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# **Rice Outlook**

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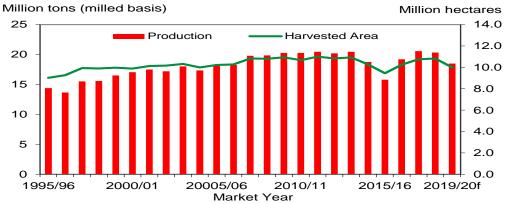
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Rice Outlook monthly tables, in excel format, can be found on the Rice Outlook report page on USDA's Economic Research Service website.

# U.S. 2019/20 Rice Production Estimate Lowered 3.3 Million Cwt to 184.7 Million Cwt

The U.S. 2019/20 total supply forecast was lowered 1 percent this month to 259.6 million cwt as a 2-percent reduction in the production estimate to 184.7 million cwt was more than offset a 2-percent increase in imports to a record 30.1 million cwt. On the 2019/20 use side, domestic and residual use was increased 2.0 million cwt to 133.0 million, and the export forecast was increased 0.5 million cwt to 98.0 million. On balance, these revisions reduced the 2019/20 ending stocks forecast by 5.3 million cwt to 28.6 million. The long-grain season-average price (SAFP) forecast was increased; the California SAFP was lowered. In the global rice market, Thailand's 2019/20 production forecast was lowered 10 percent to 18.5 million tons based on a sharply reduced drought-impacted dry-season crop. Calendar year 2020 export forecasts for India and Pakistan were raised, while Thailand's was lowered. Thailand's and U.S. trading prices rose over the past month. Vietnam's prices changed little and remain quite competitive.

Figure 1
Thailand's 2019/20 rice production is projected to be the smallest since the 2015/16 drought-reduced crop



2019/20f = forecast. Sources: Production, Supply, and Distribution database,USDA, Foreign Agricultural Service.

### **Domestic Outlook**

# U.S. 2019/20 Yield Estimate Lowered 116 Pounds per Acre

There were several supply-side revisions this month to the 2019/20 U.S. rice balance sheet. First, the 2019/20 U.S. production estimate was lowered almost 2 percent to 184.7 million cwt, 17.5 percent smaller than the 2018/19 crop. This month's downward revision in the 2019/20 production forecast was primarily due to a 116-pound per acre reduction in the average yield to 7,471 pounds per acre, almost 3 percent below a year earlier. The 2019/20 harvested area estimate was lowered 5,000 acres this month to 2.47 million acres, 15 percent smaller than a year earlier. The substantial year-to-year reduction in rice harvested area was mostly due to excessive rainfall in much of the South that led to historically high preventive plantings, especially in the Delta, delayed and hampered field operations and applications across the South, and adversely impacted rice yields in most southern States.

By class, the 2019/20 U.S. long-grain crop estimate was lowered 1.5 million cwt this month to 125.6 million cwt, 23 percent smaller than a year earlier and the smallest since 2011/12. The substantial decline in long-grain production in 2019/20 is mostly due to a 20.5-percent decline in harvested area to 1.73 million acres. The 2019/20 long-grain yield estimate of 7,261 pounds per acre is 3.4 percent below a year earlier and the lowest since 2016/17. Nearly all U.S. long-grain rice is grown in the South, with the Delta the largest producing region.

The 2019/20 combined U.S. medium- and short-grain crop estimate was lowered 1.8 million cwt to 59.1 million cwt, down 2 percent from a year earlier. The 2019/20 medium- and short-grain yield estimate of 7,959 pounds per acre is 3 percent lower than a year earlier and the lowest since 2012/13. Yields declined for medium-grain rice in all reported States in 2019/20, with Texas reporting the largest drop. At 742,000 acres, U.S. medium- and short-grain harvested acreage is down 1 percent from a year earlier, with California accounting for all of the decline. In contrast, at 256,000 acres, southern medium- and short-grain acreage is up 6 percent from 2018/19. California typically produces around 70 percent of the U.S. medium- and short-grain crop, achieving yields substantially above southern medium- and short-grain rice. Arkansas produces the bulk of the southern medium- and short-grain crop, and Louisiana grows most of the remainder.

Harvested area estimates for 2019/20 were lowered slightly this month for Louisiana, Mississippi, and Texas, but raised slightly for California. State harvested area revisions were 1,000-4,000 acres, yielding a net reduction in U.S. harvested area of just 5,000 acres. Yield estimates were lowered this month by around 3 percent for California, Louisiana, and Texas, reduced almost 2 percent for Texas, and dropped just fractionally for Arkansas. Mississippi's 2019/20 yield was unchanged from the previous forecast. These area and yield revisions resulted in reduced production forecasts this month for all reported States. The Texas crop estimate was lowered nearly 6 percent, the Louisiana crop forecast was cut 3.6 percent, Mississippi's crop estimate was reduced 2.6 percent, California's crop was lowered 2.2 percent, and Missouri's production estimate was reduced 1.8 percent. The Arkansas downward revision was less than 200,000 cwt.

