



Rice Outlook

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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.

U.S. 2021/22 Rice Crop Projection Lowered 1 Percent to 197.4 Million Hundredweight

There were several supply and use revisions this month to both the 2020/21 and 2021/22 U.S. rice balance sheets. On the 2021/22 supply side, the first survey-based all-rice yield forecast resulted in a 1-percent reduction in the U.S. production forecast to 197.4 million hundredweight (cwt), with harvested area unchanged from the previous forecast. Carryin was reduced 2.0 million cwt to 43.9 million cwt due to 2020/21 supply and use revisions. Imports for 2021/22 were lowered 1.0 million cwt to 38.0 million, still the highest on record. On the use side, 2021/22 exports were raised 1.0 million cwt to 91.0 million, while the domestic and residual use forecast was lowered 2.0 million cwt to 151.0 million. These supply and use revisions resulted in a 4.0-million cwt reduction in the 2021/22 ending stocks forecast to 37.3 million cwt.

For 2020/21, imports were lowered 1.0 million cwt to 33.7 million and exports were raised 1.0 million cwt to 94.0 million. These 2020/21 supply and use revisions resulted in a 2.0-million cwt reduction in the ending stocks forecast to 43.9 million cwt. For both 2020/21 and 2021/22, the long-grain season-average farm price (SAFP) forecast was raised 10 cents per cwt, which increased the all-rice SAFP 10 cents for both years.

In the 2021/22 global rice market, total production was increased 1.4 million tons to a record 507.5 million (milled basis). Crop projections were raised this month for Bangladesh, Brazil, Indonesia, Sri Lanka, Taiwan, and Vietnam, while they lowered for Cuba, Kazakhstan, Russia, and the United States. Global rice consumption and residual use in 2021/22 was increased 0.3 million tons to a record 514.3 million tons, largely due to larger forecasts for Bangladesh, Iraq, Sri Lanka, and Taiwan that offset reduced consumption and residual use forecasts for Brazil, China, Cuba, EU, and the United States. The 2021/22 global ending stocks forecast was lowered 3.2 million tons this month to 170.1 million tons, the second consecutive year of a decline in global ending stocks.

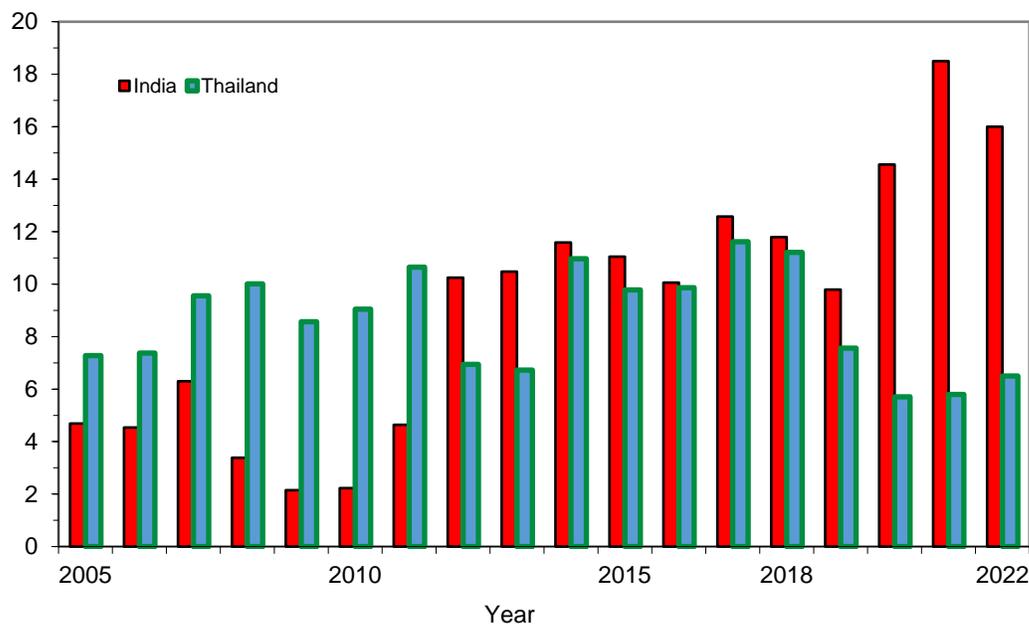
The 2022 calendar year global rice trade forecast was raised 0.65 million tons to 47.7 million tons (milled basis), with China, India, Taiwan, the United States, and Vietnam accounting for most of the upward revision in 2022 exports. China and Iraq account for most of the 2022

upward revision in imports. For 2021, global trade was increased 0.4 million tons to a near-record 48.3 million tons, with India accounting for the bulk of the larger export forecast. Price quotes from Thailand, Vietnam, and Pakistan declined over the past month and are now close to India's quotes. Since late 2018, India had typically been the most price competitive Asian source for rice. Thailand's prices continued to decline over the past month, dropping another 10-11 percent, partly due to the steady weakening of its currency. U.S. long-grain milled prices dropped also over the past month and are close to prices for South American rice of similar grade. Prices for California medium-grain milled rice were unchanged over the past month.

Figure 1

India's 2021 rice exports projected to be a record 18.5 million tons; Thailand's exports projected to increase in 2022

Million tons



Notes: Rice exports are reported on a milled basis. 2021 and 2022 are forecasts.
 Source: USDA, Foreign Agricultural Service, *Production, Supply, and Distribution* database.

Domestic Outlook

U.S. 2021/22 Rice Crop Yield Forecast Lowered 1 Percent

The 2021/22 U.S. rice production forecast was reduced 1 percent to 197.4 million cwt, 13 percent smaller than a year earlier. This month's slight crop reduction was due to a lower yield forecast. At 7,544 pounds per acre, the 2021/22 all-rice yield is 76 pounds below the previous forecast and 1 percent smaller than a year earlier. The revised yield is based on a survey of rice producers conducted in late July and early August by the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS). The results were reported in the August 12 NASS *Crop Production* report and included all-rice yields and production by State. Survey-based yields by class for the U.S. and by State will be reported in the January 2022 *Crop Production 2021 Summary*.

