

Foreign Agricultural Service

Global Market Analysis

International Production Assessment Division

Web: <https://ipad.fas.usda.gov>

October 28, 2024

Commodity Intelligence Report

Paraguay Crop Travel: Wheat Harvest and Early Summer Crop Planting

Crop analysts from FAS Washington and FAS Buenos Aires (who covers Argentina, Paraguay and Uruguay) traveled to Paraguay in September 2024 (see Figure 1) to observe the ongoing wheat harvest and *zafra* crop planting. The three largest crops grown in Paraguay are soybeans, corn, and wheat (see Figure 2). Paraguay also grows other smaller crops such as rice, cotton, sorghum, rapeseed and sunflowers. Paraguay is the world's sixth largest soybean producer with 2.6 percent of world production, but they are the world's third largest soybean exporter, accounting for 4 percent of exports. Generally, Paraguay has two summer crop seasons. The *zafra*, or main crop season, is from September to January and is followed by a minor crop season, the *zafrina*, which runs from February to July. Like in Brazil, Paraguay's *zafrina* corn crop is larger than the *zafra* corn crop. More detail by crop is below in Figure 3.

Soybeans is the largest crop produced, with 11.2 million metric tons (mmt) forecast for marketing year (MY) 2024/25, on an area of 3.85 million hectares (mha). This year's forecast is up 2 percent from last year's crop of 11.0 mmt, on an area of 3.75 mha. Soybeans are grown mostly in the *zafra* season (roughly 90 percent), which begins in late August to early September and ends in early January. Some of the soybeans (roughly 10 percent) are grown in the *zafrina* season, which runs from January through April.

Corn is the next largest crop produced. For MY 2024/25, 5.2 mmt is forecast on an area of 0.9 mha, up 63 percent from last year's crop (MY 2023/24) of 3.2 mmt on an area of 0.75 mha. Corn is mostly grown in the *zafrina* season, planted after the soybean harvest in February and harvested in July through August. Corn is also planted in the *zafra* season, but this is mostly grown as feed for feedlots. Area in MY 2023/24 was down from the previous year due to challenging drought conditions. *Cámara Paraguaya de Exportadores y Comercializadores de Cereales y Oleaginosas* (CAPECO), an industry source in Paraguay, published area for MY 2023/24 at 0.75 mha, which matches an independent assessment done by USDA. Using Google Earth Engine and regional training data, a crop classification was conducted for both corn seasons and the total planted corn area was estimated at 0.764 mha, supporting the lower year-to-year harvested area (see figures 4a and 4b). Sources note that MY 2024/25 area is expected to rebound due to an increased demand in country for grain for feedlots and ethanol production.

Wheat is the smallest of the three major crops, with a forecast of 1.3 mmt for MY 2024/25, on an area of 0.5 mha, up 46 percent from last year's crop of 0.9 mmt on an area of 0.47 mha. Wheat planting occurs in April through May and harvest occurs before soybean planting in August. If the weather cooperates during the planting and harvest windows, farmers will try to fit three crop seasons within one calendar year. For example, in one season wheat would be planted in April, harvested in August and then followed by soybeans planted in September and harvested in January. Then, the *zafra* corn would be planted in February and harvested in July. If there are any delays to the *zafra* or *zafrina* planting, this schedule becomes unfeasible.

Crop Conditions:

The majority of the wheat was in above average conditions due to a combination of favorable weather and new seed varieties finally receiving good weather needed for higher-than-average yields (see Figure 5). Some of the crop in northern growing areas is not in above average conditions, due to high temperatures and below-normal rainfall. Wheat harvest progress as of late September was about 50 percent complete (see Figure 6).

Planting for the *zafra* soybeans is underway and some of the earliest planted crops have emerged (see Figure 7). The crop is a few weeks delayed but due to the use of short season varieties, farmers should still be on track for normal harvest windows. Planting was generally done under favorable conditions due to sufficient soil moisture (see Figure 8). However, the rainfall was mostly concentrated in the southern regions and more will be needed across the country for emergence and establishment.

