



Feed Outlook

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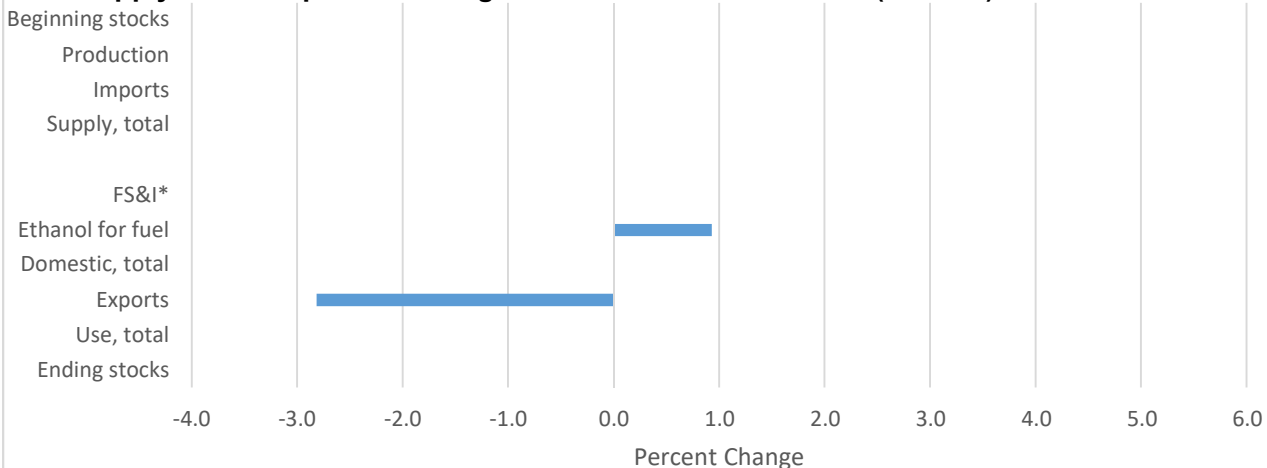
Offsetting Changes in Food, Seed, and Industrial Use and Trade Leave Stocks Unchanged

Total U.S. corn use is unchanged as 50 million bushels shifts from exports to ethanol. With total supply and use both steady, projected ending stocks remain unchanged at the lowest level since 2015/16. The season average price received by farmers is unchanged at \$3.85 per bushel.

The corn exports projections for the United States continue to decline, as expected recent improvements in export sales have been insufficient to reach last month's forecast, despite an improvement in U.S. price-competitiveness. Corn exports are projected higher for Ukraine, the European Union, and Paraguay with increased demand from Turkey and Brazil. Other changes for corn and other coarse grains are fractional.

Figure 1

Corn supply and use: percent change from last month's forecast (2019/20)



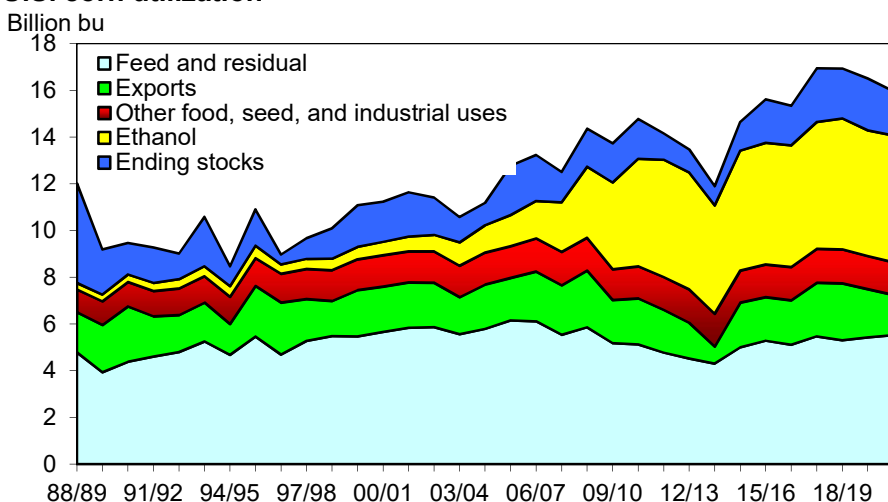
Source: Economic Research Service Feed Grain Database, U.S. Dept. of Agriculture.