Yields are projected to be below a year earlier in four States, with Texas reporting the largest yield reduction. At 7,000 pounds per acre, the Texas 2021/22 rice yield is 14 percent below a year earlier and the smallest since 2015/16 when the State was in severe drought. Like much of the South this year, the Texas rice growing region has experienced frequent rainfall all spring and summer that has hampered field operations and delayed harvesting. In nearby Louisiana, yields were forecast at 6,800 pounds per acre, down just 20 pounds from a year earlier, despite the frequent rain.

In the Delta, the Arkansas yield is forecast at 7,500 pounds per acre, unchanged from a year earlier and only slightly below the 2013/14 and 2014/15 record of 7,560 pounds despite delayed plantings due to excessive rain. Rainfall also delayed plantings in much of the Delta in 2020/21. Mississippi's 2021/22 rice yield is forecast at 7,350 pounds per acre, down almost 1 percent from a year earlier. In contrast, the Missouri yield is forecast at 7,700 pounds per acre, up 6 percent from a year earlier but still below the 2018/19 record of 7,770 pounds. Finally, the California 2021/22 yield is forecast at 8,700 pounds per acre, down 20 pounds from a year earlier and well below the 2015/16 record of 8,890 pounds.

The all-rice harvested area estimate remains forecast at 2.616 million acres, more than 12 percent below a year earlier. There were no revisions in harvested area by State this month. In the Delta, harvested area in Arkansas remains reported at 1.22 million acres, almost 16 percent below a year earlier. Mississippi's 2021/22 rice harvested area remains reported at 109,000 acres, 34 percent below a year earlier and the smallest since 1973/74. Long-grain accounts for all of Mississippi's rice production. In Missouri, 2021/22 harvested area remains reported at 233,000 acres, up 19,000 from a year earlier. On the Gulf Coast, Louisiana's harvested area remains reported at 454,000 acres, 4 percent below a year earlier. In Texas, 2021/22 harvested area remains reported at 189,000 acres, up 10,000 from a year earlier. Long-grain accounts for the bulk of the rice produced in both Missouri and Texas. Finally, in California, rice harvested area was reported at just 415,000 acres, 19 percent below a year earlier and the smallest since 1992/93. The sharp decline in California area this year is the result of severe drought and abnormally low reservoir levels in northern California.

By class, U.S. 2021/22 long-grain production is forecast at 150.0 million cwt, 1.5 percent below the previous forecast and 12 percent smaller than a year earlier. Much of the long-grain production decline in 2021/22 is the result of a substantial number of Delta growers shifting to soybeans and corn due to higher expected returns. Combined medium- and short-grain production is forecast at 47.3 million cwt, up 0.7 percent from the previous forecast but nearly

17 percent below a year earlier. Most of the decline in medium- and short-grain production in 2021/22 is the result of severe drought in California that curtailed rice plantings this spring. Almost 70 percent of U.S. medium- and short-grain rice is produced in California.

By State, the Arkansas 2021/22 rice crop is projected at 91.2 million cwt, down almost 16 percent from a year earlier, a result of smaller area. Missouri's crop is forecast 17.9 million cwt, up almost 16 percent from a year earlier, a result of a higher yield and expanded area. In Mississippi, 2021/22 production is forecast at 8.0 million cwt, down almost 35 percent from a year earlier and the smallest since 1983/84. The sharp decline in Mississippi's production in 2021/22 is mostly due to much lower area, as many rice growers shifted acreage to soybeans and corn. On the Gulf Coast, the Louisiana crop is forecast at 30.9 million cwt, down more than 4 percent from a year earlier, primarily mostly due to smaller area. In Texas, production is forecast at 13.2 million cwt, more than 9 percent below a year earlier, despite a substantially higher yield. Finally, California's production is forecast at 36.1 million cwt, more than 19 percent below a year earlier, mostly due to the sharp drop in area caused by severe drought in the State. This is the smallest California rice crop since 1998/99.

Progress of the 2021/22 U.S. Southern Rice Crop Remains Behind Normal

Persistent rainfall across the South continues to delay crop progress, field operations, and harvest in much of the region. For the week ending August 8, 74 percent of the U.S. 2021/22 rice crop was reported headed, almost unchanged from a year earlier but behind the U.S. 5-year average of 80 percent. Crop progress varied by region and by State. In the Delta, the Arkansas 2021/22 rice crop was reported 67 percent headed by August 8, 2 percentage points behind a year earlier and behind the State's 5-year average of 81 percent. Similar to this year, in 2020/21, continuing rainfall nearly all spring and well into the summer delayed crop progress in the Delta, the largest U.S. rice growing region. In nearby Missouri, 60 percent of the 2021/22 rice crop was reported headed by August 8, ahead of the 51 percent reported a year earlier but behind the Missouri 5-year average of 69 percent. The Mississippi 2021/22 rice crop was reported 89 percent headed by August 8, ahead of the 82 percent reported a year earlier and slightly ahead of the Mississippi 5-year average of 88 percent.

Crop progress was more advanced on the Gulf Coast, as expected based on its latitude and climate. For the week ending August 8, 94 percent of the Louisiana 2021/22 rice crop was reported headed, 1 percentage point behind both a year earlier and the Louisiana 5-year average. In Texas, 90 percent of the 2021/22 rice crop was reported headed by August 8, behind both the 97 percent headed a year earlier and the Texas 5-year average of 98 percent. Like the Delta, much of the Gulf Coast has experienced persistent rainfall this spring and summer that has delayed the timing of some field application. In California, 70 percent of the 2021/22 rice crop was reported headed by August 8, 8 percentage points ahead of both a year earlier and the California 5-year average. This year's much smaller California rice acreage enabled an earlier completion of planting.

Harvest began around mid-July on the Gulf Coast. For the week ending August 8, 33 percent of the Louisiana main-season rice crop was reported harvested, well behind 47 percent a year earlier and behind the State 5-year average of 42 percent. In Texas, 25 percent of the 2021/22 main-season rice crop was reported harvested by August 8, behind both 31 percent a year earlier and State 5-year average of 33 percent. For both States, persistent rainfall has hindered harvesting the 2021/22 rice crop. Some growers in both Texas and along the Louisiana Gulf Coast also harvest a partial second crop—called a ratoon crop—from the stubble remaining in

the field after the main-crop harvest. A delayed main-crop harvest or above-normal rainfall during the main-crop harvest that ruts-up the fields, hinders or discourages harvesting a ratoon crop. Growers farther north are typically unable to harvest a ratoon crop due to their shorter growing season. Harvest has not yet begun on the Delta or California, as is typical for early August.

