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

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Commodity Intelligence Report

China Soybean Production Declines while Corn Experiences Record Production

USDA estimates China marketing year (MY) 2021/22 corn production at a record 273.0 million metric tons (mmt), up 5 percent from last year and 5 percent above the 5-year average of 260.3 mmt. Yield is estimated at a record 6.5 metric tons per hectare (mt/ha), up 3 percent from last year and 5 percent from the 5-year average. Area is estimated at 42.0 million hectares (mha), up approximately 0.7 mha or 2 percent from last year (see Figure 1). The major corn growing regions are in the Northeast provinces of Heilongjiang, Jilin, and Inner Mongolia (see Figure 2).

On the other hand, soybean production is estimated at 19.0 mmt, down 600,000 metric tons (mt) or 3.1 percent from last year, but still up 15 percent from the 5-year average of 16.5 mmt. The area is estimated at 9.6 mha, down 270,000 hectares (ha) or 2.7 percent from last year, but up 11 percent from the 5-year average of 8.7 mha. The yield is estimated at 1.98 mt/ha, down 0.5 percent from last year, but up 4 percent from the 5-year average of 1.89 mt/ha (see Figure 3). The major soybean growing regions are in the Northeast provinces of Heilongjiang, Jilin, and Inner Mongolia. Soybean is also significantly grown in the North China Plain (see Figure 4).

The major factors shaping USDA's estimate are the favorable growing season conditions and government policies encouraging continued increase in production especially for corn. The MY 2021/22 season has been generally characterized by favorable growing conditions across the major corn and soybean belt, the Northeast and North Central plains. In particular, the Northeast provinces of Heilongjiang, Jilin, Liaoning, and Inner Mongolia, where close to half of the nation's corn and soybeans are produced, experienced beneficial weather for a major part of the growing season (see Figure 5). The conditions facilitated rapid planting and crop establishment, boosting bumper crop expectations. Favorable weather contributed to increased biomass at an earlier stage. The satellite-derived Normalized Difference Vegetation Index (NDVI) phenological curves show favorable year-to-year differences (see Figure 6). USDA's satellite- and growing degree day-based (GDD) crop assessment models indicate that the corn crop is at advanced maturity and harvesting stages. Harvest began at the end of August and will continue through October.

In recent years there has been an increase in harvested area for both corn and soybeans across the major production provinces. The increasing trends are primarily attributed to changes in agricultural policy. However, during the MY 2021/22 season, the increasing

trend in harvested area only continued for corn while soybeans experienced a significant decline (see Figure 7). According to FAS/Beijing the decline in soybean area is reflecting a loss of area to corn production. Recent observations indicate that farmers are switching to corn in response to higher corn prices and an increase in the corn planting subsidy. According to industry sources in corn subsidies relative to soybean subsidies have increased. In Heilongjiang, the provincial government increased the corn planting subsidy for MY2021/22 while maintaining the soybean subsidy at the previous year's level. In addition, reduced cotton area in the Yellow River region due to low profits was expected to bolster corn planted area more than soybean area.

FAS/Beijing also reported a sharp increase in corn prices in 2020 and 2021, according to industry sources including the China JCI Consulting, resulting in increased corn acreage at the expense of soybeans, particularly in China's northeastern grain belt. Corn prices are currently near a six-year high, with the spot market price rising since January 2020 after being stagnant throughout 2019. The spot market price for soybeans has also been increasing since early 2020. However, the expected return on corn is more than double that of soybeans based on an estimated per unit yield of corn being 3.5 times that of soybeans. Approximately 75 percent of China's corn is used for feed, but the government is also strategically targeting incentives to corn processors and ethanol program initiatives.

