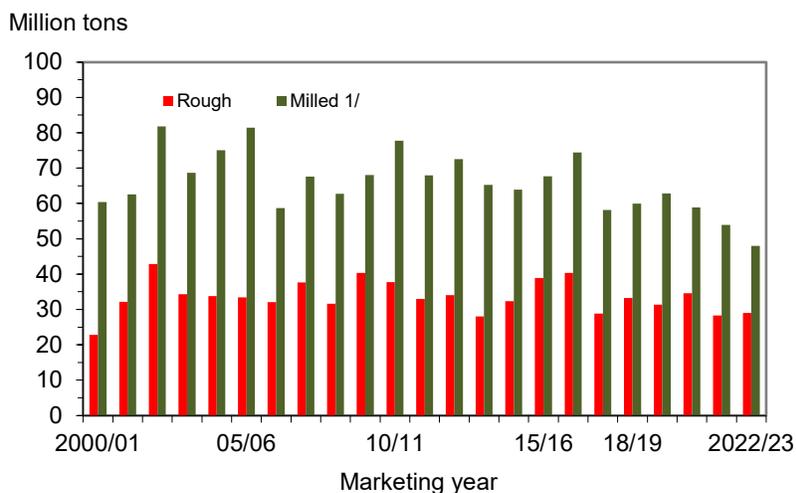
Finally, the 2022/23 U.S. all-rice carryin was lowered more than 4 percent based on data reported in the NASS *Rice Stocks* released on August 19. Long-grain carryin was reduced 3 percent and the medium- and short-grain carry was lowered more than 4 percent. These production, import, and carryin revisions lowered the all-rice 2022/23 total supply forecast 4 percent to 248.9 million cwt, the smallest since 2003/04.

## U.S. Rice 2022/23 Rice Export Forecast Lowered

U.S. 2022/23 all-rice exports are forecast at 77.0 million cwt, 2.0 million below the previous forecast, more than 6 percent below a year earlier and the lowest since 1991/92. The U.S. rough-rice export forecast was lowered 3.0 million cwt to 29.0 million cwt, mostly based on the smaller supplies and higher expected prices. Rough-rice imports are still projected slightly higher than in 2021/22. Long-grain shipments to Latin America are expected to again account for nearly all of these exports. In contrast, the 2022/23 U.S. milled-rice export forecast was raised 1.0 million cwt to 48.0 million, still the smallest since 1970/71. The slight upward revision was based on stronger expectations regarding sales to several key regular buyers. Despite the upward revisions, U.S. milled rice exports in 2022/23 will again be limited by higher prices and smaller supplies.

Long-grain 2022/23 exports are forecast at 58.0 million cwt, 2.0 million below the previous forecast, 4 percent smaller than a year earlier and the lowest since 1996/97. Medium- and short-grain exports remain forecast at 19.0 million cwt, 12 percent below a year earlier and the lowest since 2006/07. The United States is expected to make few sales of medium- and short-grain rice outside of its core markets in Northeast Asia and Canada due to record-high prices and very tight supplies.

Figure 4  
**U.S. milled-rice exports projected to continue declining in 2022/23**



Cwt = Hundredweight. 2021/22 and 2022/23 are forecasts. 1/ Milled- and brown-rice exports on a rough-rice basis.

Source: USDA, Economic Research Service, *Rice Yearbook* dataset; 2000/01–2019/20; USDA, World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, 2020/21–2022/23.

All-rice total domestic and residual use in 2022/23 is forecast at 141.0 million cwt, 4.0 million cwt below the previous forecast and 7 percent below a year earlier. The downward revision is based on smaller supplies of U.S. rice and fewer expected post-harvest losses resulting from a smaller crop forecast. The U.S. 2022/23 ending stocks forecast was lowered 15 percent this month to 30.9 million cwt, 22.0 percent below a year earlier.

## U.S. 2021/22 Trade, Domestic Use, and Stocks Revised

There were several supply and demand revisions to the 2021/22 U.S. rice balance sheet based on yearend-reported Census trade data and NASS-reported August 1 rice stocks data. On the supply side, all-rice imports were lowered slightly, with long-grain accounting for all of the reduction and medium- and short-grain raised fractionally. On the use side, total exports were lowered almost 2 percent from the previous forecast, with rough-rice accounting for all of the downward revision and milled rice exports raised about 1 percent. U.S. sales and shipments of long-grain rough rice slowed sharply late in the 2021/22 market year, likely due to higher prices, while U.S. milled-rice shipments of medium- and short-grain rice to Northeast Asia were stronger than expected.