U.S. 2021/22 Total Supply Forecast Lowered 5.0 Million Cwt

Total U.S. rice supplies in 2021/22 are projected at 279.3 million cwt, down 5.0 million cwt from the previous forecast and almost 4 percent below a year earlier. The downward revision is the result of reduced forecasts for carryin, imports, and production this month. The year-to-year decline is the result of a much smaller crop more than offsetting a big boost in carryin and record imports. At 211.8 million cwt, U.S. 2021/22 long-grain supplies are 2 percent below the previous forecast and 1 percent smaller than a year earlier. Combined medium- and short-grain supplies are projected at 66.5 million cwt, 1 percent below the previous forecast and more than 10 percent below a year earlier and the smallest since 2008/09.

The 2021/22 U.S. carryin was lowered 2.0 million cwt to 43.9 million cwt, 53 percent above the year-earlier abnormally low level. This month's downward revision was due to a larger 2020/21 export forecast and smaller 2020/21 import forecast. The 2021/2 long-grain carryin was lowered 1.0 million cwt to 31.8 million cwt, 88 percent larger than in 2020/21. The 2021/22 medium- and short-grain carryin was lowered 1.0 million cwt to 11.1 million cwt, 4 percent larger than a year earlier.

The all-rice 2021/22 U.S. rice import forecast was lowered 1.0 million cwt to 38.0 million, still 13 percent larger than a year earlier and the highest on record. U.S. long-grain imports were lowered 1.0 million cwt to 30.0 million, still up 11 percent from a year earlier and the highest on record. This month's downward revision was based on a slower pace of imported Asian aromatic varieties since the start of the 2020/21 market year which followed a record pace of aromatic imports in the spring and summer of 2020 that was partly a response to the COVID-19 national lockdown. The global container shortage and extremely high freight rates are likely additional factors causing the recent slower pace of U.S. rice imports. Asian aromatics account for the bulk of U.S. long-grain rice imports, with Thailand the largest supplier, followed by India and then Pakistan, with Vietnam now shipping a much smaller quantity as well.

Medium- and short-grain imports remain projected at a record 8.0 million cwt in 2021/22, 19 percent larger than a year earlier. Puerto Rico is expected to again import at least three shipments of 21,000 tons of medium- and short-grain rice, with a fourth shipment possible, depending on the timing of the first three shipments. China has supplied all but one of these shipments since May 2018 when Puerto Rico shifted from buying mostly U.S. rice due to much lower prices for rice delivered from China. However, in May 2021, India supplied a 21,000-ton shipment to Puerto Rico. China, India, and Thailand are the top suppliers of medium and short-grain rice to the United States, including the Puerto Rican market. Together, these three Asian suppliers account for 90 percent or more of U.S. medium- and short-grain imports. Italy, Japan, Spain, and Argentina supply most of the remaining U.S. medium- and short-grain imports, typically shipping small amounts each month.

U.S. 2021/22 Export Forecast Raised; Domestic and Residual Use Forecast Lowered

Total use of all rice in 2021/22 is projected at 242.0 million cwt, down 1.0 million cwt from the previous forecast and almost 2 percent smaller than a year earlier, with both exports and the combined domestic and residual use expected smaller than a year earlier. This month, a reduced domestic and residual use forecast more than offset a larger export forecast. Long-grain total use is projected at 183.0 million cwt, unchanged from the previous forecast and a year earlier. Combined medium- and short-grain total use is forecast at 59.0 million cwt, down 1.0 million from the previous forecast and 6 percent below 2020/21.

U.S. exports of all rice in 2021/22 are projected at 91.0 million cwt, up 1.0 million cwt from the previous forecast but still down more than 3 percent from the year-earlier revised forecast. This month, an upward revision in the long-grain export forecast more than offset a reduction in the medium- and short-grain export forecast. The year-to-year decline in U.S. exports is based on smaller U.S. supplies and less-competitive U.S. prices. Long-grain exports in 2021/22 are projected at 65.0 million cwt, a second consecutive month of a 2.0-million cwt upward revision. The upward revision was largely based on the late-July sales of 120,000 tons of long-grain milled rice to Iraq, with the actual shipments expected in 2021/22. The U.S. sold no rice to Iraq in 2020/21. U.S. long-grain exports are now forecast unchanged from the year earlier estimate. The United States is expected to face stronger competition from the South American suppliers in key Latin American markets in 2021/22, largely offsetting the impact of the recent large sales to Iraq. Most South American exporters are expected to harvest larger crops next spring compared with their 2020/21 crops, which in several countries were adversely impacted by drought.

Combined medium- and short-grain exports in 2021/22 are projected at 26.0 million cwt, down 1.0 million cwt from the previous forecast and 3.0 million cwt below the revised 2020/21 forecast. This month's downward revision in the medium- and short-grain export forecast was based on the sharp decline in California production and the resulting tighter supplies. California provides the bulk of U.S. medium- and short-grain exports. The year-to-year decline is based on expectations of few sales outside the core U.S. markets in Northeast Asia—where the bulk of U.S. medium- and short-grain exports are shipped—of Japan, South Korea, and Taiwan. U.S. medium- and short-grain sales to the Middle East are expected to be lower than in 2020/21 and the U.S. is not expected to sell any rice to North Africa. The tighter U.S. supplies of medium- and short-grain rice are expected to reduce exportable sales and boost U.S. trading prices. In addition, by late spring in 2022, Australia is expected to be in position to increase its exports due to a projected strong area expansion in 2021/22, partly a response to higher expected global trading prices for medium grain rice. Australia is expected to increase its market share in Northeast Asia and Oceania.

