

Foreign Agricultural Service Global Market Analysis International Production Assessment Division Web: <u>https://ipad.fas.usda.gov</u> Commodity Intelligence Report

August 26, 2020

MEXICO 2020/21 WHEAT: PRE-SEASON DRYNESS LOWERED PLANTED AREA

USDA estimates Mexico's market year (MY) 2020/21 wheat production at 3,050,000 metric tons (MT), down 5 percent from last year's production. Area has decreased 7 percent from last year and is estimated at 550,000 hectares (ha). The yield estimate is up 2 percent from last year at 5.55 tons per hectare (tons/ha) (see Figure 1).





Figure 1. Annual Mexico Wheat Area, Yield, and Production Estimates from 2010-2020. Source: USDA.

The state of Sonora represents about 50 percent of the wheat production in Mexico. In addition, other major wheat growing states in Mexico include Guanajuato, Baja California, and Sinaloa (see Figure 2).





Figure 2. Map of Mexico Wheat Production. Source: SIAP.

Crop Calendar

Mexico has two seasons for growing wheat: winter and spring. Representing about 95 percent of production, the winter crop cycle is planted during October through December and harvested from mid-April through July. The smaller spring crop cycle is planted from April through July and is harvested starting in September.

Types of Wheat Grown

Both bread wheat and durum wheat are grown in Mexico. Though bread wheat typically has lower yields than durum wheat, Mexico's Guarantee Price program has encouraged farmers to plant more bread wheat than durum wheat. Overall, Guanajuato mainly produces bread wheat while the northern states traditionally produce durum wheat. During the 2019/20 season, however, the production of bread wheat in Sonora and Sinaloa increased from an average of about 300,000 MT to about 700,000 MT and durum production decreased overall from an average of 1,200,000 MT to 800,000 MT. Baja California also increased the planting of bread wheat during the 2019/20 season.

Pre-Season Dryness Limited Water Availability in Reservoirs

Most of the wheat crop planted in the winter in Mexico is irrigated. Precipitation at the start of the rainy season and through the end of October 2019 was insufficient to replenish the dams for early season irrigation of wheat grown during the winter (see Figure 3).



Figure 3. Comparing Cumulative Precipitation during the 2019 Rainy Season to an Average Year in Major Wheat Growing Areas of Northwest Mexico. Source: UCSB CHIRPS.

For example, with the lowest water levels since 1955, the Mocuzari Dam (or Adolfo Ruiz Cortines Dam) delayed opening to late October 2019 for wheat irrigation in Rio Mayo, Sonora. By the end of October 2019, water storage levels in the Mocuzari Dam only reached 39 percent capacity, approximately 407 million cubic meters, while officials expected levels to reach at least 400 million cubic meters at the start of the planting season on October 1 (see Figure 4).



Figure 4. Landsat Satellite Imagery Depicting Water Levels in Mocuzari Dam in October 2014 vs. October 2019. Source: USGS.

Planted Area Progress Compared to Previous Years

Overall, wheat planted area for the winter 2020/21 crop decreased as a result of early season lower water availability in dams for irrigation. In addition, excess rain in Sonora during November and December delayed some planting to late December and early January due to wet soils (see Figure 3 and Figure 5). At the end of the 2020/21 winter planting season, planted area for wheat was about 9 percent less than the year before at 483,639 ha planted based on data from the Agri-Food and Fisheries Information Service (SIAP). For the spring season, planted area is slightly ahead of previous seasons with Tlaxcala leading the planted area with about 26,731 ha planted as of July 31, 2020 based on SIAP's reports.

Wet Conditions Replenish Reservoirs for Growing Season

Though the December rains delayed some of the wheat planting in Sonora, the rainfall in November and December in northwest Mexico was beneficial to reservoir levels for wheat irrigation by the start of the growing season (see Figure 3 and Figure 5).



Figure 5. Map Displaying Percent Normal Rainfall During November 2019 and December 2019. Source: UCSB CHIRPS.

The Wheat Crop Harvest

Harvesting for the 2020/2021 wheat crop planted in the winter was completed in July. As of July 31, 2020, SIAP reports that production for the winter cycle was 2,801,595 tons with harvested area at 477,380 ha and yields at 5.87 tons/ha. In particular, Sonora's estimated wheat production for the winter cycle is at 1,532,661 tons, about 15 percent lower than last year. The Mexico wheat crop that was planted in the spring, typically about 5 percent of total production, will begin harvesting in September. Expected wheat production for the spring cycle is approximately 150,000 tons. USDA estimates Mexico's 2020/21 total wheat production at 3,050,000 MT.

Author contact information:

Ifeoma Collins ifeoma.collins@usda.gov

For more information and to access FAS databases and reports please visit:

Current World Agricultural Production Reports https://www.fas.usda.gov/data/world-agricultural-production

Production, Supply and Distribution Database (PSD Online) <u>https://apps.fas.usda.gov/psdonline/app/index.html#/app/home</u>

Global Agricultural Information Network (Agricultural Attaché Reports) https://www.fas.usda.gov/databases/global-agricultural-information-network-gain

Crop Explorer https://ipad.fas.usda.gov/cropexplorer/

Global Agricultural and Disaster Assessment System (GADAS) https://geo.fas.usda.gov/GADAS/index.html