Based on the August 19 release of the NASS August 1 *Rice Stocks*, U.S. 2021/22 ending stocks were lowered 4 percent to 39.7 million cwt (rough and milled stocks reported on a rough basis), 9 percent below a year earlier. Long-grain ending stocks were reduced 3 percent to 24.6 million cwt, 17 percent below a year earlier but still well above 2019/20 ending stocks. Combined medium- and short-grain 2021/22 ending stocks were lowered 4 percent to 13.0 million cwt, down 14 percent from a year earlier. These import, export, and ending stocks revisions were offset by matching increases in the domestic and residual estimates for all rice and by class. Stocks of broken kernel rice, included in the total stocks estimate, are not classified by length of grain.

## U.S. 2022/23 Season-Average Farm Prices for Rice Raised

This month, USDA raised its 2022/23 season-average farm price (SAFP) forecasts for both classes of rice in the South and in California, with prices projected to be higher than a year earlier for all reported categories. Tighter U.S. rice supplies and much higher input prices are the major reasons for the expected higher—and typically record—U.S. rice prices in 2022/23. The 2022/23 SAFP forecast for long-grain rice was raised 50 cents to a record \$16.50 per cwt, more than 20 percent above a year earlier.

In California, the 2022/23 medium- and short-grain SAFP was again raised \$1.00, now to a record \$33.00 per cwt, up 28 percent from a year earlier. The upward revision was largely based on recent higher reported nominal price quotes and a reduced crop forecast. The 2022/23 southern medium- and short-grain SAFP was raised 50 cents to \$17.00 per cwt, up 21 percent from a year earlier and the highest since the 2008/09 record. The higher California and southern medium- and short-grain SAFPs boosted the U.S. medium- and short-grain SAFP to a record \$27.90 per cwt, 27 percent above a year earlier. The U.S. 2022/23 all-rice SAFP was raised 60 cents to a record \$19.40 per cwt, up almost 24 percent from a year earlier.

On August 31, NASS released its July 2022 rough-rice cash prices and marketings estimates, resulting in slight 2021/22 revisions for the California medium- and short-grain SAFP forecast, the U.S. medium- and short-grain SAFP estimate, and the U.S. all-rice SAFP estimate.

# International Outlook

## Adverse Weather Lowers 2022/23 Rice Production Forecasts for China, India, and Pakistan

This month, the 2022/23 global rice production forecast was lowered 4.4 million tons to 508.0 million tons (milled basis), more than 1 percent below a year earlier and the first year-to-year decline since 2015/16. The month-to-month reduction is largely due to smaller production forecasts for China, India, Pakistan, Sri Lanka, and the United States. In China, India, and Pakistan, these crop reductions—which are the largest reductions this month—were caused by adverse weather this summer, either drought or severe flooding, which reduced harvested area estimates for India and Pakistan and lowered China’s expected yield.

The U.S. crop forecast was reduced based on lower harvested area and yield estimates reported by NASS this month, while Sri Lanka’s crop forecast was revised down largely on severe input shortages. Additional smaller production revisions made this month are reported in table E.

These production revisions and a reduced carryin resulted in a 4.4-million ton decrease in the 2022/23 total global supply forecast this month to 692.9 million tons, 1.5 percent below a year earlier but still the second-highest on record. This is the first decline in global rice supplies since 2004/05.

On an annual basis, China and India—the two largest rice producing countries in the world—account for the bulk of the expected global production decline. Their combined production is expected to drop 5.8 million tons in 2022/23. Pakistan’s 2022/23 production is projected to drop 0.92 million tons, and the U.S. crop is projected to decline 0.85 million tons. In addition, rice production is projected to decline at least 100,000 tons in 2022/23 in Bangladesh, Brazil, the European Union, Ghana, South Korea, the Philippines, and Tanzania.

Production in 2022/23 is projected to be up at least 100,000 tons from a year earlier in Burma, Egypt, Indonesia, Iran, Nigeria, and Thailand. Egypt’s crop is projected to achieve the largest increase, up 0.45 million tons to 3.35 million based mostly on a larger harvested area estimate. Cambodia and Nepal are projected to harvest record crops in 2022/23.

The 2022/23 global consumption and residual use forecast was raised 0.6 million tons this month to 519.3 million, up just fractionally from the year-earlier revised estimate and the highest on record. India accounts for the bulk of the upward revision. India’s 2022/23 domestic and residual use forecast was increased nearly 1.8 million tons to 109.25 million, fractionally below the year-earlier record. The upward revision was largely based on expected continued large Government purchases of wheat and rice for heavily subsidized sales to its citizens in lower income categories. India’s 2021/22 consumption and residual use estimate was raised 1.1 million tons to a record 109.5 million, also based on larger-than-expected purchases by the Food Corporation of India for its Public Distribution System to supply rice and wheat to India’s most food insecure. On an annual basis, Bangladesh, Nepal, Nigeria, the Philippines, and Thailand account for most of the projected increase in global domestic and residual use.