By type, U.S. rough-rice exports in 2021/22 remain projected at 35.0 million cwt, unchanged from the year-earlier revised level. Venezuela is again expected to be a major buyer of U.S. rough-rice exports, taking almost 300,000 tons in 2020/21, all long-grain. Almost all U.S. rough-rice exports are currently shipped to Latin America. Milled-rice exports (milled-and brown-rice exports on a rough-rice basis) are projected at 56.0 million cwt, up 1.0 million cwt from the previous forecast but down 3.0 million cwt from a year earlier and the lowest since 1973/74. The upward revision is largely based on the large July sales to Iraq. The United States is expected to make few sales of milled rice beyond Northeast Asia, Haiti, Canada, Iraq, and Saudi Arabia. In addition, Mexico, although primarily a rough-rice market, regularly imports much smaller

quantities of U.S. milled rice. U.S. milled-rice exports are limited by cheaper rice from Asia, as well as by growing competition from several South American exporters.

Total domestic and residual use in 2021/22 is projected at 151.0 million cwt, down 2.0 million from the previous forecast and the second consecutive month of a downward revision. Domestic and residual use is forecast 1.0 million cwt below the year-earlier record. The downward revision is based on the reduced crop and lower import forecasts. Long-grain domestic and residual use is projected at 118.0 million cwt, down 2.0 million cwt from the revised previous forecast but unchanged from the year earlier record. Combined medium- and short-grain domestic and residual use remains projected at 33.0 million cwt, 3 percent below a year earlier.

The above supply and use projections result in a 2021/22 ending stocks forecast of 37.3 million cwt, down 4.0 million cwt from the previous forecast and 15 percent less than the year-earlier revised forecast. The all-rice stocks-to-use ratio is projected at 15.4 percent, down from a revised 17.9 percent a year earlier. Long-grain ending stocks are projected at 28.8 million cwt, down 4.3 million from the previous forecast and 9 percent below the year-earlier revised forecast. The long-grain stocks-to-use ratio is projected at 15.7 percent, down from a revised 17.4 percent a year earlier. Combined medium- and short-grain ending stocks are projected at 7.5 million cwt, up 0.3 million from the previous forecast but 33 percent smaller than a year earlier. The 2021/22 medium- and short-grain stocks-to-use ratio is projected at 12.6 percent, down from 17.7 percent a year earlier.

U.S. 2020/21 Export Forecast Again Raised, Imports Lowered

The only supply-side revision to the 2020/21 U.S. rice balance sheet this month was a 1.0-million cwt reduction in the import forecast to 33.7 million cwt, nearly 10 percent smaller than a year earlier. Long-grain accounts for all of this month's downward revision in 2020/21 imports. At 27.0 million cwt, long-grain imports are down 1.0 million cwt from the previous forecast and 9 percent below a year earlier. The downward revision was based on a slower-than-expected pace of imports of Asian aromatic rice—mostly of jasmine rice from Thailand—in the second half of the market year.

In June, the U.S. imported 54,208 tons (product-weight) of long-grain rice, down 25 percent from a month year earlier and the smallest since February 2020, just prior to the COVID-19 lockdown. Thailand supplied 32,000 tons of long-grain rice (almost all aromatic) to the United States in June, down 37 percent from May and the smallest since September 2018. The severe container shortage in Asia and current historic high freight cost are factors behind the substantial reduction in shipments to the United States in June. India's long-grain shipments of 11,652 tons (nearly all basmati) in June are virtually unchanged from April and May. Long-grain imports from Pakistan, almost all basmati, have remained around 2.0 million tons per month since January.

Medium- and short-grain imports remain forecast at 6.7 million cwt, down 12 percent from a year earlier. The forecast assumes the arrival of a 21,000-ton shipment to Puerto Rico from China in July, which would be the third such shipment to arrive in Puerto Rico in 2020/21, down from four shipments in 2019/20. In June, China's export data reported a 21,000-ton shipment loaded for Puerto Rico. U.S. (including Puerto Rico) imports of medium- and short-grain rice totaled 8,788 tons in June, the lowest in 2 years, with Thailand's shipments down substantially from a month earlier.

On the demand side, total exports were raised 1.0 million cwt to 94.0 million, the second consecutive month of a 1.0-million cwt upward revision. Total exports are nearly unchanged

from a year earlier. Combined medium- and short-grain exports in 2020/21 are projected at 29.0 million cwt, up 1.0 million cwt from the previous forecast but down 1.5 percent from a year earlier. The upward revision was based on a stronger-than-expected pace of shipments in June reported by the U.S. Bureau of Census and larger-than-expected shipments in July reported by the weekly *U.S. Export Sales*. The year-to-year decline is due to weaker shipments to North Africa and the Middle East that are now supplied by China. U.S. 2020/21 long-grain exports remain forecast at 65.0 million cwt, virtually unchanged from a year earlier. The domestic and residual use forecasts for all rice and by class were not revised this month.

The above revisions resulted in a 2.0-million cwt decrease in the 2020/21 total ending stocks forecast at 43.9 million cwt, still 53 percent larger than the year-earlier abnormally low level. The 2020/21 stocks-to-use ratio is projected at 17.9 percent, well above the abnormally low 12.0 percent achieved in 2019/20. For long-grain rice, the 2020/21 ending stock forecast was lowered 1.0 million cwt to 31.8 million, 88 percent above the year-earlier abnormally low level. The long-grain stocks-to-use ratio is projected at 17.4 percent, well above just 9.9 percent a year earlier. The medium- and short-grain ending stocks forecast was lowered 1.0 million cwt to 11.1 million, 4 percent above a year earlier. The 2020/21 medium- and short-grain stock-to-use ratio is forecast at 17.7 percent, up from 15.9 percent a year earlier and the highest since 2015/16.

For 2021/22, the SAFP forecast was raised for long-grain rice but unchanged for medium- and short-grain in either the South or California. The 2021/22 long-grain SAFP was raised 10 cents per cwt to \$12.90 per cwt, mostly a response to the tighter projected supplies, and is up 30 cents from the revised 2020/21 long-grain SAFP.

The California medium- and short-grain 2021/22 SAFP remains forecast at \$22.00 per cwt, up \$2.30 from 2020/21 and the highest since the 2008/09 record of \$27.40 per cwt. The southern medium- and short-grain SAFP remains forecast at \$13.50 per cwt, up 50 cents from 2020/21 and the highest since 2014/15. With a substantial decline in the California crop likely in 2021/22 due to the acreage decline, some users of medium- and short-grain rice are expected to switch from California rice to southern medium- and short-grain rice. The U.S. 2021/22 medium- and short-grain SAFP remains forecast at \$19.30 per cwt, \$1.70 higher than a year earlier. The 2021/22 U.S. all-rice SAFP was increased 10 cents per cwt to \$14.50 per cwt, up 60 cents from the year-earlier revised U.S. SAFP.

