USDA United States Department of Agriculture

Foreign Agricultural Service
Global Market Analysis
International Production Assessment Division
Web: https://ipad.fas.usda.gov

March 23, 2021

Commodity Intelligence Report

Argentina Sorghum Increases due to Higher Demand from China

Argentina sorghum harvested area for marketing year (MY) 2020/21 has increased from the last four years due to a continuing demand for exports and an uptick in sorghum pricing (Figure 1). Expected harvested area is 730,000 hectares (ha), an increase of 27 percent over last season and 9 percent over the 5-year average (Figure 2). Production in MY 2020 is expected to be 3.20 million metric tons (mmt), 28 percent more than in MY 2019. Sorghum can be grown throughout much of Argentina from the province of Buenos Aires in the south to the northern provinces of the country (Figure 3).

Yields are estimated at 4.38 tons per hectare (t/ha) this season (Figure 2). This is less than 1 percent above last season's yield and slightly below the 5-year average. Satellite-derived Normalized Difference Vegetation Index (NDVI) analysis indicates similar yields to last year (4.35 t/ha) and to the MY 2010/11 season (4.40 t/ha) (Figure 4).

Demand for sorghum to use as animal feed increases when corn prices increase. As corn pricing has recently remained high, sorghum becomes the substitute protein in feed rations. The nutritive value of sorghum is around 96 percent of that of corn. Higher in protein at about 9.5 percent versus that of corn at 8 percent, sorghum only lacks the higher concentration of lysine and threonine of corn within a ration. Both amino acids, however, can be added separately to supplement feed rations to complete a robust animal feed.

Improved management and varieties have helped to limit some of the losses of sorghum seed from birds, the main problem for losses, while producing a product that is more feed friendly. Lower tannin sorghum varieties are often being used in Argentina so that better feed value can be realized. Management strategies to improve moisture content at harvest and better moisture control during storage are being used in Argentina to improve grain quality. The impetus for better grain quality and quantity through better field management is an increasing demand of grain sorghum from China.

This season, the demand for Argentina grain sorghum has pushed farmers to plant 27 percent more sorghum than last year. International pricing for sorghum also encouraged Argentina farmers to plant more of the crop. The value of the crop in February 2021 was over 82 percent above the value in February 2020 within Argentina. The international price for the grain also rose, increasing over 17 percent in February

2021. This season 95 percent of the sorghum shipments from Argentina are headed for China.

Argentine sorghum producers are hoping that demand from China will continue. Some have suggested this trend could be just spot business, but it is a trend that Argentina as well as other sorghum exporting countries will closely watch.