#### Rice Production in 2019/20 Declined in all Reported States

Rice harvested area is estimated to be smaller than a year earlier in all reported States, with Arkansas accounting for almost 68 percent of the 438,000-acre total decline. At almost 1.13 million acres, all-rice harvested area in Arkansas is down 21 percent from a year earlier, with long-grain accounting for all of the annual decline. Medium-grain rice harvested area in Arkansas is estimated to be up 5 percent from 2018/19. Missouri's 2019/20 rice harvested area is estimated to have dropped more than 21 percent to

173,000 acres, with long-grain accounting for the bulk of the decline. At 150,000 acres, rice harvested area in Texas is estimated to be almost 21 percent smaller than a year earlier. Long-grain accounts for most of the area decline in Texas, although the medium-grain harvested area of 3,000 acres is 50 percent below 2018/19. Harvested area in Mississippi is estimated at 113,000 acres, down almost 19 percent from a year earlier, with long-grain accounting for all of the State's rice acreage. Louisiana's 2019/20 rice acreage is projected to have declined just 5 percent to 414,000 acres, with long grain accounting for all of the area decline. In contrast, Louisiana's 2019/20 medium-grain harvested area is estimated to have increased 21 percent to 53,000 acres. In California, rice harvested area is estimated to have dropped almost 2 percent to 496,000 acres, with short-grain accounting for most of the decline. Heavy rains in mid- and late May delayed plantings in California.

Average yields in 2019/20 are projected well below a year earlier in California, Louisiana, Missouri, and Texas, down fractionally in Arkansas, and unchanged in Mississippi. On the Gulf Coast, Louisiana's rice yield is estimated to have declined 10.5 percent to 6,380 pounds per acre, the smallest since 2011/12. Although planting in Southwest Louisiana began in the third week of March, by early April excessive rainfall covered the region and slowed emergence and development. In June, high temperatures during the grain-filling period and damage from *Hurricane Barry*, which made landfall on July 11, further reduced yields in Southwest Louisiana. Weather was not as adverse in Northeast Louisiana. The 2019/20 Texas rice yield was reported at just 7,350 pounds per acre, almost 8 percent below a year earlier and the lowest since 2016/17. Wet and cool conditions delayed plantings in Texas early in the season, and then the main Texas crop yield was adversely affected by excessive rainfall around harvest time, which also impacted the Louisiana crop. In Texas, *Hurricane Imelda* struck in mid-September with extremely heavy rain that submerged late-maturing rice. Finally, an unusual cold snap with frost on the Gulf Coast in early November halted further crop development of both the Texas and Louisiana ratoon crops, further reducing total yields in both States.

In the Delta, Missouri's yield is estimated to have declined 5 percent in 2019/20 to 7,370 pound per acre, the lowest since 2016/17. As in the rest of the Delta, persistent and heavy rains delayed planting and interfered with field operations and applications all season. The Arkansas yield of 7,480 pounds per acre is down just 40 pounds from a year earlier, despite rain-delayed planting and much rainfall during the summer. However, yields in Arkansas benefited from very favorable temperatures (high daytime temperatures followed by cool nights) in late August and early September. Mississippi's yield of 7,350 pounds per acre is unchanged from a year earlier, despite persistent rainfall that began in early April and continued through May, delaying planting and hindering operations. However, Mississippi's rice crop also benefited from mild temperatures all season, and the weather was favorable during harvest.

Despite 100 percent of the crop being rated as either good or excellent from mid-June forward, the California yield of 8,450 pounds per acre is down 2 percent from a year earlier. The California rice growing area and much of the State experienced excessive rainfall in mid- and late May that delayed planting, forcing most farmers to rapidly plant in June. Late-planted rice is generally associated with lower-than-average yields, typically a result of a shorter growing season and hastened operations. Temperatures were cooler than normal early in the season, as well. Once the rice was planted by mid-June, weather conditions were generally favorable for the rest of the season for rice growing in California.

These area and yield estimates resulted in declining rice production in all reported rice producing States in 2019/20, with Arkansas accounting for 58 percent of the 39.2-million cwt decline in total U.S. rice production. At 84.3 million cwt, the Arkansas rice crop is 21 percent smaller than a year earlier, almost entirely due to reduced plantings. The Texas 2019/20 rice crop of 11.0 million cwt is down 27 percent from a year earlier, a result of both smaller area and a lower yield. This is the smallest rice crop in Texas since 2015/16 when much of the State was experiencing severe drought. In Missouri, 2019/20 rice production is estimated at 12.7 million cwt, down more than 25 percent from a year earlier, also

due to smaller area and a lower yield. Mississippi's 2019/20 rice production of 8.3 million cwt is down almost 19 percent from a year early, the result of smaller area. This is Mississippi's smallest rice crop since 1984/85. Louisiana's 2019/20 rice crop of 26.4 million cwt is down 15 percent from a year earlier, mostly due to a yield drop. Finally, at 41.9 million cwt, the California rice crop is 3.4 percent smaller than a year earlier, a result of slightly smaller area and a slightly lower yield.