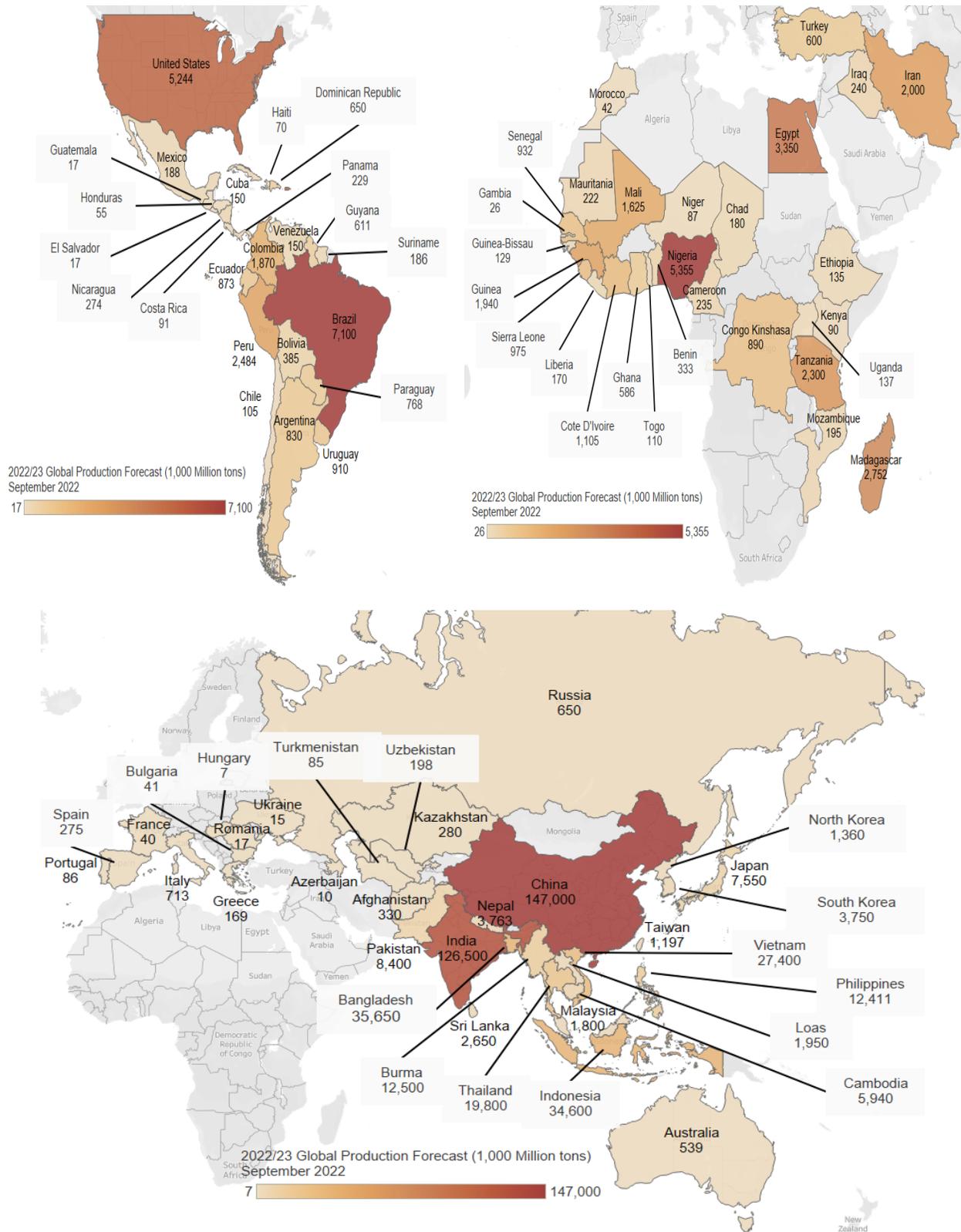
Table E - Global rice production, selected monthly revisions and year-to-year changes, September 2022						
Country or region	Current forecast	Change from previous month	Percent change from previous year	Month-to-month direction	Year-to-year direction	Explanation and comments on month-to-month change
<b>Rice production in 2022/23, 1,000 metric tons (milled basis)</b>						
Australia	539	-36	8.2	↓	↑	Reduced the crop forecast based on a smaller harvested area estimate. At 75,000 hectares, harvested area is 5,000 hectares below the previous estimate but 10 percent above a year earlier.
China	147,000	-2,000	-1.3	↓	↓	Lowered the production forecast based on a reduced yield caused by severe drought in the south that is expected to adversely impact the late crop. The late crop is mostly produced in the southeast and accounts for about 18 percent of China's total rice production.
Cuba	150	-20	2.0	↓	↑	Reduced the production forecast based on a reduced harvested area estimate and a lower expected yield. Cuba's rice sector continues to face severe input shortages.
Egypt	3,350	450	15.5	↑	↑	Raised the crop forecast based on a larger harvested area estimate and a higher expected yield. At 550,000 hectares, harvested area is up 50,000 hectares from both the previous forecast and a year earlier, but is still well below previous levels due to stricter enforcement of Government area restrictions. The yield was raised 5 percent to 8.83 tons per hectare largely based on new varieties and better farm practices.
India	126,500	-2,000	-2.9	↓	↓	Lowered the production forecast 2.0 million tons for a second consecutive month based on reduced plantings of the kharif crop in several major producing States in the northeast due to inadequate rainfall during the first half of the 2022 summer monsoon season. Total harvested area was reduced 0.5 million hectares to 45.5 million, 3 percent below the year earlier record. India's yield forecast was lowered slightly.
Madagascar	2,752	320	-1.8	↑	↓	Increased the production forecast based on a higher expected yield. The revision was based on recent production forecasts released by the United Nation's Food and Agricultural Organization.
Pakistan	8,400	-500	-9.9	↓	↓	Reduced the crop forecast based largely on reduced plantings in the Sindh caused by severe flooding from torrential rainfall in August. Total plantings were lowered 200,000 hectares to 3.2 million, 6 percent below a year earlier. The yield forecast was lowered slightly.
South Korea	3,750	30	5.9	↑	↑	Crop forecast was raised slightly based on a larger harvested area estimate reported by the Korean Statistical Information Service. Harvested area was increased 5,000 hectares to 727,000, still almost 1 percent smaller than a year earlier.
Sri Lanka	2,650	-345	0.8	↓	↑	Reduced the production forecast based on a substantially lower expected yield, especially for the yala crop that is currently being harvested. Sri Lanka's yield was lowered almost 12 percent to 3.54 tons per hectare, still up more than 1 percent from the year earlier's abnormally low yield. Sri Lanka's agriculture continues to be adversely impacted by a severe fertilizer shortage and lack of fuel for farm equipment and transport.
United States	5,244	-345	-13.9	↓	↓	Crop forecast was lowered based on a smaller harvested area estimate and a weaker yield reported by USDA's National Agricultural Statistics Service.