For 2020/21, the long-grain SAFP was raised 10 cents per cwt to \$12.60, up 60 cents from a year earlier. The upward revision was based on NASS-reported monthly cash prices and marketings through June and expectations regarding prices and marketings in July. There were no revisions to the 2020/21 medium- and short-grain SAFPs this month. The 2020/21 all-rice SAFP was raised 10 cents per cwt to \$13.90 due to the higher long-grain price and is 60 cents higher than a year earlier.

International Outlook

Production Forecasts for 2021/22 Raised for Bangladesh, Sri Lanka, and Taiwan, but Lowered for Cuba

Global rice production in 2021/22 is forecast at a record 507.5 million tons (milled basis), up 1.4 million tons from the previous forecast and more than 1.6 million tons larger than the year-earlier crop. Production forecasts were raised this month for Bangladesh, Brazil, Indonesia, Sri Lanka, Taiwan, and Vietnam, but lowered for Cuba, Kazakhstan, Russia, and the United States. On an annual basis, Argentina, Australia, Bangladesh, Burma, Cambodia, China, Cote d'Ivoire, Guinea, Guyana, Laos, Mali, Mexico, Nicaragua, Niger, Nigeria, South Korea, Paraguay, Peru, Thailand, Uganda, and Uruguay account for the bulk of the projected production increase in 2021/22, with China and Thailand showing the largest year-to-year production increases.

In contrast, crops are projected to be smaller than a year earlier in Colombia, Ecuador, Egypt, EU, India, Iraq, Kazakhstan, Madagascar, the Philippines, Russia, the United States, and Vietnam. India and the United States are projected to show the largest production declines in 2021/22, although India's production would still be the second-highest on record.

Global rice consumption and residual use in 2021/22 is projected to be a record 514.3 million tons, up 0.3 million tons from the previous forecast and 7.6 million tons larger than a year earlier. This month, USDA raised its 2021/22 consumption and residual use forecasts for Bangladesh, Burma, Iraq, Sri Lanka, and Taiwan, but lowered its forecasts for Brazil, China, Cuba, EU, and the United States. On an annual basis, China accounts for the bulk of the projected increase in global rice consumption and residual use in 2021/22, with total domestic and residual use expected to increase 5.4 million tons to a record 155.7 million tons. Industrial and feed uses account for nearly all of China's projected increase in consumption and residual use in 2021/22.

Bangladesh, Burma, Cambodia, Colombia, Ethiopia, Ghana, Guinea, India, Nepal, Nigeria, Pakistan, the Philippines, Sri Lanka, Tanzania, Thailand, and Vietnam are also projected to increase consumption and residual use in 2021/22. In contrast, consumption and residual use is projected to decline in 2021/22 in Japan and South Korea, with the decline in both countries a result of long-term diet diversification along with negligible population growth or a slow population decline.

In 2021/22, global ending stocks are forecast at 170.1 million tons, down 3.2 million from the previous forecast and down 6.8 million tons from a year earlier, the second consecutive year of declining global ending stocks. India's 2021/22 rice ending stocks were lowered 0.5 million tons to 22.9 million due to an upward revision in market-year exports to a record 19.0 million tons. China's 2021/22 ending stocks forecast was raised 1.6 million tons to 111.0 million, a result of larger imports. U.S. ending stocks were lowered 0.13 million tons to 1.2 million. China and India account for the bulk of the projected decline in global ending stocks in 2021/22, with China's stocks expected to drop 5.5 million tons to 111.0 million tons and India's to drop 3.0 million tons to 22.9 million tons. The 2021/22 global stocks-to-use ratio is projected at 33.1 percent, down from 34.9 percent in 2020/21.