# U.S. 2019/20 Rice Import Forecast Raised 0.5 Million Cwt to a Record 30.1 Million Cwt

This month's reduction in the 2019/20 U.S. crop estimate was partially offset by an upward revision in the all-rice import forecast. At a record 30.1 million cwt, the 2019/20 U.S. import forecast is up 0.5 million cwt from the previous forecast and nearly 4 percent larger than a year earlier. This month's upward revision was based on the delivery pace through November and expectations regarding imports the remainder of the market year. Through November 2019, imports of all rice totaled 324,752 tons (product-weight), up more than 20 percent from a year earlier. Thailand accounted for 57 percent of total rice imports through November, up 26 percent from a year earlier. The bulk of this rice is jasmine rice; a smaller amount is glutinous rice, with broken kernel rice a very small share of Thailand's shipments to the United States. Imports were also up substantially from a year earlier from Brazil, India, and Pakistan. India and Pakistan ship mostly basmati rice to the United States. Jasmine, glutinous, and basmati are specialty rices.

Long-grain accounts for all of this month's upward revision in U.S. rice imports. At a record 24.5 million cwt, U.S. long-grain imports are forecast up 0.5 million cwt from the previous forecast and almost 5 percent larger than a year earlier. Through November, U.S. long-grain imports of 262,370 tons were up almost 23 percent from a year earlier, with Thailand accounting for the bulk of the increase. At 160,213 tons, U.S. imports of Thailand's long-grain rice—nearly all jasmine—were up 24 percent from a year earlier. Imports of long-grain rice from Brazil through November totaled 13,421 tons, up more than 350 percent from a year earlier. Imports of basmati rice from India of 58,748 tons through November were up nearly 8 percent from a year earlier.

U.S. medium- and short-grain imports remain forecast at 5.6 million cwt, fractionally above a year earlier. The medium- and short-grain import forecast assumes continued large purchases by Puerto Rico of rice from China in 2019/20. China's shipments are all regular milled white rice (non-specialty and non-aromatic varieties). In 2018/19, Puerto Rico made three purchases of around 21,000 tons of rice from China. Through November 2019, Puerto Rico had made one 21,000-ton purchase from China in 2019/20, about the same amount as imported a year earlier. Previously, Puerto Rico was supplied medium- and short-grain rice by the United States. However, much lower prices for rice from the sales of China's Government held stocks and reduced shipping expenses have recently led to China's return as the number one supplier of rice to Puerto Rico. Currently, Thailand, China, and India are the top suppliers of medium- and short-grain rice to the United States, with Thailand and India supplying specialty rices classified as medium- and short-grain. Italy supplies a much smaller amount of its Arborio rice to the United States.

Beginning stocks for 2019/20 remain estimated at 44.9 million cwt, 53 percent larger than a year earlier. Long-grain beginning stocks remain estimated at 32.6 million cwt, more than 60 percent higher than a year earlier. Combined medium- and short-grain beginning stocks remain estimated at 10.2 million cwt, up 34 percent from a year earlier. Stocks of brokens—not reported by length of grain—remain estimated at 2.1 million cwt, up 46 percent from a year earlier.

Total U.S. supplies of rice in 2019/20 are forecast at 259.6 million cwt, down 1 percent from the previous forecast and 8 percent below a year earlier. Long-grain 2019/20 total supplies are forecast at

182.7 million cwt, down about 0.5 percent from the previous forecast and almost 12 percent below a year earlier—a result of a much smaller crop. Medium- and short-grain supplies are forecast at 74.8 million cwt, down 2 percent from the previous forecast but up 3 percent from 2018/19, mostly due to a larger carryin.

# U.S. 2019/20 Long-Grain Export Forecast Raised 1.0 Million Cwt to 70.0 Million Cwt

U.S. all-rice exports in 2019/20 are forecast at 98.0 million cwt, up 0.5 million cwt from the previous forecast and almost 5 percent larger than a year earlier. This month's upward revision in exports is based on an abnormally high level of outstanding sales on the books as of late December (especially to Haiti, Mexico, and Central America), a strong pace of total shipments to date, and expectations regarding shipments and sales the remainder of the 2019/20 market year. The pace of U.S. shipments and sales through late December indicates even higher U.S. exports than currently forecast. However, a projected substantial tightening of U.S. supplies later in the 2019/20 market year and rising U.S. prices are expected to eventually slow the pace of U.S. exports.

Long-grain exports in 2019/20 are forecast at 70.0 million cwt, up 1.0 million cwt from the previous forecast and 6.5 percent larger than a year earlier. Through December 26, both shipments and outstanding sales of long-grain rice were well ahead of a year earlier for Guatemala, Mexico, and Nicaragua. In addition, although shipments through December 26 were little changed from a year earlier, outstanding sales were well ahead of a year earlier for the Dominican Republic. Mexico is the largest market for U.S. long-grain rough-rice exports and Haiti is the largest market for U.S. long-grain milled rice. Nicaragua has just returned as a major buyer of U.S. long-grain rough rice after almost a decade of weak or negligible purchases of U.S. rice. Latin America is projected to remain the top market for U.S. long-grain rice in 2019/20, with rough rice the majority of the sales. The Middle East and Canada are projected to account for most of the remaining U.S. long-grain exports, purchasing almost exclusively milled rice, including a small amount of brown rice sold to Canada.