Domestic Outlook

Corn, Use Shifts From Exports to Ethanol

There is no change in 2019/20 corn supply this month. Total projected supply remains at 15,962 million bushels and use is unchanged at 14,070 million. Corn for ethanol is raised 50 million bushels to 5,425 million on strong crushings in December, reported by the National Agricultural Statistics Service (NASS) *Grain Crushings and Co-Products Production* report, and strong weekly production in January, reported by the Energy Information Administration's Weekly Petroleum Status Report. As a result, food, seed, and industrial (FSI) use is projected at 6,820 million bushels.

Figure 2
U.S. corn utilization



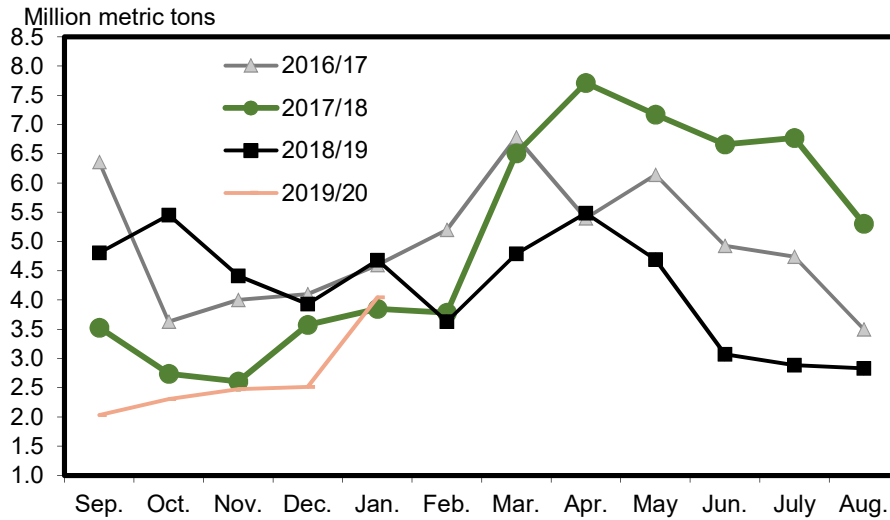
Note: Marketing year 2018/19 and 2019/20 are projected.
Source: USDA, World Agricultural Outlook Board, WASDE.

Projected corn exports are reduced 50 million bushels to 1,725 million bushels on continued strong competition from other corn exporters such as Brazil, Argentina, and Ukraine (Please see international section for greater detail).

With offsetting changes in use, projected ending stocks remain at 1,892 million bushels, the lowest since 2015/16. The stocks-to-use ratio is unchanged this month at 13.4, compared with 15.5 in 2018/19.

The 2019/20 season average price received by farmers for corn is projected unchanged at \$3.85 per bushel, based on weighted average sales to date.

Figure 3
Monthly U.S. corn exports

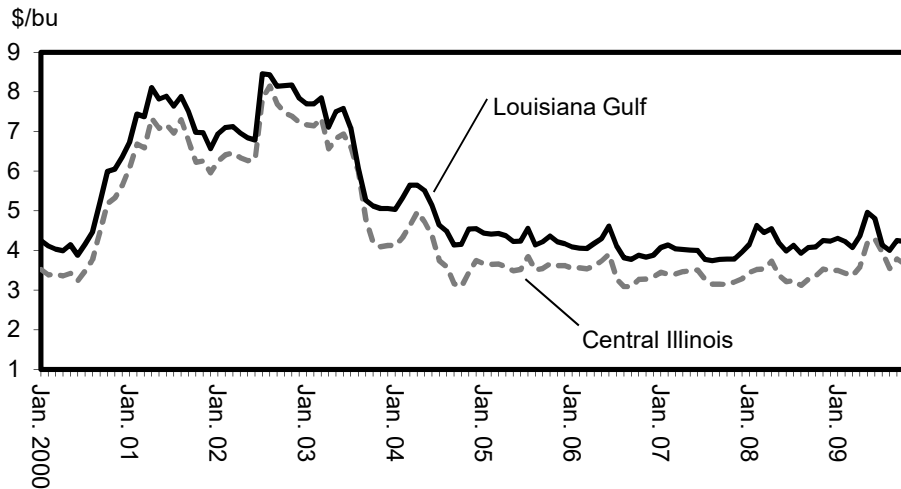


Source: USDA, Economic Research Service with data from U.S. Department of Commerce, U.S. Census Bureau, January 2020 Grain Inspections.