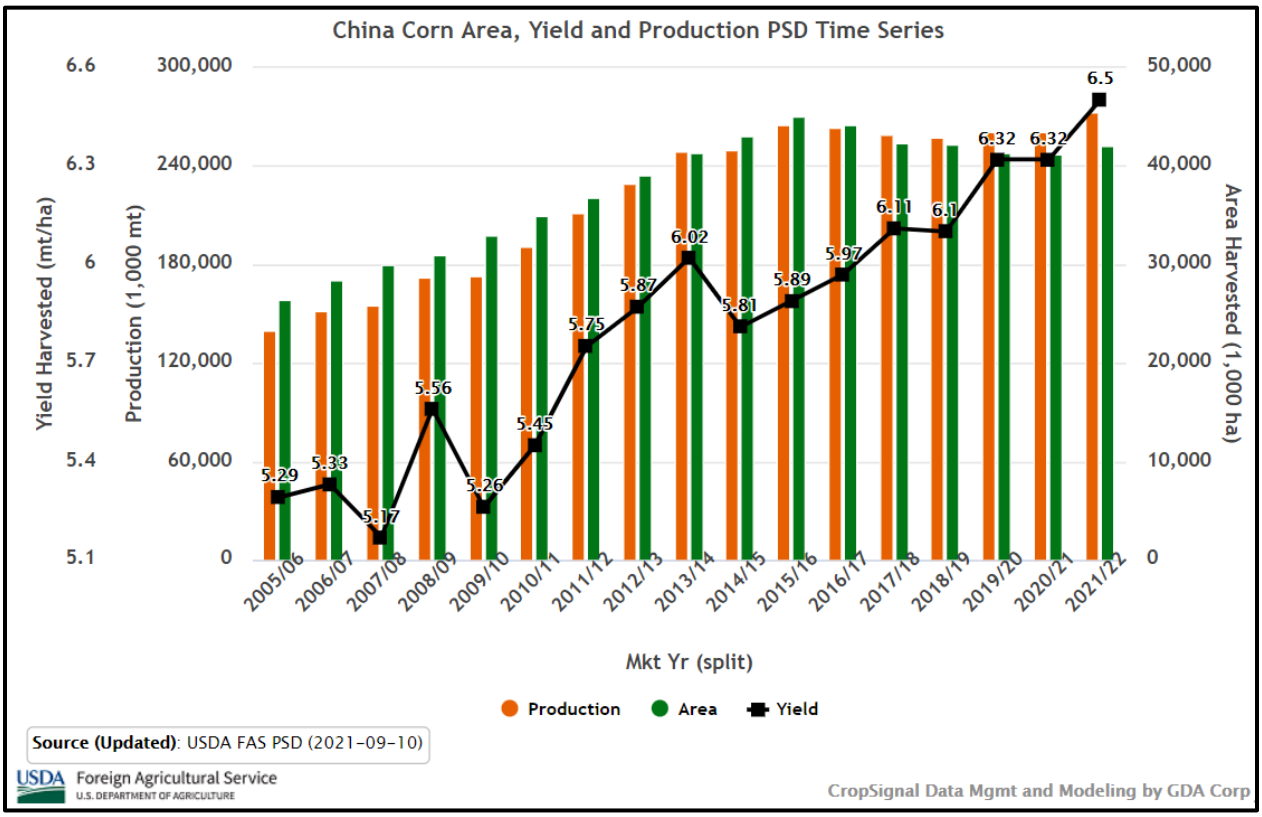

Figure 1. China Corn Area, Yield, and Production PSD Time Series. Source: USDA PSD Online