U.S. medium- and short-grain exports in 2019/20 are projected at 28.0 million cwt, down 0.5 million cwt from the previous forecast but still up almost 1 percent from 2018/19. The slight downward revision this month is due to a lack of sales—except to Jordan, Canada, and Mexico—outside the core Northeast Asia market, with Mexico and Canada typically relatively small buyers of medium- and short-grain rice. The extremely small year-to-year projected change in U.S. medium- and short-grain exports is based on expectation of another consecutive year of few, if any, sales outside the three Northeast Asia buyers—Japan, South Korea, and Taiwan—along with Jordan, Mexico, and Canada. All imports of rice by the three Northeast Asian countries are made as part of their World Trade Organization agreements. These three Asian countries typically account for the bulk of U.S. medium- and short-grain rice exports, with California supplying almost all of this rice. The United States has sold almost no rice to North Africa in 2019/20 and very little rice to Turkey, previously a major market for U.S. medium- and short-grain rice, mostly rough rice. The South typically accounts for the bulk of U.S. sales to North Africa and generally supplies some of the shipments to Turkey.

U.S. 2019/20 rough rice exports are forecast at 36.0 million cwt, up 1.0 million cwt from the previous forecast and 9 percent larger than a year earlier. This month's upward revision in rough-rice exports was largely based on stronger-than-expected sales to Mexico and Central America. Long-grain shipments to Latin America account for the bulk of U.S. rough rice exports, with Mexico and Central America the top markets. Through December 26, Mexico has been the only market for medium- and short-grain rough rice exports in 2019/20, with total commitments of U.S. medium- and short-grain rough rice to Mexico totaling 30,800 tons, up from 24,200 tons a year earlier. Mexico is typically a small buyer of medium- and short-grain rough rice, with long-grain the dominant class purchased. Although

the United States sold 41,500 tons of medium- and short-grain rough rice to Libya in 2018/19, to date there been only minuscule U.S. sales of rice to that country in the 2019/20 market year. Turkey is not expected to return as a significant buyer in 2019/20.

U.S. 2019/20 milled-rice exports (combined milled and brown rice exports on a rough basis) are projected at 62.0 million cwt, down 0.5 million cwt from the previous forecast but more than 2 percent above 2018/19. The slight downward revision this month in the U.S. milled-rice export forecast is primarily due to a lack of sales of medium- and short-grain rice outside the large core Northeast Asia market, along with the much smaller regular market composed of Jordan, Canada, and Mexico. Haiti and Japan—the two largest markets for U.S. milled rice—account for most of the expected increase in 2019/20 milled-rice exports, with Japan's increase largely due to a slightly larger than normal carryover of sales from 2018/19. U.S. sales to Sub-Saharan Africa are projected to remain quite small as the U.S. is not price-competitive in this huge and growing global market. Little, if any, increase in U.S. exports in 2019/20 to Canada, Jordan, and Saudi Arabia is expected.

Total domestic and residual use of rice for 2019/20 is forecast at 133.0 million cwt, up 2.0 million cwt from the previous forecast but 7.5 percent below a year earlier and the smallest since 2015/16. This month's upward revision is based on a higher-than-expected implied use for August-November. The NASS-reported December 1 stocks of rice were below prior expectations for both classes of rice, indicating stronger domestic use. Long-grain domestic and residual use in 2019/20 is forecast at 99.0 million cwt, up 1.0 million cwt from the previous forecast but 9 percent smaller than the year-earlier record. The substantial projected decline in long-grain domestic and residual use from the previous year is based on much smaller supplies. Medium- and short-grain domestic and residual use in 2019/20 is forecast at 34.0 million cwt, up 1.0 million cwt from the previous forecast but more than 2 percent below a year earlier.

#### U.S. Long-Grain Ending Stocks Projected Lowest Since 2003/04

These supply and use revisions resulted in a 5.3-million cwt reduction in the 2019/20 ending stocks forecast to 28.6 million cwt, 26 percent below a year earlier and the smallest since 2003/04. The ending stocks-to-use ratio is forecast at 12.4 percent, also the lowest since 2003/04. Long-grain 2019/20 ending stocks are projected at 13.7 million cwt, down 3.0 million cwt from the previous forecast and 58 percent below a year earlier. The long-grain 2019/20 ending stocks-to-use ratio is forecast at 8.1 percent, well below 18.7 percent in 2018/19. As with all rice, these are the lowest ending stocks and stocks-to-use ratios since 2003/04. For medium- and short-grain rice, 2019/20 ending stocks are projected at 12.8 million cwt, down 2.3 million cwt from the previous forecast but 26 percent larger than a year earlier. The medium- and short-grain ending stocks-to-use ratio is projected at 20.7 percent, up from 16.3 percent in 2018/19 but still below the abnormally large levels reported for 2014/15 and 2015/16.