Grain-Consuming Animal Units

Grain-consuming animal units (GCAU) for 2019/20 are projected at 103.1 million units, up 0.3 million from last month. Inventory rose for broilers and layers, but declined for turkeys.

Figure 4
Monthly corn (yellow #2) prices for Central Illinois and Louisiana Gulf



Sources: USDA, Economic Research Service, *Feed Grains Database* and USDA, Agricultural Marketing Service.

Feed and Residual Use: Four Feed Grains and Wheat

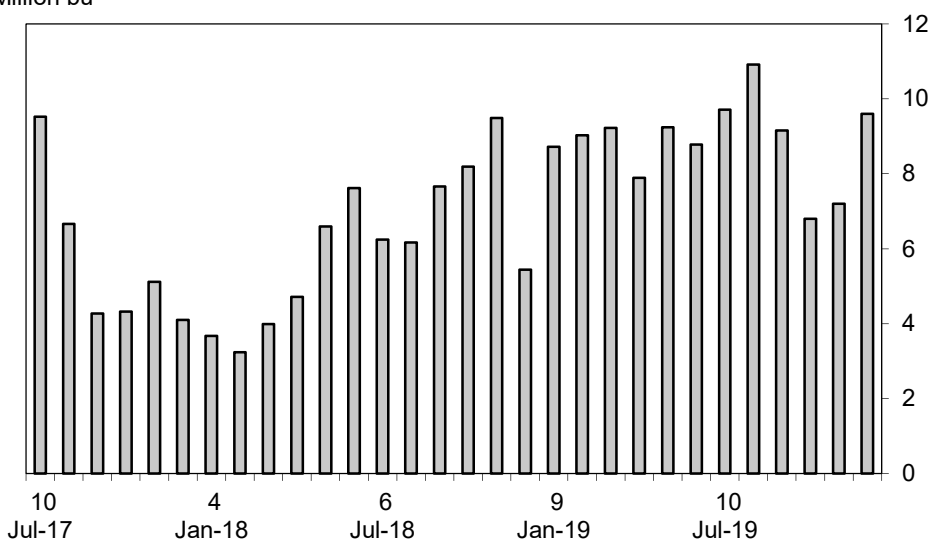
Feed and residual use for the four feed grains (corn, sorghum, barley, and oats) and wheat on a September-August marketing year basis for 2019/20 is projected at 150.5 million tons, with no changes in any categories since last month.

Sorghum FSI Raised

Greater sorghum use for ethanol reported by the NASS *Grain Crushings and Co-Products Production* report for December push 2019/20 sorghum FSI 5 million bushels higher to 105 million leading to a total use of 245 million bushels. Sorghum for ethanol reached 9.5 million bushels in December 2019, the highest since August. September through December sorghum used for ethanol totaled 33.1 million bushels, up about 8 percent relative to the same period a year ago. Favorable sorghum/corn price ratios in some areas and improved ethanol production margins prompted a greater sorghum grind.

Figure 5
U.S. sorghum for ethanol use by month

Million bu



Note: Months for which data were withheld to avoid disclosure are shown as null.

Source: USDA Economic Research Service with data from USDA, National Agricultural Statistics Service, *Grains Crushings and Co-Products Production*.

Ending stocks are projected down 5 million to 40.2 million bushels compared with 63.7 in 2018/19. The season average price received by farmers for 2019/20 is projected at \$3.35 per bushel, down 5 cents from last month, based on observed prices to date. The stocks-to-use ratio is 11.0 compared with 18.9 in 2018/19.

Barley Exports Raised, Oats Balance Sheet Unchanged

Strong malting barley exports to Canada, Mexico, and Japan in December edged the 2019/20 export forecast up 1 million bushels to 5 million. Volume in December was the largest since May 2017. As a result, ending stocks were lowered to 88 million bushels, nearly 2 million above last year's level. Projected price is unchanged.

There were no changes to the oats balance sheet or price this month.