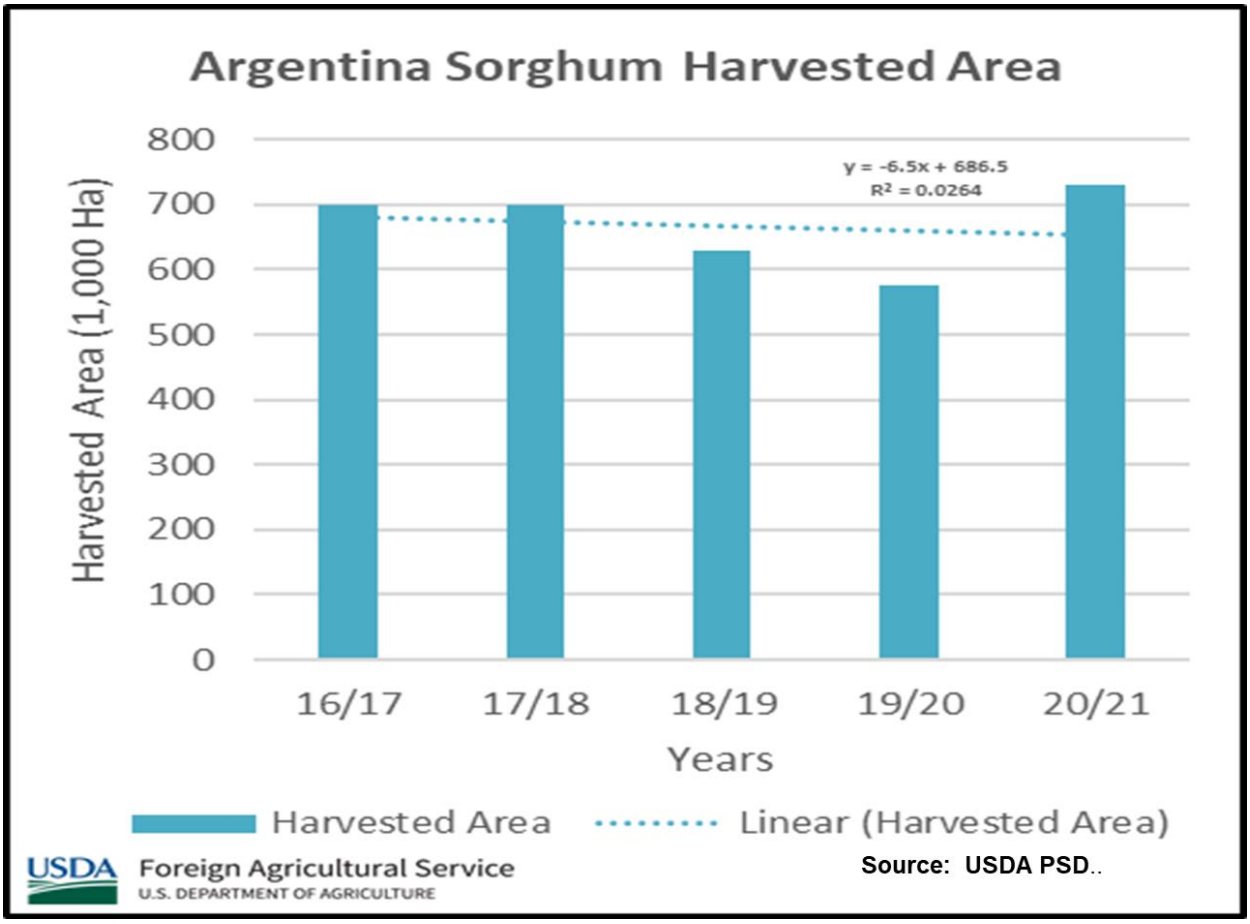

Figure 1. USDA's estimated harvested area of Argentine sorghum from MY 2016 to 2020. Source: USDA PSD.