Table A - Global rice production, selected monthly revisions and year-to-year changes, August 2021						
Country or region	Current forecast	Change from last month's forecast	Percent change from a year earlier	Month-to-month direction	Year-to-year direction	Explanation and comments on year-to-year change or month-to-month revision
1,000 metric tons (milled basis)						
Rice production in 2021/22						
Bangladesh	36,250	920	4.8	↑	↑	Rice production forecast was revised up to a record-high based on a slightly larger area estimate and a record yield. At 11.675 million hectares, Bangladesh's rice-harvested area is up 25,000 hectares from the previous forecast and 1.5 percent above 2020/21 rice area that was reduced by severe late-summer flooding. Despite this month's upward revision, Bangladesh's rice-harvested area remains below the 2019/20 record of 11.83 million tons. The 2021/22 forecast average yield of 4.66 tons per hectare is the highest on record. Weather for both the summer-harvested aus crop and the fall-harvested aman crop has been quite favorable, with area and yield projected higher than a year earlier for both crops. Much of this analysis was based on data provided by the U.S. Agricultural Office in Dhaka.
Brazil	8,024	68	0.3	↑	↑	Production forecast was raised this month based on a revised yield. At 6.94 tons per hectare, the 2021/22 average yield is fractionally below the year-earlier revised record of 7.0 tons. The upward revision for the 2021/22 yield was based on long-term trend analysis, while the 2020/21 upward yield revision was based on near-year-end data from the Government of Brazil released in July. Harvested area for 2021/22 remains forecast at 1.7 million hectares, up 1.1 percent from the year-earlier revised estimate. Almost 80 percent of Brazil's rice crop is now produced in the South, mostly in Rio Grande do Sul, where all of the rice is irrigated.
Cuba	210	-50	0.0	↓	→	The crop forecast was reduced based on both a smaller harvested area estimate and a lower yield forecast. At 90,000 hectares, Cuba's harvested area is 20,000 hectares below the previous forecast but is unchanged from the year-earlier revised estimate. This is the lowest rice area in Cuba since 1968/69. Both area and yield were lowered this month based on lack of input availability, a fuel shortage, and the current political turmoil. Although Cuba was previously facing drought, rainfall improved in late June and July, somewhat improving crop conditions in much of the country. Production in 2021/22 is forecast to be the lowest since 1993/94, shortly after the breakup of the Soviet Union that ended many input subsidies for Cuba.
Indonesia	35,350	50	0.1	↑	↑	The slight increase in the production forecast is based on a higher yield. At 4.72 tons per hectare, the yield is fractionally above a year earlier. Harvested area remains estimated at 11.8 million hectares, unchanged from a year earlier. Much of this analysis was based on data and information provided by the U.S. Agricultural Office in Jakarta.
Kazakhstan	320	-37	-11.6	↓	↓	The production forecast was lowered, primarily based on a smaller harvested area estimate reported by the Government of Kazakhstan. At 90,000 hectares, harvested area is 10,000 hectares below the previous forecast, 12 percent smaller than a year earlier and the lowest since 2013/14.
Russia	700	-15	-5.7	↓	↓	Lowered the crop forecast based on an updated planted-area estimate reported by the Government of Russia. At 185,000 hectares, rice harvested area is 5,000 hectares below the previous forecast and nearly 6 percent smaller than a year earlier. The average yield of 5.82 tons per hectare is fractionally below the year-earlier record.
Sri Lanka	3,468	258	0.5	↑	↑	The production forecast was raised to a record-high, largely based on the recently released Government of Sri Lanka's preliminary estimate of the yala crop harvest of a record 2.1 million tons, up 7 percent from a year earlier. The yala crop harvest began this month and will end in October. The larger maha crop will be planted this fall and harvested February-April. At a record 1.1 million hectares, Sri Lanka's total rice harvested area is up 0.1 million hectares from the previous forecast and nearly 1 percent larger than a year earlier.
Taiwan	1,225	75	-0.1	↑	↓	The production forecast was raised based on a larger harvested area estimate and a stronger yield. The area and yield revisions were largely based on revised historic area and production estimates reported by the Council of Agriculture on Taiwan for 2019/20 and 2022/21, which were substantially higher than previous estimates.
United States	6,266	-63	-13.3	↓	↓	The U.S. production forecast was lowered based on a reduced yield forecast reported by the U.S. Department of Agriculture's National Agricultural Statistics Service. The yield of 8.46 tons per acre is down 1 percent from both the previous forecast and a year earlier. This is the first survey-based yield forecast for the 2021/22 U.S. rice crop. In the South, yields are likely impacted by above-normal rainfall nearly all spring and into summer that delayed plantings and has hindered field operations. Total harvested area remains forecast at 1.06 million hectares, down 12.4 percent from a year earlier. Severe drought led to a substantial decline in California's rice plantings this year, while the South saw some shift in area to soybeans and corn based on higher expected returns. Harvest began last month on the Gulf Coast. Harvest in the Delta is expected to begin later this month in the southern areas of the Delta rice growing region.
Vietnam	27,100	200	-1.2	↑	↓	Vietnam's production forecast was raised based on a larger harvested area estimate reported by the U.S. Agricultural Office in Ho Chi Minh City. At 7.35 million hectares, rice harvested area is up 50,000 hectares from the previous forecast but still fractionally below a year earlier. Despite this month's upward revision, this is the smallest harvested rice area in Vietnam since 2008/09 and the fifth consecutive year of decline. Much of this long-term decline is due to salt water intrusion along the Mekong River Delta, as well as to reduced water-flow from the Mekong River, largely a result of upstream dams.

Continued--

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

Table A - Global rice production, selected monthly revisions and year-to-year changes, August 2021--continued						
Country or region	Current forecast	Change from last month's forecast	Percent change from a year earlier	Month-to-month direction	Year-to-year direction	Explanation and comments on year-to-year change or month-to-month revision
1,000 metric tons (milled basis)						
Rice production in 2020/21						
Brazil	8,001	95	5.2	↑	↑	Raised the production estimate based on a higher yield reported by the Government of Brazil in July. At a record 7.00 tons per hectares, the 2020/21 yield is up more than 1 percent from the previous forecast and 4 percent larger than a year earlier. The record yield is larger due to the adoption of management practices recommended by the research and extension services such as early soil preparation, use of certified seeds, sowing at the optimal time, early management of weeds, crop rotation (mainly with soybeans), implementation of winter coverings in integrated agricultural production systems, and planting of high-yield varieties.
Chile	98	-13	-10.1	↓	↓	Lowered the crop estimate based on a smaller harvested area reported by the Ministry of Agriculture. The 2020/21 harvested area estimate was lowered 3,000 hectares to 23,000, nearly 12 percent below a year earlier and smallest since 2016/17.
Cuba	210	-30	-15.0	↓	↓	Crop estimate was lowered primarily based on information and data from the United Nation's Food and Agriculture Organization indicating a smaller crop. The reduced crop is largely the result of drought across much of Cuba and input shortages, including fuel.
Dominican Republic	623	-7	3.5	↓	↑	A slight reduction in the crop estimate was based on the recent release by the Ministry of Agriculture of harvested area data for July 2020 through June 2021, which completes the 2020/21 market year.
Indonesia	35,300	100	1.7	↑	↑	Raised the production estimate slightly based on a higher yield attributed to favorable late-season weather. Much of the data and analysis was provided by the U.S. Agricultural Office in Jakarta.
Philippines	12,460	60	4.5	↑	↑	The production estimate was raised to a record-high based on data from the Philippines Statistical Agency reporting April-June 2021 rough-rice production at a record 4.24 million tons, up nearly 3 percent from a year earlier, a result of a record yield. Much of the Philippines received a favorable distribution of rainfall during April-June 2020/21, the final quarter in the 2020/21 market year. The 2020/21 average yield for the Philippines was the highest on record.
Taiwan	1,226	326	-2.2	↑	↓	Raised the crop estimate based on data reported by Taiwan's Council of Agriculture showing substantially higher area and production than previously reported.
Vietnam	27,438	338	1.2	↑	↑	The production estimate was increased based on larger total harvested area--with the winter-spring crop accounting for all of the upward revision in harvested area--and a higher yield. Yields were revised up this month for all three crops--winter-spring, summer-autumn, and winter (or 10th month)--with the average yield for Vietnam at 5.9 tons per hectare, the highest on record. On an annual basis, the winter-spring crop accounted for all of the area decline. Despite this month's upward revision, Vietnam's rice production remains well below the 2014/15 record of 28.2 million tons, a result of declining area.