Calendar Year Ethanol Exports

The U.S. Census Bureau reported calendar year ethanol exports of 1.470 million gallons in 2019, 224 million or 13 percent below 2018. Of the 224 million gallon decline, most was attributable to slower shipments to the two largest importers—Brazil, which was down 32 percent, and Canada, which declined 5 percent. Shipments to Brazil slackened due to higher tariffs on U.S. ethanol implemented by Brazil. Through November, the latest data available, exports represent about 9 percent of U.S. ethanol total disappearance.

International Outlook

Favorable Conditions in South Africa Push Corn Yield Forecast Higher

Global coarse grain production in 2019/20 is expected to be up fractionally over last month's projections. A majority of the revisions are in the corn and barley production estimates for **South Africa** and **Morocco**. Global corn production is projected up 0.8 million tons while barley production is expected to be up 0.1 million tons, while the changes in the other feed grains are minor.

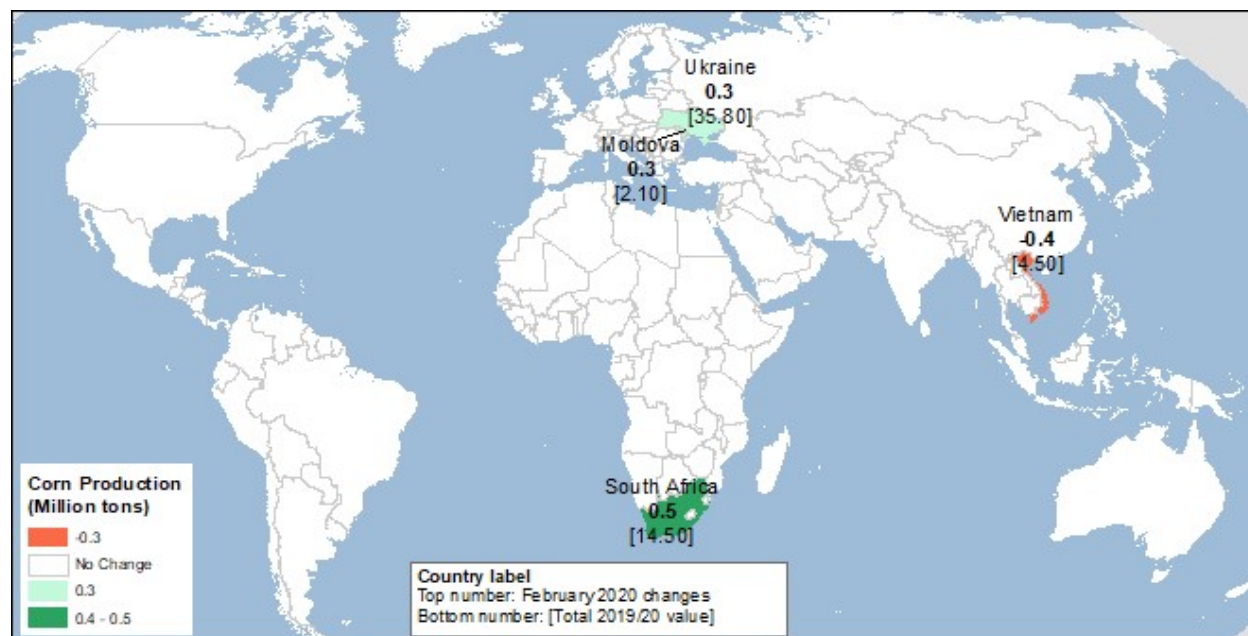
South African corn production is revised up by 0.5 million tons to reach 14.5 million. Crop conditions in the country's corn belt are above average. Planting in the central-east part of the corn belt was initially delayed because of dryness. However, beneficial rains and cooler temperatures since November boosted crop development dramatically, improving overall crop conditions in these provinces as the bulk of the crop is currently going through the pollination period. The northwestern part of the corn belt that produces 20 percent of the crop was virtually not affected by dryness, as corn there is normally planted later and the area had abundant rains in December and January. Crop pollination in that part of the country has just started and crop

conditions appear to be excellent. In addition to favorable growing conditions, improved genetic varieties are expected to additionally boost corn yield, now expected to reach 5.00 tons per hectare. Such a yield has not been observed since 2016/17's bumper harvest.