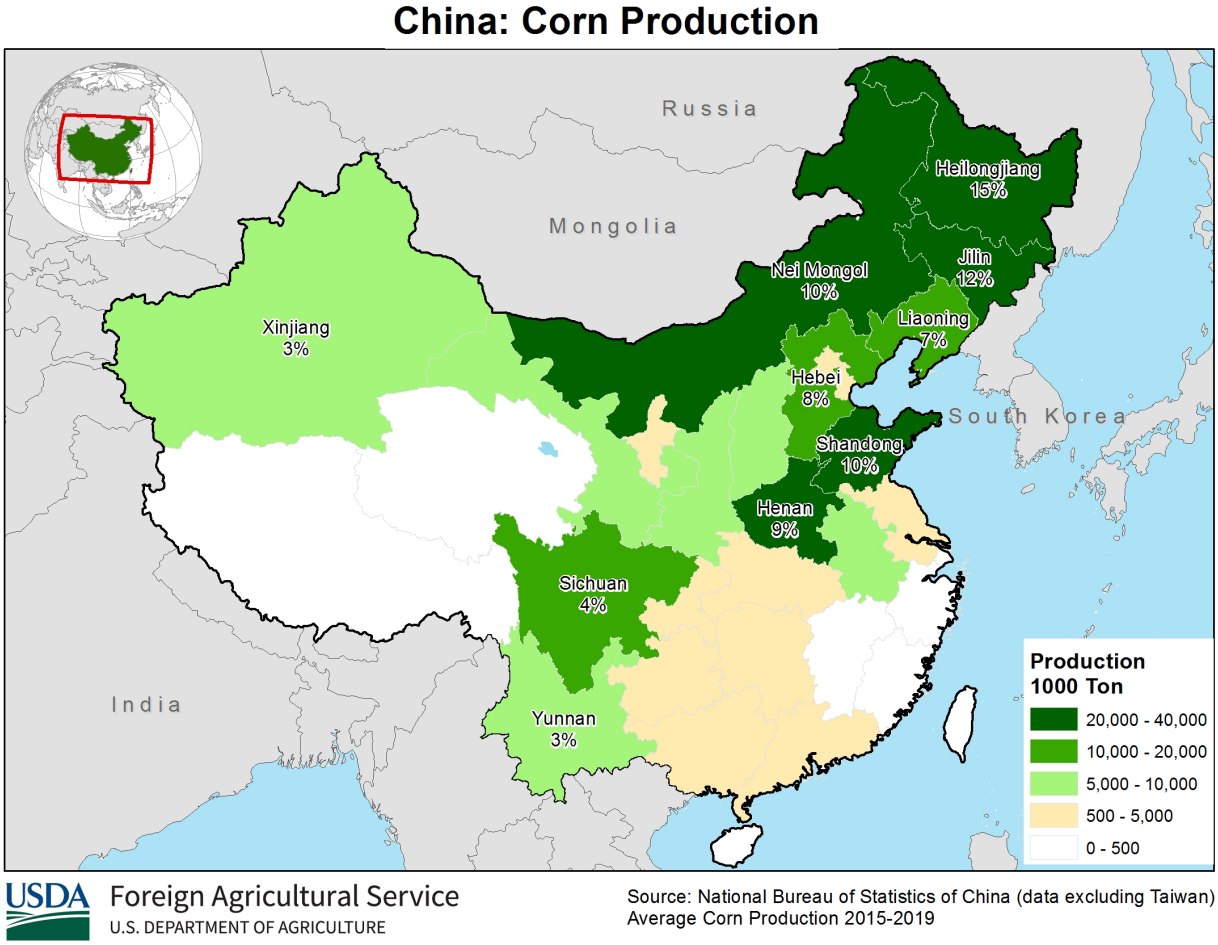

Figure 2. China Corn Production Distribution Map. Source: NBSC via USDA Crop Explorer