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

Table B - Selected rice importers at a glance (1,000 metric tons), August 2021.						
Country or region	Current forecast	Change from last month's forecast	Percent change from a year earlier	Month-to-month direction	Year-to-year direction	Explanation of year-to-year change in forecast or month-to-month change in forecast
Rice importers, 2022						
Brazil	650	-50	-11.0	↓	↓	Import forecast was lowered based on larger production and rising stocks.
Chile	160	10	-8.6	↑	↓	Import forecast was raised based on stronger imports in 2021 and a weaker 2020/21 rice crop harvested this spring.
China	3,600	600	-7.7	↑	↓	Import forecast raised based on a much faster-than-expected pace of purchases to date, especially from Burma.
European Union	2,000	-100	8.1	↓	↑	Lowered the import forecast based on only moderate expected growth in 2022.
Iraq	1,200	50	4.3	↑	↑	Import forecast was raised based on stronger consumption.
Russia	210	10	5.0	↑	↑	Import forecast was raised based on a smaller crop forecast.
Taiwan	100	-10	-13.0	↓	↓	Import forecast was lowered based on a larger crop.
United States	1,225	-25	6.5	↓	↑	Reduced import forecast slightly based on a slowdown in imports of aromatic rice from Asia, the dominant type of rice imported by the United States.
Table B - Selected rice importers at a glance (1,000 metric tons), August 2021-- Continued.						
Country or region	Current forecast	Change from last month's forecast	Percent change from a year earlier	Month-to-month direction	Year-to-year direction	Explanation of year-to-year change in forecast or month-to-month change in forecast
Rice importers, 2021						
Bangladesh	1,800	100	8900.0	↑	↑	Import forecast was raised based on continued Government tender for 50,000 tons each and the recent further reduction in the rice import tariff to 15 percent from 25 percent. The tariff was reduced to 25 percent in late 2020 from 62.5 percent.
Cambodia	20	10	100.0	↑	↑	Raised import forecast based on a stronger pace of shipments to date from Vietnam.
Chile	175	10	-11.6	↑	↓	Increased import forecast based on the current pace of deliveries and a smaller crop.
China	3,900	100	21.9	↑	↑	Import forecast was increased based on a stronger-than-expected pace of purchases to date, with Pakistan, Vietnam, Burma, and India the largest suppliers.
Cuba	450	-50	-10.2	↓	↓	Despite a smaller crop, the import forecast was lowered based on the shipment pace to date.
European Union	1,850	-100	-7.2	↓	↓	Reduced the import forecast based on weaker imports from Burma earlier in the year, caused by disruptions following the February 1 military coup in Burma
Indonesia	600	-100	9.1	↓	↑	Import forecast was lowered based on a larger crop.
Iran	1,150	-50	2.2	↓	↑	Import forecast was reduced based on smaller monthly imports from India and Pakistan.
Iraq	1,150	150	18.6	↑	↑	Raised the import forecast based on recent large monthly deliveries, the late-July purchase of 120,000 tons from the United States, and the early-August purchase of 40,000 tons from Thailand.
Peru	280	-20	-9.7	↓	↓	Reduced the import forecast based on weaker demand for rice from Uruguay, Peru's number-one supplier.
United States	1,150	-25	-5.0	↓	↓	Import forecast lowered based on a weaker-than-expected pace of shipments through June, with June imports of 63,000 tons the smallest since February 2020.
Uzbekistan	40	20	100.0	↑	↑	Import pace-to-date is stronger than expected.
Vietnam	1,200	500	200.0	↑	↑	Raised the 2021 import forecast to a record 1.2 million tons due to record imports from India of 670,000 tons through June. Vietnam typically purchases less than 5,000 tons of rice annually from India but bought nearly 50,000 tons in 2020, taking both broken kernel rice and regular milled rice. High internal prices and lower prices for imported rice from India spurred the large purchases. However, Vietnam's prices have now dropped to about India's level, making large purchases from India unlikely in 2022. Cambodia is expected to continue supplying unmilled rice to Vietnam, typically shipping around 300,000 tons (milled basis) annually.

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

Table C - Selected rice exporters at a glance (1,000 metric tons), August 2021.						
Country or region	Current forecast	Change from last month's forecast	Percent change from a year earlier	Month-to-month direction	Year-to-year direction	Explanation of year-to-year change in forecast or month-to-month change in forecast
Rice exporters, 2022						
Burma	2,000	-100	8.1	↓	↑	Export forecast was lowered based on reduced expectations regarding exports to the EU, which were hindered in 2021 by disruptions in Burma stemming from the February 1 military coup.
China	2,400	100	4.3	↑	↑	Raised the export forecast based on expectation that the recent strong pace of shipments will continue in 2022, with shipments to West Africa especially strong so far in 2021.
Ecuador	10	-10	100.0	↓	↑	Export forecast was lowered based on expectations of virtually no demand from Colombia.
India	16,000	500	-13.5	↑	↓	Increased the export forecast based on expectations of continued strong sales to China in 2022.
Kazakhstan	80	-10	-11.1	↓	↓	Reduced the export forecast based on a smaller crop.
Peru	65	-15	30.0	↓	↑	Export forecast was lowered based on the expectation of continuing near-absence of sales to Colombia.
Taiwan	150	60	-25.0	↑	↓	Export forecast was increased based on a larger crop and the expectation that the stronger-than-expected pace of shipments reported in the first 5 months of 2021 will continue in 2022.
United States	2,875	25	-2.5	↑	↓	The 2022 export forecast was raised based on the large late-July sales of 120,000 tons to Iraq.
Vietnam	6,400	100	1.6	↑	↑	Export forecast was raised based on a larger crop.
Table C - Selected rice exporters at a glance (1,000 metric tons), August 2021--Continued.						
Country or region	Current forecast	Change from last month's forecast	Percent change from a year earlier	Month-to-month direction	Year-to-year direction	Explanation of year-to-year change in forecast or month-to-month change in forecast
Rice exporters, 2021						
Australia	100	-30	138.1	↓	↑	Export forecast was reduced based on a slower-than-expected monthly pace of shipments to date, with Taiwan continuing to supply many of Australia's traditional markets.
Brazil	800	-75	-35.5	↓	↓	Reduced the export forecast based on a substantial loss of market share in Venezuela, a strong destination for U.S. rice since late 2020.
Burma	1,850	-50	-19.6	↓	↓	Export forecast was lowered based on weaker sales to the EU due to disruptions caused by the February 1 military coup in Burma.
Ecuador	5	-15	-88.6	↓	↓	Reduced the export forecast based on virtually no purchases to date from top-buyer Colombia.
India	18,500	500	27.1	↑	↑	Export forecast was raised to a record high based largely on stronger-than-expected sales to Vietnam, with shipments to date to Vietnam at a record 670,000 tons.
Malaysia	40	10	33.3	↑	↑	Raised the export forecast based on a stronger-than-expected pace of shipments to date. These are the largest exports from Malaysia since 2016. Indonesia is the main buyer of rice from Malaysia.
Paraguay	600	20	-25.3	↑	↓	Raised the export forecast, based on a stronger-than-expected pace of shipments to date. Brazil and Chile are the top export markets for Paraguay.
Peru	50	-30	-33.3	↓	↓	Export forecast lowered based on the near-absence of purchases by Colombia.
Taiwan	200	110	-10.7	↑	↓	Raised the export forecast based on a larger crop and a stronger-than-expected shipment pace through May. China and Papua New Guinea are the largest export markets for Taiwan.
United States	2,950	25	3.2	↑	↑	Export forecast raised based on the late-July sale of 120,000 tons of rice to Iraq. This was the first significant U.S. sale to Iraq in nearly 2 years.
Uruguay	700	-80	-27.6	↓	↓	Reduced the export forecast based primarily on slower-than-expected sales to Peru and Brazil through June.