Estimates for corn output in **Ukraine** are adjusted up 0.3 million tons to 35.8 million based on the recently published official preliminary data indicating higher harvested area, but marginally lower yield. Ukrainian production of sorghum and millet are also revised higher. Final numbers from the country's statistical office are expected in March. Corn production in **Moldova**, which borders Ukraine to the southwest, is also revised this month, up 0.3 million tons to 2.1 million following official reports.

With reduced area and yield, corn production in **Vietnam** is projected 0.35 million tons lower this month at 4.5 million. The area is expected to continue its slow decline, as price competitive imported corn is increasingly dominating Vietnamese corn consumption, with imports providing 66 percent of domestic supplies in 2019/20.

Map A1 – Corn production changes, February 2020



Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.

Barley Output in Morocco Projected Higher

Moroccan barley production is projected up 0.2 million tons to 1.2 million, a gain of 20 percent over last month's projection based on information from the government, but still on the low side of the usual Moroccan output for barley. This change is driven by a yield that is higher than

previously projected. Barley is the coarse grain in Morocco with the highest output and the country is the largest producer in North Africa.

Both **Argentina** and **Uruguay** have small production cuts. Argentine barley output is revised down 0.1 million tons to 4.6 million, on lower area which more than offsets higher yield. Area changes are based on Ministry of Agriculture weekly area estimates, with an assumption of a 10 percent area loss. Uruguay's barley production is marginally reduced this month. Argentine oats production is also revised slightly down.

Consumption Projected Slightly Higher This Month

World coarse grain use in 2019/20 is forecast up 2.1 million tons to 1,423.5 million. Global coarse grain feed and residual use for 2019/20 is projected 0.9 million tons higher this month, while world food, seed, and industrial use (FSI) is also up on account of increased use of corn for ethanol production in the United States (see domestic section above).

The expanding **Brazilian** pork and poultry industry is expected to use an additional 0.5 million tons of corn for feeding animals utilizing larger corn imports from **Paraguay** (see the trade section below). Increased imports are expected to enhance corn feeding in Turkey, mainly for the poultry sector, up 0.4 million tons. Higher projected corn output is expected to advance corn feeding for **Moldova** by 0.2 million tons. **Ukrainian** use of corn for feeding is projected 0.1 million tons lower this month, recognizing the country's depressed livestock industry that is affected by declining population and weakening local demand. Barley feed and residual use in **Argentina** is adjusted 0.1 million tons down following production revision.

Growth in global coarse grain use is steeper than an increase in supplies, which reduced expected global ending stocks. World 2019/20 coarse grain ending stocks are forecast 1.1 million tons lower than the January projection, to reach 326.6 million. Individual countries' changes in stocks follow production and trade revisions and are all under 0.35 million tons.

U.S. Corn Export Prospects Continue to Decline

The record-large global corn exports for the international October-September trade year are projected slightly higher this month, up 0.7 million tons to reach 173.0 million. However, export projections for the **United States** continue to decline.

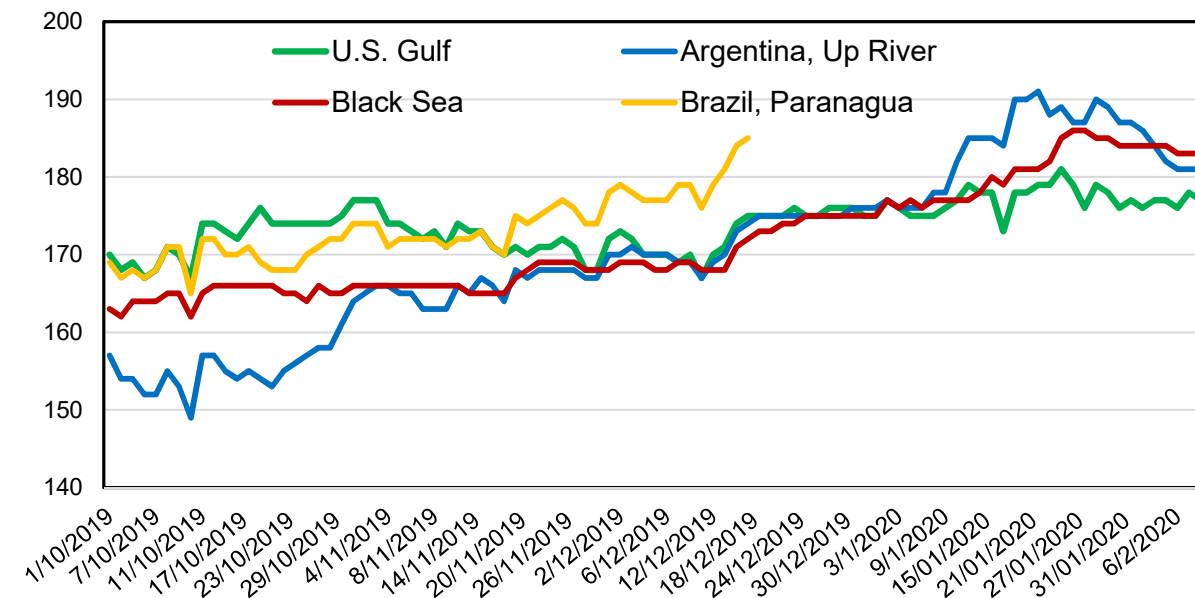
U.S. October-September 2019/20 corn exports are projected down 1.0 million tons this month to 47.0 million (down 50 million bushels to 1,725 million for the September-August local marketing year). The pace of shipments has been slow, with Census data for October-December 2019 at