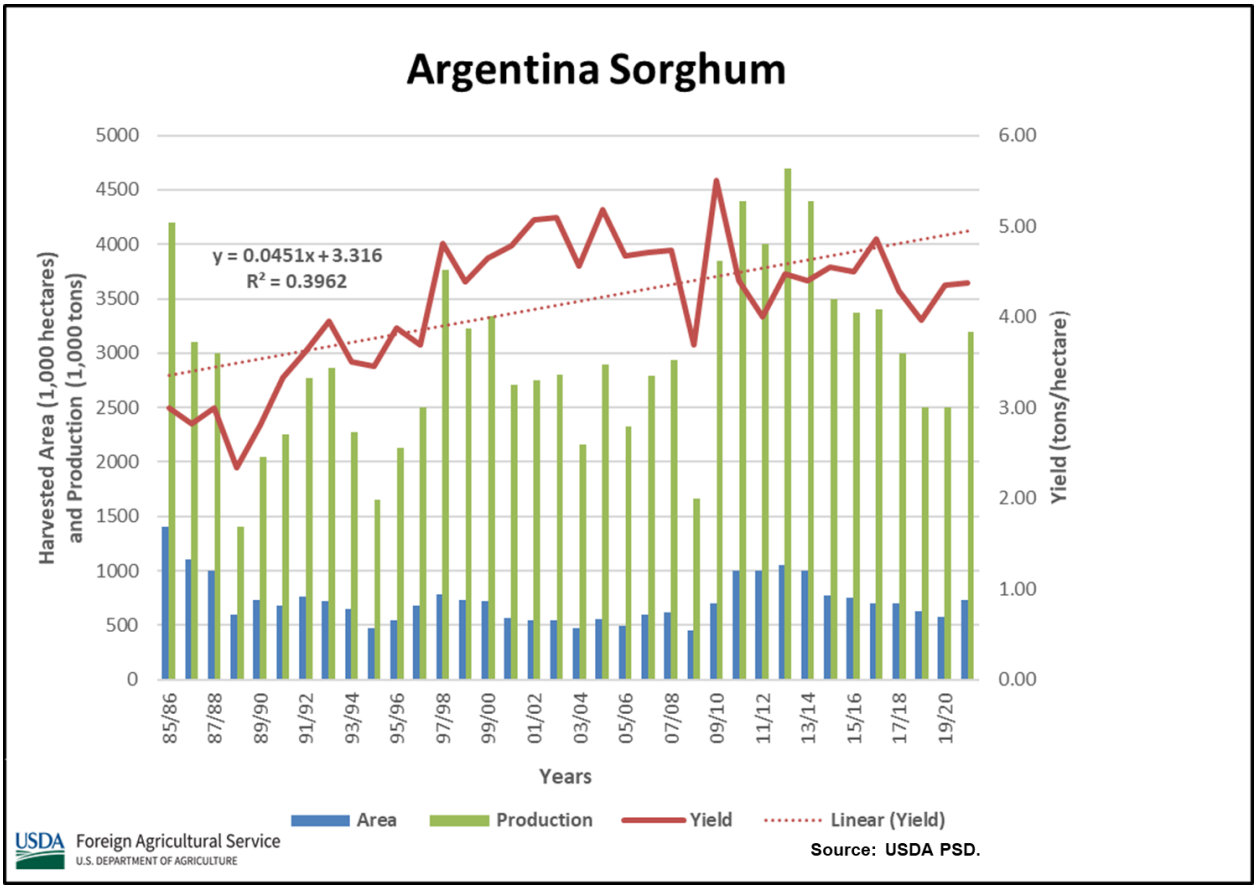

Figure 2. The estimated area, production, and yield of sorghum from Argentina from 1985 to present. These 35 years of production in Argentina have varied based on demand domestically and internationally as well as on pricing. Management of the crop has improved with new varieties and management methods. Source: USDA PSD.

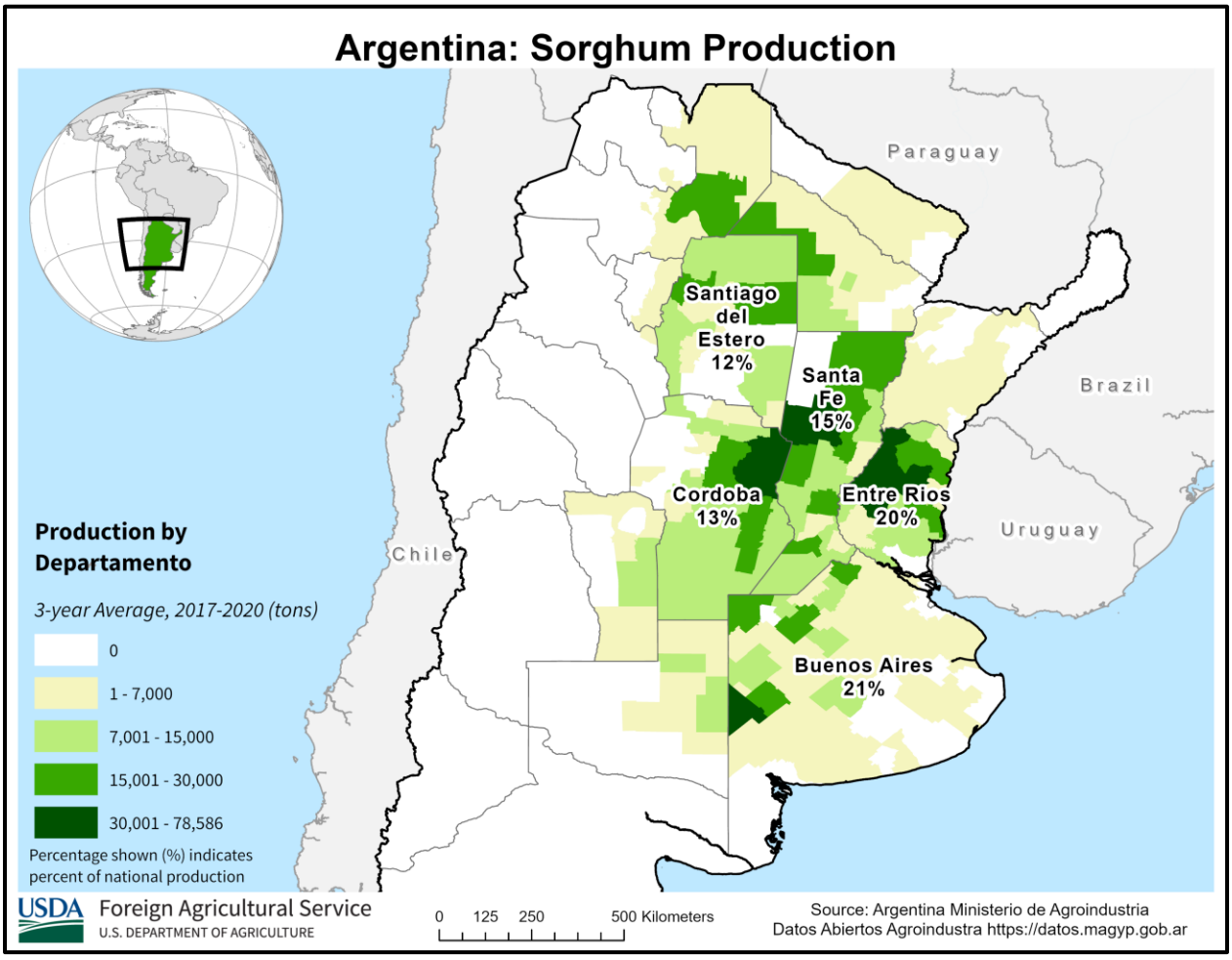

Figure 3. Production of sorghum occurs throughout Argentina from the province of Buenos Aires in the south to the northernmost provinces. Source: Argentina Ministry of Agriculture data, MY 2017 through 2019.