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

Export Forecasts for 2022 raised for India and Taiwan; India's 2021 Exports Forecast at a Record 18.5 Million Tons

Global rice trade in calendar year 2022 is projected at 47.7 million tons (milled basis), up 0.65 million tons from the previous forecast but 1.4 percent below the year-earlier revised near-record. Much of the expected year-to-year global trade decline is the result of much weaker imports of Indian rice by Bangladesh. On an annual basis, in 2022, exports are projected to increase from Australia, Brazil, Burma, Cambodia, EU, Pakistan, Paraguay, Thailand, and Uruguay, with Thailand's exports projected to increase the most, up 0.7 million tons to 6.5 million. In contrast, exports in 2022 are projected to decline for India and the United States, with India's exports expected to drop 2.5 million tons to 16.0 million tons for the trade year (TY), second only to the year-earlier revised record of 18.5 million tons, the largest amount of rice exported by any country.

For imports, Angola, Colombia, Costa Rica, Cote d'Ivoire, Egypt, Ethiopia, EU, Iran, Iraq, Kenya, North Korea, Madagascar, Mozambique, Nepal, Nigeria, Qatar, Senegal, and the United States account for most of the expected increase in 2022. These expected import increases are partially offset by projected import declines for Australia, Bangladesh, Brazil, China, South Korea, Saudi Arabia, South Africa, and Vietnam. Bangladesh's imports are projected to drop 1.3 million tons to 0.5 million, China's to decline 0.3 million tons to 3.6 million, and Vietnam's to decrease 0.7 million tons from the current record high to 0.5 million tons.

Over the past month, price quotes in Asia have nearly converged as quotes from Thailand, Pakistan, and Vietnam have declined to roughly match prices from India, previously the most competitive source in Asia. For Thailand, trading prices for most grades of regularly milled white rice (excluding aromatic rice) are down 10-11 percent from a month earlier, mostly due to a lack of new inquirers for sales because of the extremely high freight costs and a lack of containers, as well as the continued decline in the value of the Thai currency. Thailand's 100-percent Grade B long-grain milled rice for export was quoted at \$392 per ton for the week ending August 9, down \$42 from the week ending July 5 and the lowest since March 2019. Prices for Thailand's 5-percent broken parboiled rice—a specialty rice—were quoted at \$382 per ton for the week ending August 9, down \$47 from the week ending July 5. Prices for Thailand's jasmine rice—a premium aromatic—were quoted at \$605 per ton for the week ending August 9, down \$32 from the week ending July 5 and the lowest since April 2017.

Price quotes for Vietnam's rice for the autumn crop currently being harvested declined over the past month, mostly due to supply disruptions stemming from COVID-19 closures and restrictions, lack of new inquires due to the container shortage and extremely high freight costs, and increasing supplies entering the market from the autumn crop. For the week ending August 10, prices for Vietnam's 5-percent broken-kernel long-grain milled rice were quoted at \$380 per ton, down \$30 from the week ending July 13 and the lowest since February 2020. Pakistan's price quotes for 5 percent broken rice dropped \$35 per ton from the week ending July 13 to \$365 for the week ending August 10. India's 5-percent broken non-parboiled white rice was quoted at \$380 per ton (bulk) for the week ending August 10, down \$5 from the week ending July 13.

Uruguay's generic 5-percent broken-kernel long-grain milled rice was quoted at \$580 per ton for the week ending August 10, unchanged since late June and about \$20 per ton below the current U.S. price for a similar grade of rice. Prices for Brazil's generic 5-percent broken-kernel rice were quoted at \$530 per ton for the week ending August 10, down \$37 from the week ending June 29.

U.S. trading prices for long-grain milled rice declined 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, Iraq specifications) were quoted at \$600 per ton for the week ending August 10, down \$30 from the week ending June 29. U.S. prices for Latin American milled-rice markets—Haiti, Colombia, and Mexico—were quoted at \$550 per ton for the week of August 10, down \$5 from the week ending June 29.

In contrast, milled-rice prices in California were unchanged over the past month, largely a response to few sales prior to the harvest of the 2021/22 crop. Prices for California Number 1 Grade, 4-percent broken kernels for the week ending August 10 were quoted at \$1,100 per ton (free on board at a domestic mill, Mediterranean specifications), unchanged from the week ending June 29 and the highest since March 2014 when California was experiencing an earlier severe drought. For delivery to the Port of Oakland, California, medium-grain milled-rice (Korean specifications) prices were quoted at \$1,200 per ton for the week ending August 10, unchanged from the week ending June 29. For listings of trading prices by exporter and grade of rice, see table 9 in the Excel file.

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