Zafra corn planting and emergence is also underway, but this is a small portion of the crop; most of the corn is grown during the *zafrina* season (see Figure 9). During Argentina's MY 2023/24 season, an insect called the leafhopper arrived and transmitted bacteria, which impacted the development of corn kernels. Leafhoppers, however, are currently not a big problem in Paraguay since the corn seeds used are similar to Brazilian varieties. Farmers in Brazil also routinely coexist with leafhoppers, and farmers in Paraguay apply insecticides more often. Last year's corn crop was estimated at a below average crop of 3.2 mmt, mostly due to unfavorable weather. Farmers in southern South America are concerned about the potential issues with the spread of leafhoppers.

The contributions of the USDA Foreign Agricultural Service's Office in Buenos Aires and assistance from Global Market Analysts in FAS Washington are gratefully acknowledged.

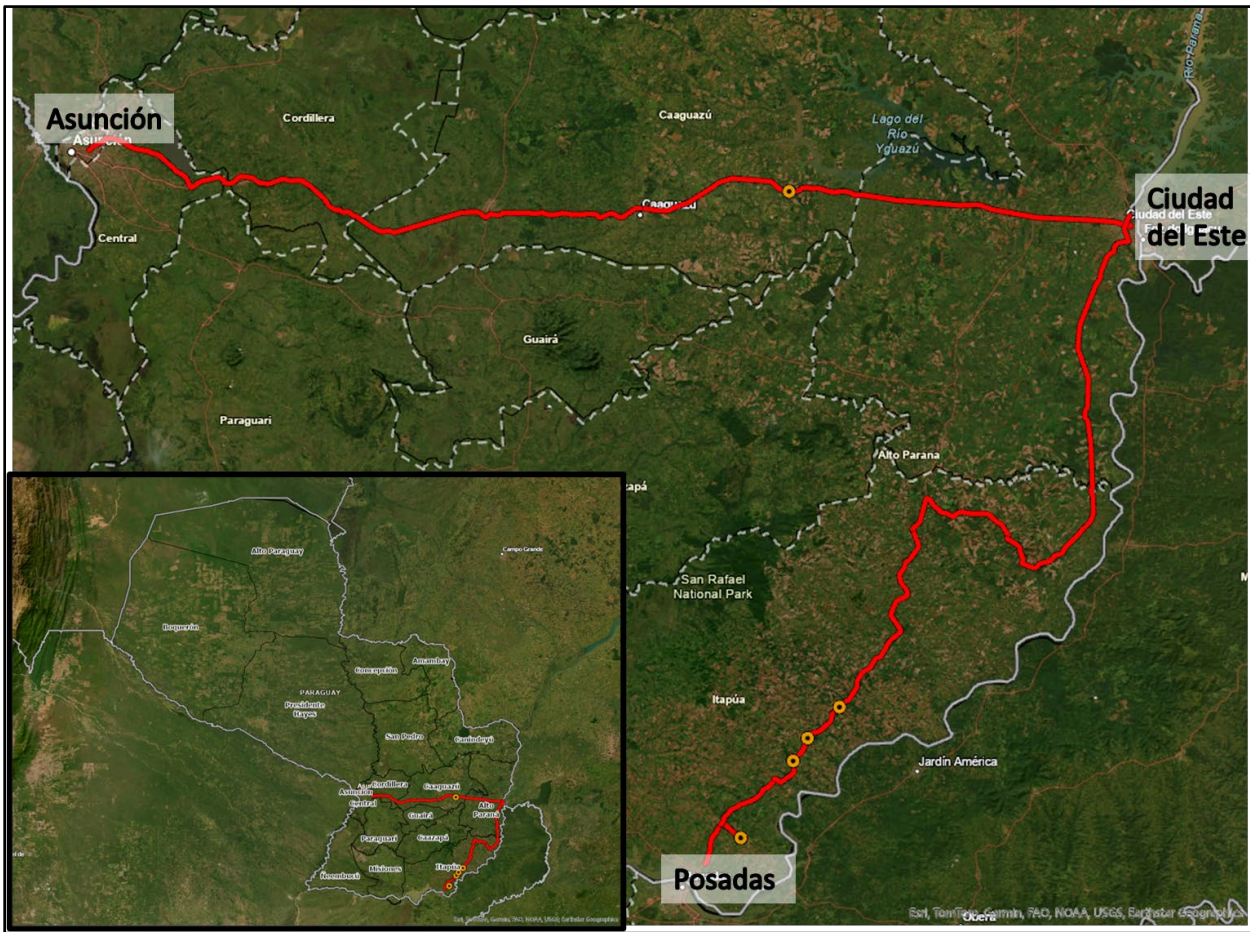


Figure 1. Paraguay Crop Trip Route in mid-September 2024, Source: USDA FAS GPS

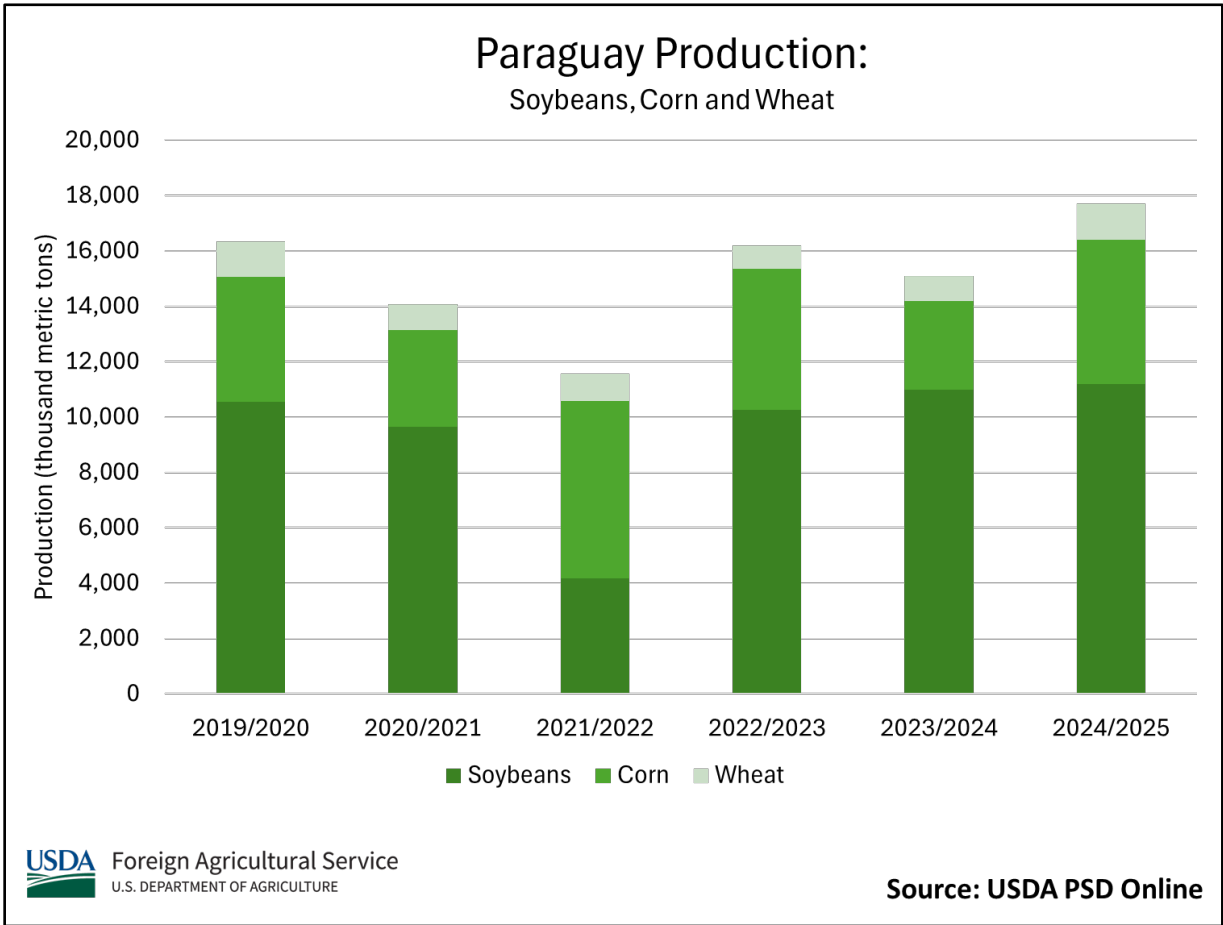


Figure 2. Paraguay Crop Production for Soybeans, Corn and Wheat, Source: USDA FAS Production, Supply, and Distribution Database