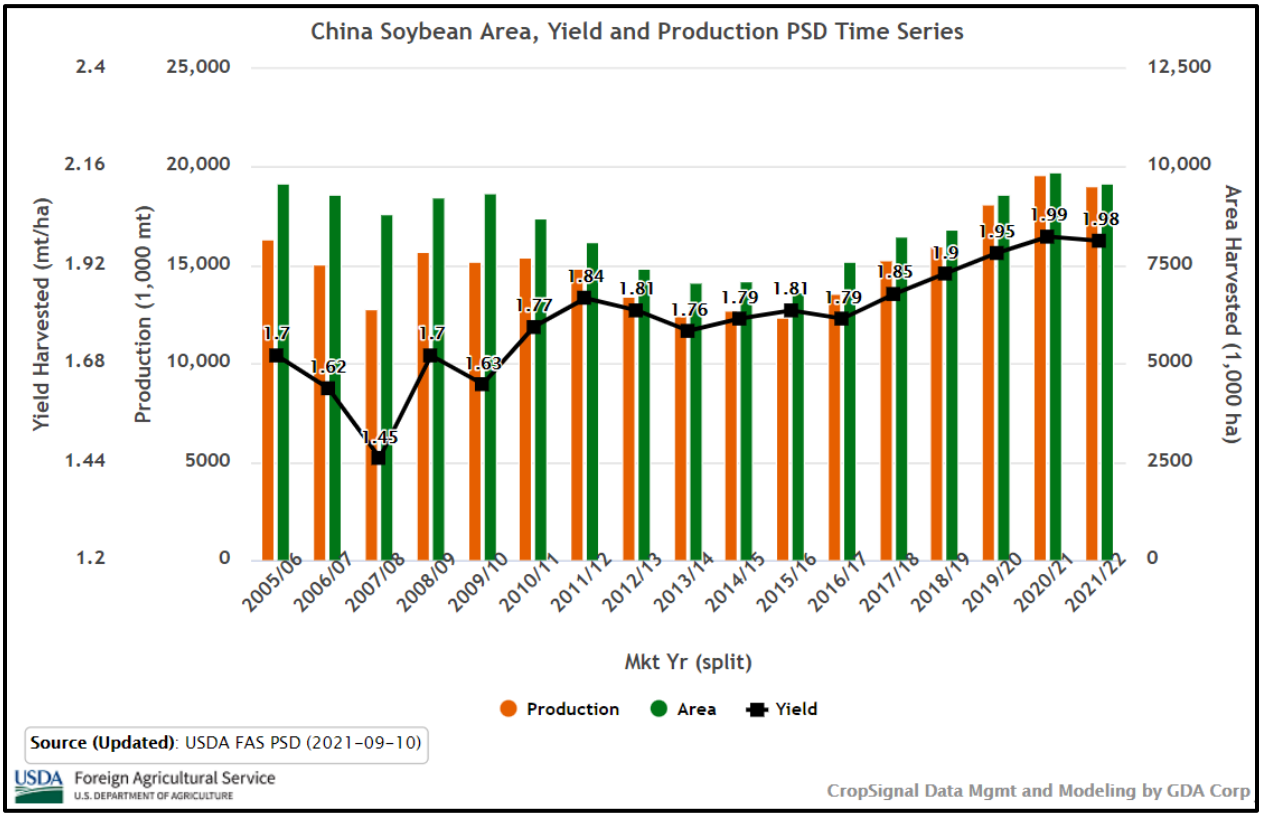

Figure 3. China Soybean Area, Yield, and Production PSD Time Series. Source: USDA PSD Online