Based on data reported by NASS in the January 2020 *Rice Stocks*, total U.S. rice stocks on December 1 are calculated at 131.7 million cwt (combined milled- and rough-rice stocks on a rough basis), down 9 percent from a year earlier and well below expectations. By class, U.S. long-grain rice stocks on December 1 are calculated at 83.0 million cwt, down nearly 16 percent from a year earlier and also below expectations. Combined medium- and short-grain rice stocks are calculated at 47.0 million cwt, up 5.5 percent from a year earlier but still well below expectations. Stocks of broken kernel rice—not classified by length of grain—are estimated at 1.7 million cwt, up 37 percent from a year earlier.

Rice stocks are projected to be smaller than a year earlier on December 1 in all reported States except California, with Arkansas accounting for 56 percent of the 12.7-million cwt year-to-year decline. At 60.9 million cwt, Arkansas' rice stocks on December 1 were 10.5 percent smaller than a year earlier. Rice stocks in Louisiana were reported at 11.7 million cwt, down 24 percent from a year earlier. Texas

December 1 rice stocks of 8.3 million cwt were 9 percent below a year earlier. Rice stocks in Missouri on December 1 are estimated at 6.1 million cwt, down 24 percent from a year earlier. At 3.8 million cwt, Mississippi's December 1 rice stocks were 16 percent from a year earlier. In contrast to the South, California's December 1 rice stocks of 39.5 million cwt are up 5 percent from a year earlier.

This month, USDA raised its 2019/20 season-average farm price (SAFP) forecast for long-grain rice 40 cents to \$12.20 per cwt, up \$1.40 from 2018/19. The upward revision is largely based on expectations that tighter U.S. long-grain supplies will push prices higher later in the market year. Through November 2019, NASS reported monthly cash prices weighted by marketings yields at an average price to date of about \$11.30 per cwt, thus indicating prices will need to increase to achieve the current SAFP forecast. The southern medium- and short-grain SAFP is forecast at \$12.20 per cwt, up 10 cents from the previous forecast and just 10 cents below the year-earlier SAFP. The slight upward revision this month is based on the higher expected long-grain prices. On an annual basis, supplies of southern medium-and short-grain rice are up about 3 percent from a year earlier, with both production and carryin slightly higher. To date, export demand for southern medium-grain has been very weak, with little growth expected.

The California 2019/20 SAFP is projected at \$18.30 per cwt, down 20 cents from the previous forecast and \$1.70 below a year earlier. This month's downward revision in the 2019/20 California SAFP is largely based on October and November reported cash prices and expectations regarding prices the remainder of the market year. Prices for California medium- and short-grain rice are limited by a lack of export demand outside the core markets of Northeast Asia and Jordan and the much smaller regular sales to Mexico and Canada. The U.S. medium- and short-grain 2019/20 SAFP was lowered 20 cents to \$16.30 per cwt due to the reduced California medium- and short-grain SAFP. The U.S. medium- and short-grain price is down \$1.30 from a year earlier. The U.S. all-rice SAFP was raised 20 cents to \$13.20 per cwt, a result of the higher long-grain SAFP offsetting the weaker California medium- and short-grain SAFP. The all-rice 2019/20 U.S. SAFP is up 90 cents from 2018/19.

The only revision this month to the 2018/19 U.S. rice balance sheet was a 0.4-million cwt reduction in the production estimate to 223.8 million cwt, with long-grain accounting for all of the decline. The crop reduction was due to a 5,000-acre reduction in harvested area in Arkansas. Total domestic and residual use was lowered 0.4 million cwt to offset the slightly smaller crop.

### **International Outlook**

# Drought Sharply Lowers Thailand's 2019/20 Rice Production Forecast; Bangladesh's 2019/20 Crop Forecast Raised

Global rice production in 2019/20 is forecast at 496.7 million tons (milled basis), down 1.7 million tons from the previous forecast and 2.5 million tons below the year-earlier record. Thailand accounts for the bulk of this month's downward revision in global rice production. The U.S. crop estimate was lowered slightly. On an annual basis, rice production in 2019/20 is projected to be smaller than a year earlier in Australia, Bolivia, China, Colombia, Cuba, Ecuador, Honduras, India, Indonesia, Mali, Mozambique, Nepal, Nicaragua, Panama, Paraguay, South Korea, Sri Lanka, Taiwan, Thailand, the United States, and Venezuela. In contrast, in 2019/20 Argentina, Bangladesh, Burma, Cambodia, Cote d'Ivoire, Egypt, EU, Ghana, Guyana, Iraq, Japan, Laos, Madagascar, Mexico, Nigeria, Pakistan, the Philippines, Russia, Sierra Leone, and Vietnam are projected to harvest larger crops than in 2018/19.