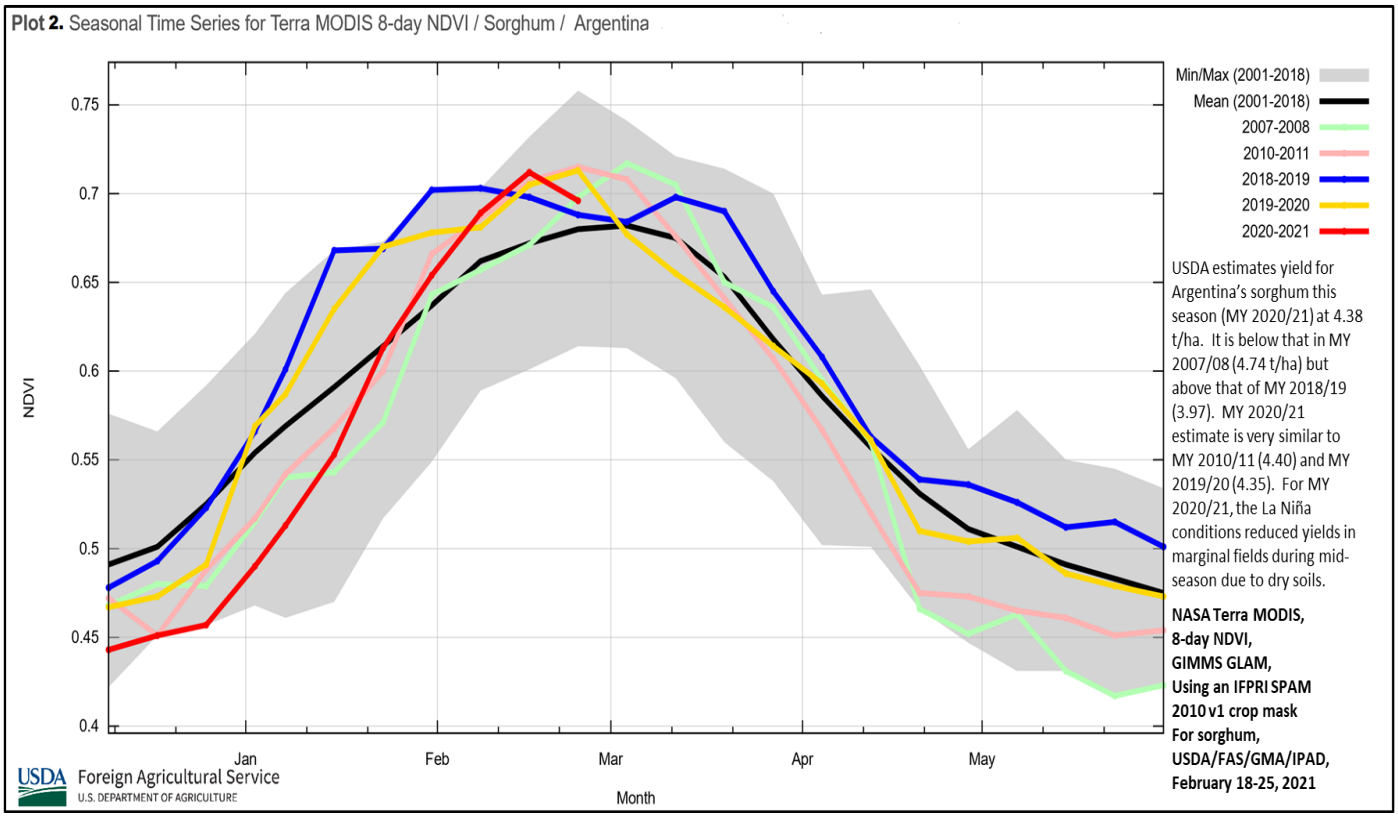

Figure 4. The current Normalized Difference Vegetation Index (NDVI) graph of MY 2020/21 compared to previous years to qualitatively assess the current estimated yield for the Argentina sorghum crop. Source: NASA's GIMMS (GLAM) using MODIS-NDVI and an IFPRI sorghum crop mask.

Author contact information:

Dr. Denise McWilliams
denise.mcwilliams@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)
https://apps.fas.usda.gov/psdonline/app/index.html#/app/home

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