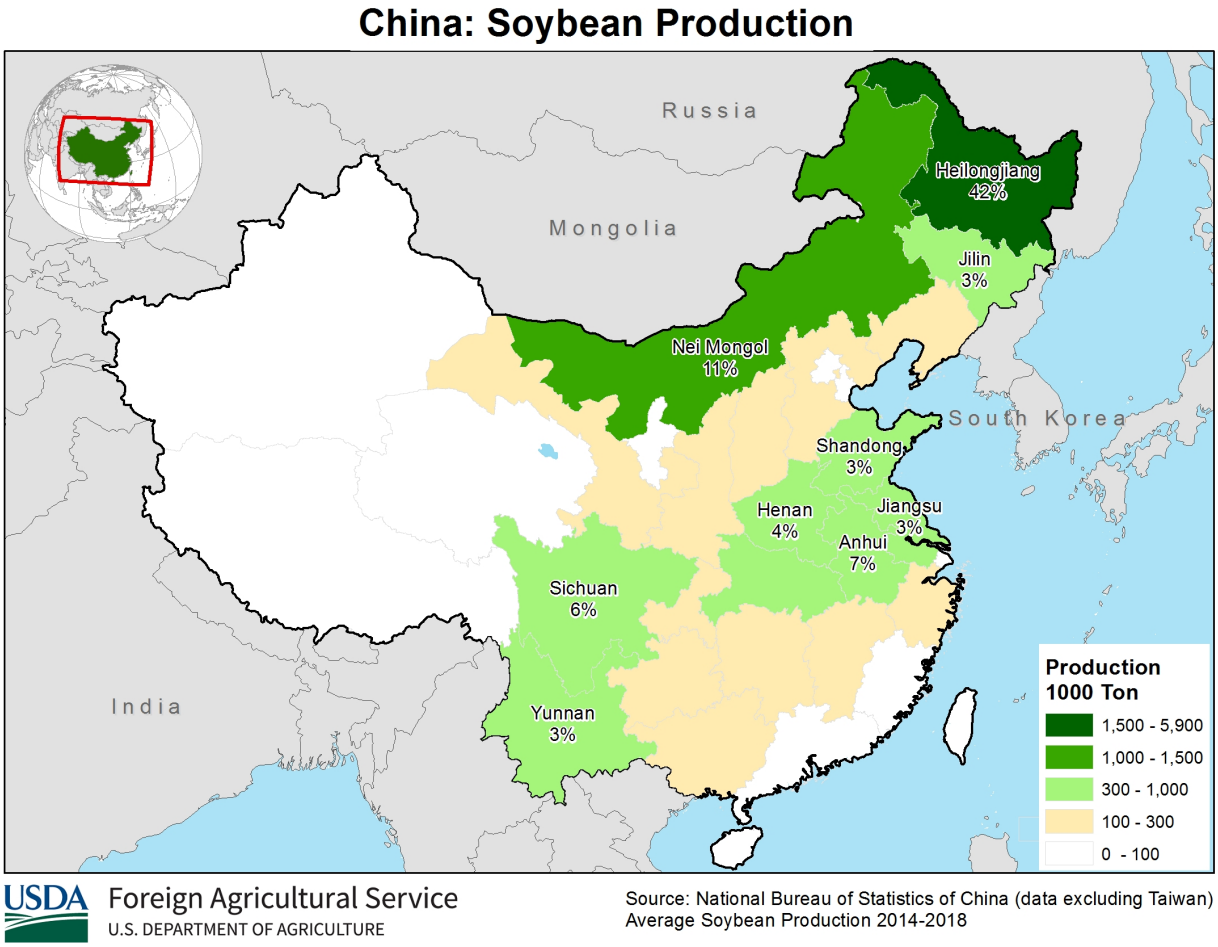

Figure 4. China Soybean Production Distribution Map. Source: NBSC via USDA Crop Explorer