This month, USDA lowered Thailand's 2019/20 total rice production forecast 2.0 million tons to 18.5 million tons, 9 percent smaller than a year earlier and the smallest total rice production since 2015/16 when the country was experiencing one of its severest droughts on record. The year-to-year production decline is the result of a nearly 8-percent drop in total harvested area to 10.0 million hectares and a 1.5-percent drop in the average yield to 2.80 tons per hectare. The bulk of the area decline is for the higher yielding and mostly irrigated dry-season crop to be harvested this March to June.

Rainfall during May-July was well below average, particularly in the North—where the bulk of the dry-season crop is grown, although a rebound late in the rainy season limited the decline of the main-season production to less than 1 percent. The bulk of the main-season crop is rain-fed, with yields well below the mostly irrigated dry-season levels.

However, the weak rainfall early in the 2019 wet season led to near-historic low reservoir levels in the North that sharply cut irrigated dry-season planted area. Dry-season irrigated plantings are estimated at 0.8 million hectares, down almost 46 percent from 2018/19. The dry soil conditions also reduced the nonirrigated dry season planted area to 357,000 hectares, down more than 17 percent from 2018/19. These area reductions resulted in a 39-percent reduction in the total dry-season production forecast to 3.3 million tons, still above the historically low 2015/16 dry-season crop of less than 2.0 million tons.

Dry-season production typically accounts for around 25 percent of Thailand's total annual rice production. Almost 80 percent of the dry season crop is produced from irrigated fields. While most of the dry-season crop is produced in the lower North, some is also grown in the Central Plains. The dry-season crop is planted December-February, and harvested March-June. The sharply reduced 2019/20 Thailand rice production forecast has led to lowered export forecasts for both 2019 and 2020. Thailand is currently the second largest rice exporting country. Much of the timely data and information on Thailand's 2019/20 rice production was provided by the U.S. Agricultural Office in Bangkok.

Table A - Global ri	ice productio	on, selected mo	nthly revisions	and year-to-	year change	es, January 2020	
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 revisions and year-to- year change	
1,000 metric tons	(milled basi	s)					
Rice production in	Rice production in 2019/20						
Afghanistan	377	47	10.2%	•	1	A higher yield forecast based on adequate snow melt for irrigation and favorable growing weather.	
Bangladesh	35,850	350	2.7%	1	•	Both the Aus crop (harvested June-August) and the aman crop (harvested November-December) estimates were revised up based on data from the Government of Bangladesh. Total yield is now record high with harvested area remaining at a record 11.8 million hectares. Production is also record high.	
Chile	104	-14	-7.1%	1	1	Smaller harvested area estimate reported by the Government of Chile.	
Russia	715	-10	590.0%	1	•	Lower yield reported by the Government of Chile.	
Thailand	18,500	-2,000	-9.0%	1	•	A substantial reduction in the dry season irrigated harvested area due to severe drought that has led to extremely low reservoir levels and the Government's urging of farmers not to plant dry season rice in some provinces. The average yield was lowered slightly due to a smaller share of the total rice crop accounted for by the higher-yielding dry season crop.	
United States	5,864	-104	-17.5%	1	1	A lower yield and slight reduction in the harvested area estimate reported by NASS.	
Russia 715 -10 590.0% Lower yield reported by the Government of Chile.  A substantial reduction in the dry season irrigated harvested area due to severe drought that has led to extremely low reservoir levels and the Government's urging of farmers not to plant dry season rice in some provinces. The average yield was lowered slightly due to a smaller share of the total rice crop accounted for by the higher-yielding dry season crop.  United States 5,864 -104 -17.5% A lower yield and slight reduction in the harvested area estimate reported by NASS.  Rice production in 2018/19  Bangladesh 34,909 -91 6.9% A slightly lower yield reported by the Government of Bangladesh.							
Bangladesh	34,909	-91	6.9%	1	•		
Pakistan	7,300	-100	-2.7%	1	1	A slightly lower yield reported by the Government of Pakistan.	
Sri Lanka	3,131	171	39.3%	<b>1</b>	î	A much higher and record total yield based on final Yala and Maha crop estimates reported by the Government of Sri Lanka. The total harvested area estimate was actually lowered. The Government of Sri Lanka recently reported a record 2018/19 Maha crop, with yields record for both the earlier harvested Yala crop and the more recently harvested Maha crop.	
United States	7,107	-12	25.6%	1	•	Slightly lower harvested area estimate reported by NASS.	

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

China and India are also projected to show large production declines in 2019/20, with China's production expected to drop 1.8 million tons to 146.7 million tons and India's to drop 1.4 million tons to 115.0 million tons. Harvested area is estimated lower in 2019/20 for both countries. These are the two largest rice producing countries in the world, accounting for more than half of global rice production. Egypt is expected to show the largest production increase in 2019/20, with production up 1.5 million

tons to 4.3 million tons due to a substantial area expansion motivated by a relaxation of Governmentimposed area constraints.