Continued--

Table E - Global rice production, selected monthly revisions and year-to-year changes, September 2022--continued						
Country or region	Current forecast	Change from previous month	Percent change from previous year	Month-to-month direction	Year-to-year direction	Explanation and comments on month-to-month change
<b>Rice production in 2021/22, 1,000 metric tons (milled basis)</b>						
Australia	498	28	63.4	↑	↑	Raised the crop estimate based on a larger harvested area and a higher yield reported by the Australian Bureau of Agricultural and Resource Economics and Sciences.
Cuba	147	-23	-15.5	↓	↓	Production estimate lowered based on data reported by the United Nation's Food and Agricultural Organization indicating smaller harvested area and a weaker yield. This is Cuba's smallest crop since 1969/70.
India	130,290	630	4.8	↑	↑	Raised the crop based on higher estimates for both the kharif and rabi crops reported by the Government of India in its August 17 <i>Fourth Advance Estimates</i> .
Madagascar	2,803	243	3.5	↑	↑	Increased the production estimate due to a higher yield. The revision was largely based on recent production estimates released by the United Nation's Food and Agricultural Organization.
Pakistan	9,323	623	7.2	↑	↑	Raised the production estimate to a record high based on a larger harvested area reported by the Government of Pakistan. At a record 3.54 million hectares, rice harvested area was up 137,000 hectares from the previous forecast and 6 percent above a year earlier.
Philippines	12,540	-60	1.0	↓	↑	Lowered the crop estimate slightly based on revised Government data reporting a slightly lower yield.
Sri Lanka	2,630	-15	-22.4	↓	↓	Reduced the crop estimate based on a slightly lower yield reported by the Government of Sri Lanka.