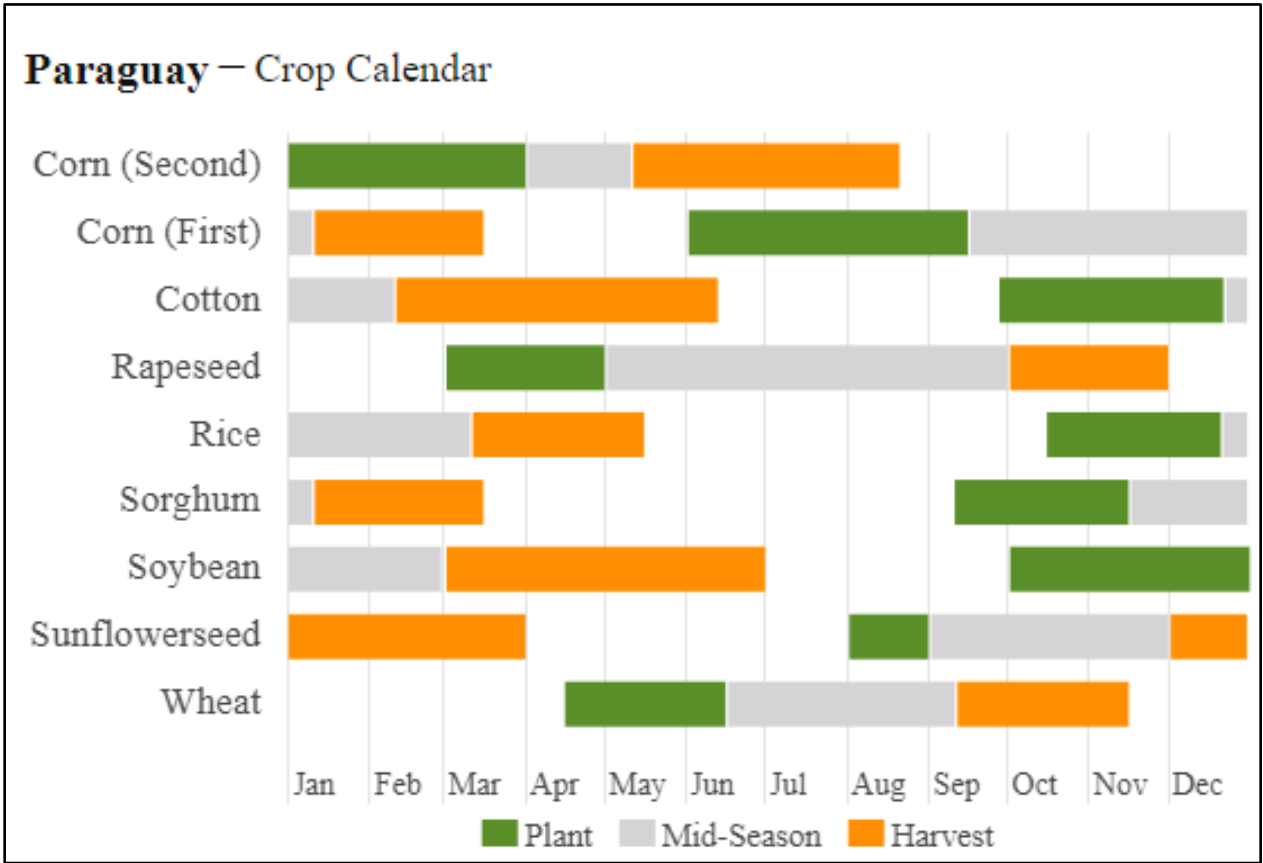
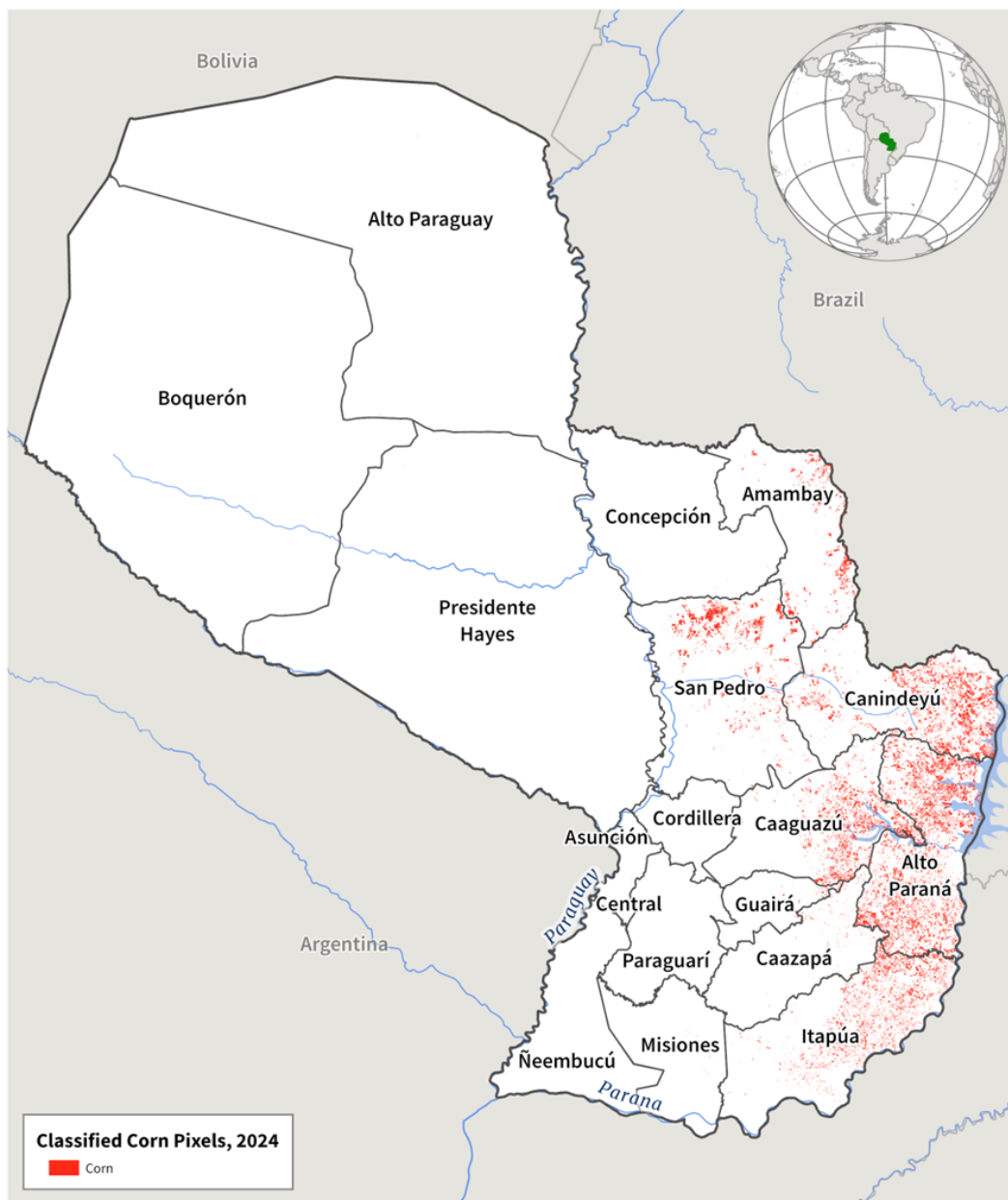