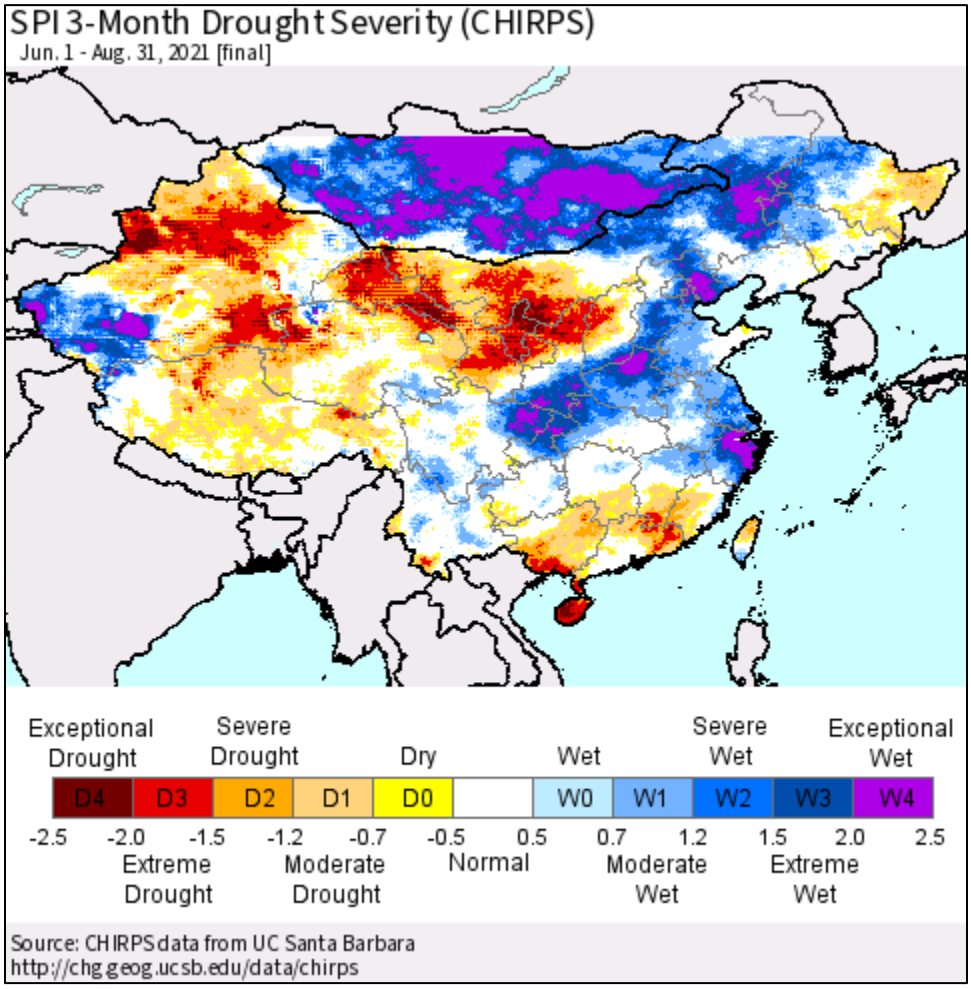

Figure 5. China Seasonal (June - August) Soil Moisture Distribution Map. Shows favorable conditions in the major corn and soybean growing regions in the east China Plains and the Northeast Provinces. Source: CHIRPS, UC Santa Barbara via USDA Crop Explorer

Jilin and Heilongjiang Province, China: NDVI Time Series Shows Crops at Advanced Maturity Stages

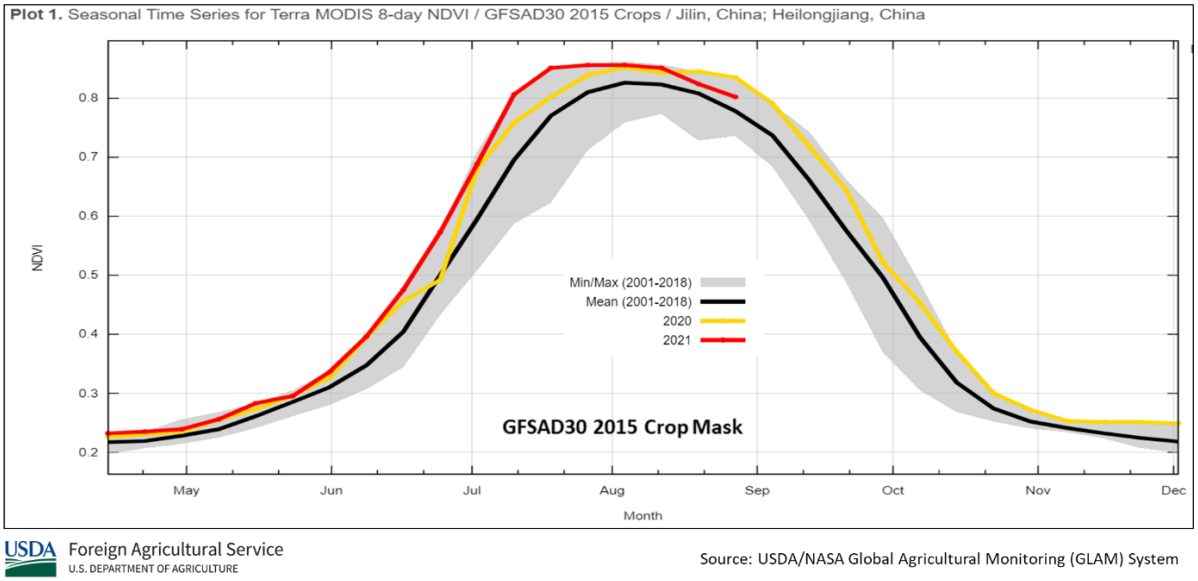

Figure 6. Jilin and Heilongjiang Province, China: The satellite-derived Normalized Difference Vegetation Index (NDVI) phenological curves show favorable year-to-year differences. Source: USDA/NASA GLAM, MODIS 8-day NDVI