# Export Forecasts for 2020 Raised for India and Pakistan, but Lowered for Thailand

Global rice trade in 2020 is projected at 46.0 million tons, virtually unchanged from the previous forecast but 2.5 percent above the revised 2019 forecast. Despite the expected increase in rice trade in 2020, global rice trade remains well below the 2017 record of 48.1 million tons, largely due to much smaller imports by Bangladesh, China, Nigeria, and Sri Lanka. The decline in global rice trade in these four countries since 2017 has been partially offset by import increases for the Philippines from 2017-2019, Sub-Saharan Africa from 2017-2020, and Indonesia in 2018 and 2020.

On an annual basis, expanded 2020 exports from Burma, Cambodia, China, Egypt, India, the United States, and Vietnam are projected to more than offset reduced shipments from Argentina, Australia, Brazil, South Korea, and Pakistan. China's exports continue the rapid pace of expansion that began in 2017, with substantial amounts of rice now shipped to Sub-Saharan Africa, North Africa, and the Middle East. Thailand continues to lose market share in Sub-Saharan Africa, Southeast Asia, and China, largely due to uncompetitive prices, is expected to lose more markets in 2020 due to tighter supplies. India's exports declined in 2018 and 2019 from the 2017 record—mostly due to sharply reduced sales to Bangladesh and Sri Lanka, as both countries now import only small quantities of rice—but also to competition from lower priced rice from China in Sub-Saharan Africa and the Middle East. India's exports are expected to increase 13 percent in 2020, partly a response to much weaker exports from Thailand and a result of a larger carryin. Vietnam's exports have continued their steady increase since 2017 due to very competitive prices and ample supplies. However, Vietnam's exports remain below the 2012 record of 7.7 million tons. South American exports are projected at slightly over 3.0 million tons in 2020, down 0.5 million tons from a year earlier, mostly due to smaller supplies.

For 2020, imports are projected to increase for Australia, Brazil, Burkina Faso, Cameroon, Colombia, Cote d'Ivoire, Cuba, Ecuador, Gambia, Guinea, Haiti, Indonesia, Kenya, Liberia, Mali, Mozambique, Nepal, Niger, Panama, Peru, Saudi Arabia, Senegal, South Africa, Tanzania, the United Arab Emirates, and the United States; with Indonesia projected to show the largest increase. Partially offsetting these expected import increases are projected reductions for Bangladesh, China, Egypt, EU, Iran, Iraq, North Korea, Laos, the Philippines, Singapore, and Venezuela. Egypt, Laos, and the Philippines are projected to experience the largest import slowdown in 2020. Nigeria's 2020 imports are projected at 1.8 million tons, unchanged from 2019 but 0.3 million below 2018 imports. China's 2019 projected imports of 2.3 million tons have declined sharply from the 2017 record of 5.9 million tons as China attempts to reduce its huge stocks of rice. See table B below for more detail.

Global rice consumption and residual use is projected to be a record 494.0 million tons in 2019/20, up slightly from the December forecast and almost 1.4 percent above a year earlier. On an annual basis, rice consumption and residual use is projected to be higher than a year earlier in Bangladesh, India, the Philippines, and Vietnam. China's record consumption and residual of 143.0 million tons is up just 30,000 from a year earlier. Nigeria's 2019/20 consumption and residual use remains forecast at a record 7.0 million tons. In contrast, rice consumption is expected to continue to decline in Japan and South Korea due to diet diversification. U.S. consumption and residual is projected to decline 7.5 percent in 2019/20 due to smaller supplies. Thailand's consumption and residual is expected to drop almost 3 percent in 2019/20, also due to smaller supplies.

Table B - Selected ri	ce importer		,000 MT), Janua	ry 2020.		
Country or region	Current forecast	Change from last month's forecast	Change from a year earlier	Month-to- month direction	Year-to- year direction	Explanation of month-to-month change in forecast
Rice importers, 2020	0					
Afghanistan	310	-50	-3.1%	1	1	A larger 2019/20 crop estimate reduced the demand for imported rice.
Bangladesh	30	-20	-66.7%	1	1	A larger 2019/20 crop estimate further reduced the already-low demand for imported rice in 2020.
China	2,300	-100	-4.2%	1	1	Import forecast lowered due to extremely large stocks and a recent slower pace of purchases.
Ghana	950	50	0.0%	1	<b>→</b>	Expect 2019's upwardly revised pace of imports to continue into 2020. Imports in 2019 and 2020 are projected record high.
Indonesia	1,000	-400	233.3%	•	•	Indonesia's rice consumption forecast for 2019/20 was lowered based on higher expected wheat consumption. The rice import level is still high based on concerns over a drought-reduced crop in 2019/20.
United States	955	15	3.2%	1	1	Expect the recent faster pace of monthly imports to continue, with shipments from Thailandthe largest supplier to the United Statesespecially strong last fall. U.S. rice imports are projected record high in 2020.
Rice importers, 2019	9					
Bangladesh	90	-10	-93.5%	1	•	A record 2019/20 crop with the harvest of its third and final cropthe Aman cropcompleted in late December.
Brazil	770	-30	43.4%	1	1	Import data through November indicate stronger imports in 2019.
Ghana	950	50	14.5%	•	•	Import data through November indicated stronger imports in 2019.
Haiti	450	-30	5.1%	•	<b>1</b>	U.S. export data through late December indicate weaker-but still strongtotal rice imports in 2019. The United States supplies the bulk of Haiti's rice imports, with Asian and South American exporters supplying only a very small fraction of Haiti's imports.