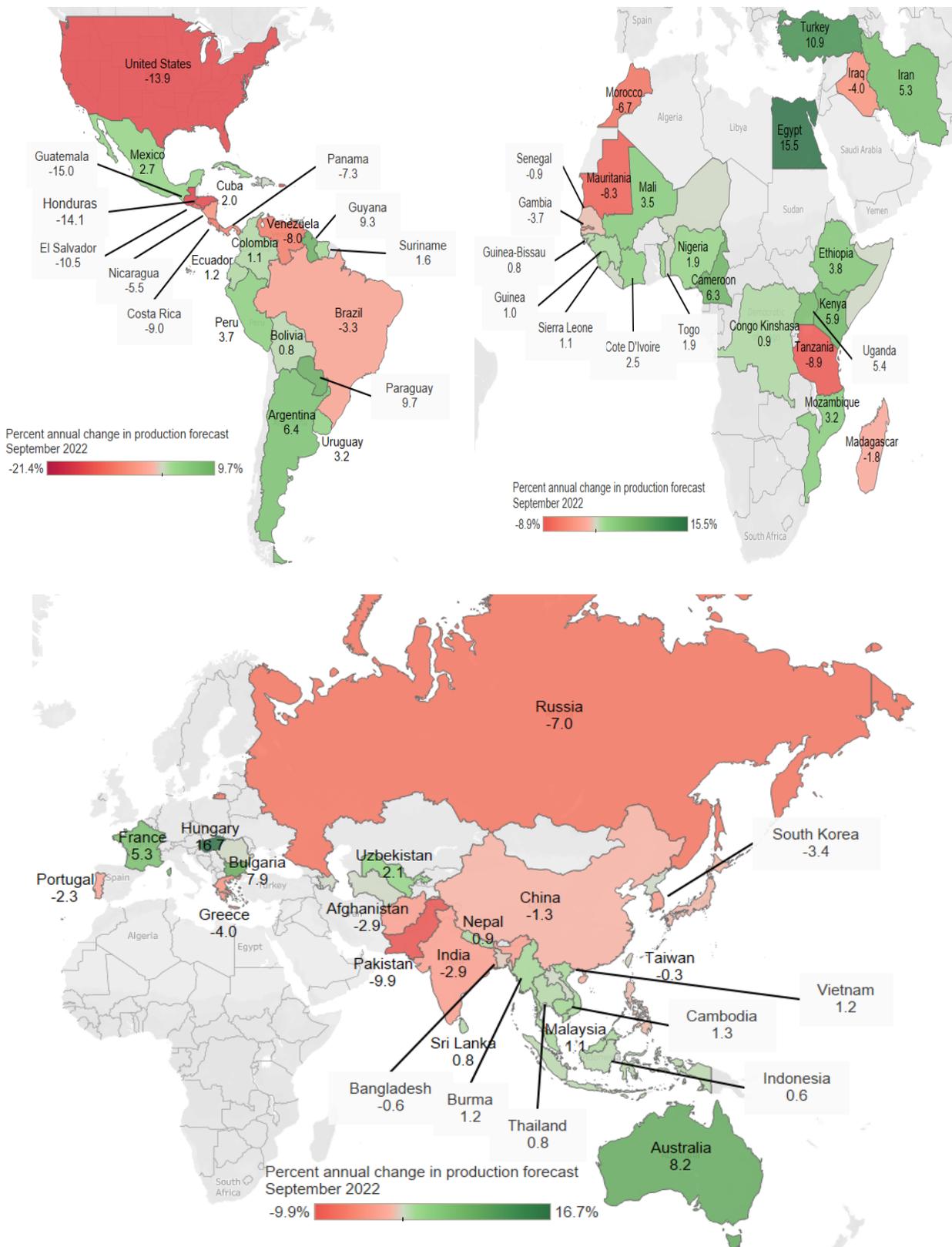
Source: Created by USDA, Economic Research Service with data from USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

Map 1: Production forecasts (milled basis) 2022/23



Source: Created by USDA, Economic Research Service with data from USDA, Foreign Agricultural Service, Production, Supply and Distribution database.

Map 2: Projected annual change in production (percent) 2022/23



Source: Created by USDA, Economic Research Service with data from USDA, Foreign Agricultural Service, *Production, Supply and Distribution* database.

This month, the 2022/23 global ending stocks forecast was lowered 5.0 million tons to 173.6 million tons, more than 6 percent below a year earlier and the second consecutive year of a decline. Global ending stocks are the lowest since 2017/18. China and India account for most of this month's downward revision in global ending stocks, partly due to smaller crop forecasts, and in India also due to stronger domestic and residual use. China's ending stocks are projected at 107.2 million tons, 1.8 million below the previous forecast and the lowest since 2016/17. India's 2022/23 ending stocks are projected at 33.75 million tons, down 2.75 million from the previous forecast and almost 8 percent below the year-earlier revised estimate.

Table F - Global rice balance sheet for 2021/22 and 2022/23, September 2022 (in million tons, milled basis)								
Balance sheet item	2021/22 August	2021/22 September	2021/22 change previous month	2022/23 August	2022/23 September	2022/23 change from previous month	2022/23 change from previous year	Percent change from previous year
<b>Supply</b>								
Beginning stocks	187.9	188.0	0.1	184.8	184.9	0.1	-3.1	-1.7
Production	513.7	515.1	1.4	512.4	508.0	-4.4	-7.1	-1.4
Total supply	701.5	703.1	1.5	697.3	692.9	-4.4	-10.2	-1.5
Trade year imports 1/	54.7	54.3	-0.5	54.7	53.7	-1.0	-0.5	-1.0
<b>Demand</b>								
Consumption and residual use	516.7	518.2	1.5	518.7	519.3	0.6	1.1	0.2
Trade year exports	54.7	54.3	-0.5	54.7	53.7	-1.0	-0.5	-1.0
Ending stocks	184.8	184.9	0.1	178.5	173.6	-5.0	-11.3	-6.1
Trade year 2021/22 is calendar year 2022. 1/ Includes imports not assigned to a specific country.								
Source: USDA, Foreign Agricultural Service, <i>Production, Supply and Distribution</i> database.								