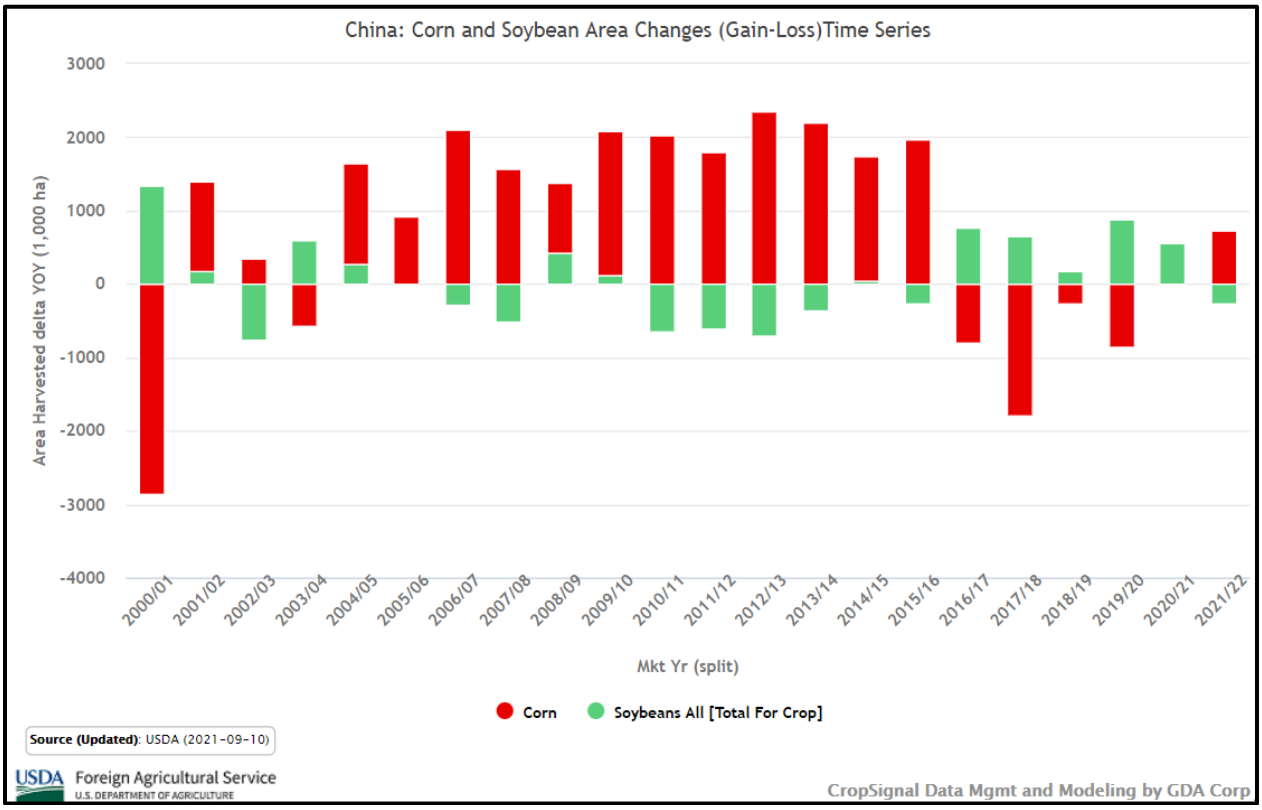

Figure 7. China Corn and Soybean Area Changes (Gain-Loss) Time Series. Source: USDA PSD Online

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Global Agricultural Information Network (Agricultural Attaché Reports)
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Crop Explorer
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Global Agricultural and Disaster Assessment System (GADAS)
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