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

Table C - Selected ri	ice exporter	s at a glance (1,	.000 MT), Janua	ry 2020		
Country or region	Current forecast	Change from last month's forecast	Change from a year earlier	Month-to- month direction	Year-to- year direction	Explanation of month-to-month change in forecast
Rice exporters, 2020	)					
India	12,000	500	13.2%	•	•	A larger 2019/20 carryin and expectations of supplying some of Thailand's import markets in 2020.
Pakistan	4,400	400	-4.3%	•	•	A strong pace of exports in 2019, plenty of supplies, and an exchange rate value with the U.S. dollar favorable to exports.
Thailand	7,500	-900	-5.1%	•	•	Uncompetitive prices and expectations of much tighter supplies later in 2020 due to a 10-percent reduction in the 2019/20 total rice production forecast this month, with the upcoming dry season crop to be harvested this spring accounting for most of the downward revision in production.
United States	3,175	50	4.1%	1	•	Expectations that the strong pace of exports that was reported in late 2019 by the U.S. Government will continue into early 2020 until tightening supplies and higher prices slow the U.S. export pace.
Rice exports, 2019						
Brazil	950	180	-23.7%	•	•	The revision is based on the Government of Brazil's export data through November.
Mexico	15	-15	-86.2%	•	1	Exports lowered based on the Government of Mexico's export data through October.
Pakistan	4,600	500	17.6%	•	•	Recently released Government of Pakistan trade data indicate a much faster pace of exports in 2019. These are the highest exports for Pakistan on record.
Thailand	7,900	-200	28.5%	1	•	A slower than expected export pace through November and a widening price difference over Asian competitors.

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

# Global Ending Stocks Projected Record High in 2019/20; Thai and U.S. Prices Rise Over the Past Month

Global ending stocks in 2019/20 are projected at a record 177.1 million tons, down almost 0.8 million tons from the previous forecast but up 2.7 million tons from a year earlier. This is the 13th consecutive year of increasing global ending stocks. India accounts for most of this month's upward revision in 2019/20 global ending stocks, with India's stocks forecast raised more than 2 percent to 30.2 million tons, an even higher record. The upward revision in India's 2019/20 ending stocks is based a higher endings estimate of 29.5 million tons reported by the Government of India for 2018/19, which increased India's 2019/20 total rice supplies. On an annual basis, China, India, and the Philippines account for most of the projected increase in global ending stocks in 2019/20. The global stocks-to-use ratio is forecast at 35.8 percent in 2019/20, nearly unchanged from a year earlier but still below the 2000/01 record of 37.3 percent.

Market prices for most grades of Thailand's non-aromatic rice have risen 5-6 percent over the past month, mostly due to concerns over a much-diminished dry-season crop that will begin harvest in March and a continued strong baht. Thailand's 100 percent Grade B long-grain milled rice for export remains quoted at \$428 per ton for the week ending January 6, up from \$407 for the week ending December 9 and the highest since mid-August. In contrast, prices for Thailand's premium aromatic

rice—quoted at \$1,113 per ton—are unchanged from a month earlier. Thailand's 2019/20 jasmine crop was harvested last October-November.

Vietnam's 5-percent broken kernels long-grain milled rice is currently quoted at \$347 per ton, down \$3 from mid-December but up \$2 from the beginning of December. Vietnam's prices are currently more than \$70 below prices for comparable grades of Thailand's rice, making Vietnam a price-competitive supplier. Quoted prices from South American exporters are virtually unchanged from a month earlier. The South American harvest should begin by April in the southern part of the continent that accounts for the bulk of the region's exports.

U.S. trading prices for long-grain rice increased over the past month, with prices for U.S. long-grain milled rice, Number 2 Grade, 4-percent broken kernels (free on board a vessel at a Gulf port) currently quoted at \$570 per ton, up \$10 from early December. U.S. long-grain milled prices are currently being supported by recent large sales to Haiti and expectations of much tighter supplies later this market year. The U.S. price difference over Thailand's long-grain milled rice is currently \$142 per ton, down \$9 per ton from a month earlier. The U.S. price difference over South American exporters increased about \$10 per ton over the past month.

Quotes for California Number 1 Grade, 4-percent broken kernels for the week ending January 7 are quoted at \$825 per ton (free on board at a domestic mill), up \$15 from a month earlier. For delivery at the Port of Oakland, California, medium-grain milled rice was quoted at \$935 per ton for the week ending January 7, unchanged from a month earlier. For listings of trading prices by exporter and grade of rice, see Table 9 in the Excel file.

## Contacts & Additional Information

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