## Export Forecasts for 2023 Lowered for India and China

Global rice trade in calendar year 2023 was lowered 1.0 million tons to 53.7 million tons, down 1 percent from the year-earlier revised estimate and the first decline since 2019. For 2023, a 2.0-million-ton reduction in India's export forecast and a 0.2-million-ton reduction in China's exports were not fully offset by upward export revisions for Burma, Pakistan, Thailand, and Vietnam. The sharp reduction in India's export forecast was based primarily on the September 9 announced Government restrictions on rice exports, measures taken to offset the impacts of the smaller crop on domestic food security. On the 2023 import side, forecasts were decreased for China, Cuba, Egypt, Guinea-Bissau, Liberia, Madagascar, Mexico, Nepal, Peru, Saudi Arabia, Senegal, Turkey, the United Arab Emirates, and Vietnam that were not fully offset by upward import revisions for Algeria, Australia, Iraq, the Philippines, and Sri Lanka. The 0.5-million-ton reduction in China's 2023 import forecast was the largest import revision this month. China has been a major importer of broken kernel rice from India.

On an annual basis, Argentina, Brazil, Cambodia, China, the European Union, India, Laos, Pakistan, Senegal, Tanzania, Turkey, and Uruguay are all expected to decrease exports in 2023. India's exports are projected to decrease 0.30 million tons and Pakistan's to decline 0.20 million tons, mostly due to smaller crops. In contrast, Australia, Guyana, Paraguay, Thailand, and Vietnam are projected to export more rice in 2023. U.S. exports are projected unchanged at 2.55 million tons, as smaller supplies and higher expected prices prevent any expansion.

On the 2023 global import side, Australia, Bangladesh, Benin, Cambodia, China, Costa Rica, Egypt, Guinea, Iraq, Madagascar, Mali, the Philippines, Senegal, Sri Lanka, and Vietnam are projected to import less rice in 2023 than in 2022. Partially offsetting these expected import declines are increased imports in 2023 for Afghanistan, Cote d'Ivoire, Cuba, Ecuador, the European Union, Ghana, Mexico, Mozambique, Nepal, Tanzania, United Arab Emirates, and the United States, with both the EU and the U.S. imports projected record high.

Table G - Selected rice importers at a glance (1,000 metric tons), September 2022						
Country or region	Current forecast	Change from previous month	Percent change from previous year	Month-to-month direction	Year-to-year direction	Explanation of month-to-month change
<b>Rice importers, 2023</b>						
Algeria	170	40	0.0	↑	→	Raised the import forecast based on expected strong shipments from India, Algeria's main supplier. Imports are unchanged from the year-earlier record.
Australia	180	10	-18.2	↑	↓	Import forecast raised based on a smaller 2022/23 crop forecast.
China	5,500	-500	-3.5	↓	↓	Expect reduced imports from main-supplier India due to India's recently announced ban on exports of broken kernel rice.
Cuba	400	-90	14.3	↓	↑	Expect the recent slower-than-expected pace of imports to continue.
Egypt	650	-200	-18.8	↓	↓	Reduced the import forecast based on a larger 2022/23 crop forecast.
Guinea-Bissau	130	-30	8.3	↓	↑	Import forecast lowered based on the expectation that the recent slower-than-expected pace of purchases will continue in 2023.
Iraq	1,450	100	-3.3	↑	↓	Raised the import forecast to a near-record high based on expectation that the recent larger-than-expected purchases from top-supplier Thailand will continue.
Liberia	360	-50	2.9	↓	↑	Import forecast lowered based on expectation that the recent slower-than-expected pace of purchases will continue in 2023.
Madagascar	600	-150	-14.3	↓	↓	Reduced the import forecast based on larger 2021/22 and 2022/23 crop forecasts.
Mexico	800	-20	6.7	↓	↑	Expect the recent slower-than-expected pace of imports to continue.
Nepal	1,100	-100	4.8	↓	↑	Lowered imports based on the recently announced export restrictions by India, Nepal's top supplier.
Peru	220	-30	10.0	↓	↑	Expect the recent slower-than-expected pace of imports to continue.
Philippines	3,300	200	-2.9	↑	↓	Expect the recent faster-than-expected pace of purchases, especially from main-supplier Vietnam, to continue.
Saudi Arabia	1,300	-100	0.0	↓	→	Lowered the import forecast based on expectations that the recent slower-than-expected pace of purchases will continue.
Senegal	1,100	-150	-12.0	↓	↓	Reduced the import forecast based on India's September 9 announced ban on exports of brokens.
Sri Lanka	500	200	28.6	↑	↑	Raised the import forecast based on a smaller 2022/23 production forecast.
Turkey	370	-80	5.7	↓	↑	Lowered the import forecast based on expectations that the recent slower-than-expected pace of purchases will continue.
United Arab Emirates	950	-50	5.6	↓	↑	Expect less purchases from main-supplier India.
Vietnam	700	-100	-30.0	↓	↓	Expect reduced imports from current main-supplier India due to India's recently announced ban on exports of broken kernel rice.