7.3 million tons, down 22 percent from the 5-year average of 2013/14-2017/18. This average does not include the front-loaded year of 2018/19 to avoid distortion. January 2020 corn export inspections were only 2.3 million tons (with an expectation that final census results for January export will reach 2.5 million tons), down almost 30 percent from the 5-year average (also excluding 2018/19, from 2013/14 through 2017/18). During the last several months, all three major U.S. export competitors—Argentina, Brazil, and Ukraine—were exporting corn at a brisk, often record-high pace. Since the beginning of October, Ukraine alone exported more than 16 million tons of corn. Argentina has been predictably slowing down the pace of corn exports, but with the progress of the corn harvest, a strong comeback is expected after March. In the coming months, Brazil’s corn exports are expected to drop sharply as port capacity shifts to soybean exports, but are expected to accelerate again in July when the projected ample second crop (safrinha corn) reaches the market. In the rest of the year, the pace of U.S. exports has to improve significantly to reach currently projected exports. There are indications that the U.S. export performance is getting better. U.S. corn export quotes have recently become more competitive on a free-on-board basis, with export sales starting to improve (for the first week of February, corn exports inspections reached 0.77 million tons) and a year-to-year gap in outstanding sales narrowing by the end of January.

Figure 6

U.S. corn export price-competitiveness has been improving

\$U.S./ton



Note. Dates are shown in European format: DD/MM/YYYY.

Source: International Grains Council data.

With higher projected corn output and a continuing brisk pace of exports, Ukraine is projected to export an additional 0.5 million tons, pushing its record-high exports further to 31.0 million.

With an increase in projected corn production, **South Africa** is expected to export an additional 0.5 million tons, for a total of 2.0 million mainly to the neighboring countries of Botswana, Mozambique, and Namibia, where unfavorably dry weather harmed crops.

Corn exports for **Paraguay** are projected 0.3 million tons higher. Paraguay's exports to the neighboring southern states of **Brazil** are increasing as logistics and costs favor importing additional corn for the burgeoning livestock industry over transporting it from the northern parts of the country. Given stronger-than-expected demand for corn feeding, corn imports for **Brazil** are adjusted up 0.2 million tons for the 2019/20 international trade year (and for both March-February 2018/19 and 2019/20 local marketing years, up 0.2 million tons, each).

The **European Union (EU)** has been exporting corn to **Turkey** at a higher pace than previously expected, and its exports are projected to be 0.4 million tons higher to reach 2.8 million.

Corn imports are also adjusted this month for **Turkey**. Turkey has been importing corn (as well as wheat) at a higher pace than previously projected with additional imports coming largely from Romania and Bulgaria within the European Union (EU) and Ukraine. This month the projection for corn imports for Turkey is up 0.4 million tons to reach a record of 3.0 million.

Changes in trade for other coarse grains are marginal this month. The most noticeable alteration is higher projected barley exports for the **U.S.**, up 25 thousand tons (1 million bushels for the local September-October marketing year). December barley exports were the highest for this month since 2017, as the United States exported additional quantities of barley to Mexico, Canada, and Japan.

Map A2 – Corn trade year (TY) exports changes, February 2020



Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online database.