Continued--

**Table G - Selected rice importers at a glance (1,000 metric tons), September 2022--continued**

Country or region	Current forecast	Change from previous month	Percent change from previous year	Month-to-month direction	Year-to-year direction	Explanation of month-to-month change
<b>Rice importers, 2022</b>						
Algeria	170	30	25.0	↑	↑	Raised the import forecast to a record-high based on stronger-than-expected purchases from main-supplier India.
China	5,700	-100	15.8	↓	↑	Expect reduced imports from main-supplier India due to India's recently announced ban on exports of broken kernel rice and a 20-percent export duty on nonaromatic and nonparboiled shipments of rough-, brown-, and milled-rice.
Cuba	350	-130	-15.9	↓	↓	Reduced imports based on a recent slower-than-expected pace of purchases.
Guinea-Bissau	120	-30	0.0	↓	→	Reduced imports based on a recent slower-than-expected pace of purchases.
Iraq	1,500	100	17.2	↑	↑	Increased the import forecast based on stronger-than-expected purchases from top-supplier Thailand.
Liberia	350	-50	-2.8	↓	↓	Reduced imports based on a recent slower-than-expected pace of purchases, with virtually no imports from the United States and weak shipments from India.
Mexico	750	-50	-1.2	↓	↓	Reduced imports based on a recent slower-than-expected pace of purchases, despite larger imports from South American suppliers.
Nepal	1,050	-100	-16.7	↓	↓	Lowered imports based on the recently announced export restrictions for India, Nepal's top supplier.
Philippines	3,400	200	15.3	↑	↑	Import forecast raised to a record high based on stronger-than-expected purchases, especially from main-supplier Vietnam.
Saudi Arabia	1,300	-100	8.3	↓	↑	Reduced the import forecast based on a recent slower-than-expected pace of purchases.
Sri Lanka	700	50	376.2	↑	↑	Import forecast raised based on stronger-than-expected purchases from India and a reduced 2022/23 production forecast.
Turkey	350	-100	5.7	↓	↑	Lowered the import forecast based on a slower-than-expected pace of purchases.
Vietnam	1,000	-200	-44.4	↓	↓	Lowered the import forecast based on India's September 9 announced ban on exports of broken kernel rice.

Source: Created by USDA, Economic Research Service with data from USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Table H - Selected rice exporters at a glance (1,000 metric tons), September 2022						
Country or region	Current forecast	Change from previous month	Percent change from previous year	Month-to-month direction	Year-to-year direction	Explanation of month-to-month change in forecast
<b>Rice exporters, 2023</b>						
Burma	2,300	200	0.0	↑	→	Raised the export forecast based on expected stronger purchases by the European Union and Bangladesh, and on weaker global exports from India.
China	2,200	-200	-2.2	↓	↓	Reduced the export forecast based on a smaller 2022/23 production forecast.
India	20,000	-2000	-1.5	↓	↓	Reduced the export forecast based on a smaller 2022/23 production forecast, expected stronger domestic use, and the September 9 announced 20-percent tax on non-basmati and nonparboiled exports of milled-, brown-, and rough-rice and a ban on exports of broken kernel rice.
Pakistan	5,000	100	-3.8	↑	↓	Raised the export forecast based on a reduced 2023 export forecast for India, a major competitor in several key markets.
Thailand	8,000	500	4.1	↑	↑	Raised the export forecast based on recent stronger-than-expected purchases by Iraq and expected weaker exports by India--a major competitor in certain key markets--in 2023.
Vietnam	6,800	400	1.5	↑	↑	Raised the export forecast based on expected weaker exports from India in 2023.
<b>Rice exporters, 2022</b>						
Argentina	350	30	-12.5	↑	↓	Export forecast was raised based on a recent stronger-than-expected pace of shipments to Brazil and the European Union.
India	20,300	-1450	-4.4	↓	↓	Lowered the export forecast based on the recently announced 20-percent duty on exports of nonaromatic and nonparboiled milled-, brown, and rough-rice and a ban on the exports of broken kernels.
Pakistan	5,200	400	27.3	↑	↑	Increased export forecast to a record-high based on a stronger-than-expected pace of shipments to China and an expected slowdown in shipments from major-competitor India.
Senegal	150	50	66.7	↑	↑	Export forecast raised based on a recent stronger-than-expected pace of shipments, with Sub-Saharan Africa accounting for almost all of Senegal's exports.
Thailand	7,500	300	23.7	↑	↑	Raised the export forecast based on recent stronger-than-expected purchases by top-buyer Iraq and an expected slowdown in shipments from the top global exporter India.
Turkey	270	40	12.0	↑	↑	Export forecast increased based on stronger-than-expected shipments to Europe and the Middle East.
Uruguay	875	55	24.3	↑	↑	Raised the export forecast based on stronger-than-expected shipments to key Latin American markets, especially Brazil, Costa Rica, and Mexico.
Vietnam	6,700	100	6.8	↑	↑	Raised the export forecast based on an expected slowdown in shipments from India--a major competitor in certain key markets--due to its recently announced export restrictions.

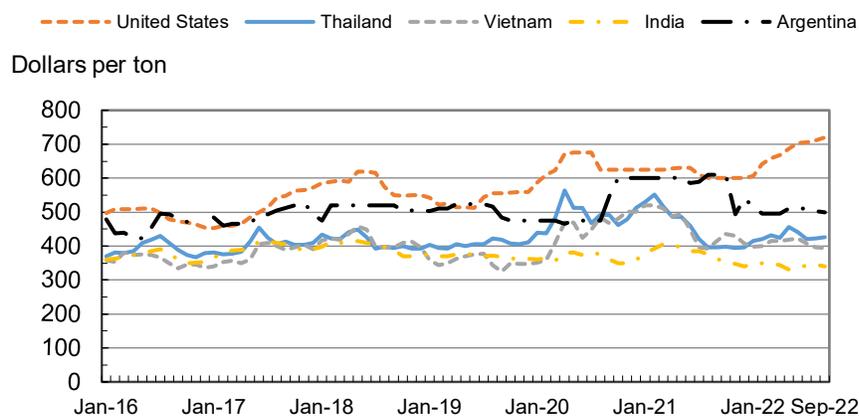
Source: Created by USDA, Economic Research Service with data from USDA, Foreign Agricultural Service, Production, Supply, and Distribution database.

Over the past month, quotes for Thailand’s trading prices for most grades of regular (nonspecialty) milled rice increased 3-4 percent from a month earlier, mostly due to the strengthening of the Thai baht and new inquires for regular-milled white rice and for parboiled rice. For the week ending September 6, Thailand’s 100-percent Grade B long-grain milled rice for export was quoted at \$427 per ton, up \$11 from the week ending August 9. Price quotes for Vietnam’s summer-autumn crop—harvest nearly complete—for the week ending September 6 were unchanged from the week ending August 9 despite slow demand from the Philippines, Vietnam’s top buyer. India’s price quotes for 5-percent broken-kernel rice shipped bulk decreased \$5 per ton to \$340. India is currently the most competitively priced source of Asian rice. However, on September 9, the Government of India announced the implementation of a 20-percent export duty on nonaromatic and nonparboiled milled-, brown-, and rough-rice exports and a ban on exports of broken kernel rice. This import duty will impact the future competitiveness of India’s rice. Pakistan’s price quote for 5-percent broken-kernel rice for the week ending September 6 increased \$30 per ton to \$400 from the week ending August 9. Argentina’s 5-percent broken-kernel rice was quoted at \$500 per ton for the week ending September 6, down \$10 from the week ending August 9.

U.S. trading prices for long-grain milled rice continued to increase over the past month. Prices for U.S. long-grain milled rice, Number 2 Grade, 4-percent broken kernels (free on board a vessel at a Gulf port, Iraqi specifications) were quoted at \$720 per ton for the week ending September 6, up \$10 from a month earlier and the highest for U.S. milled long-grain rice since early October 2008. U.S. price quotes for Latin American markets also increased \$10 over the past month, to \$685 per ton. Milled-rice nominal price quotes (no actual offers or sales) in California were unchanged since the week ending August 9. Nominal price quotes for California medium-grain Number 1 Grade, 4-percent broken kernels remain unchanged at \$1,550 per ton (free on board at a domestic mill), the highest on record for this specification. For listings of trading prices by exporter and grade of rice, see table 10 in the Excel file.

Figure 5

**U.S. trading prices remain well above Asian export prices; India remains the lowest-priced seller**



September 2022 = First week only. Notes: Free on Board local port. Monthly average of weekly price quotes. Quotes used: Thailand, 100-percent grade B; India, 5-percent broken, break bulk; Vietnam, 5-percent broken; Argentina, 5-percent broken; United States, No. 2, 4-percent broken.

Sources: Thailand: *Rice Price*, U.S. Embassy, Bangkok; United States, India, Argentina, and Vietnam prices: *Creed Rice Market Report*.

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