Figure 3. General Paraguay Crop Calendar

2024 Paraguay Corn Classification

Paraguay: Classified Corn, 2024



Source: Copernicus Sentinel Data (2024)

Figure 4a. Paraguay Corn Crop Classification

1. Imagery:

- Sentinel-2 Surface Reflectance (Harmonized), 10m resolution

2. Classification Tools: Google Earth Engine, Support Vector Machine (SVM) Classifier**3. Classified Imagery Dates (2023/24 Corn Seasons):**

- 1st Season: 12/10/2023 – 1/10/2024 [Peak NDVI for each pixel selected]
- 2nd Season: 4/10/2024 – 5/20/2024 [Peak NDVI for each pixel selected]

4. Training Data Points and Imagery Dates:

- WorldCereals Bahia 2020 collection
- Optical sampling of other landcover types in 2024

<u>State</u>	<u>Total Corn Area (ha)</u>
Alto Parana	256,536
Amambay	42,213
Caaguazú	109,843
Canindeyú	155,215
Itapúa	104,768
San Pedro	86,292
Remainder of PY	8,886
Total	763,753

Figure 4b. Paraguay Corn Crop Classification



Figure 5. Soon-to-be-harvested wheat in Caaguazú, Paraguay in September 2024



Figure 6. Harvest ongoing in Itapúa, Paraguay in September 2024

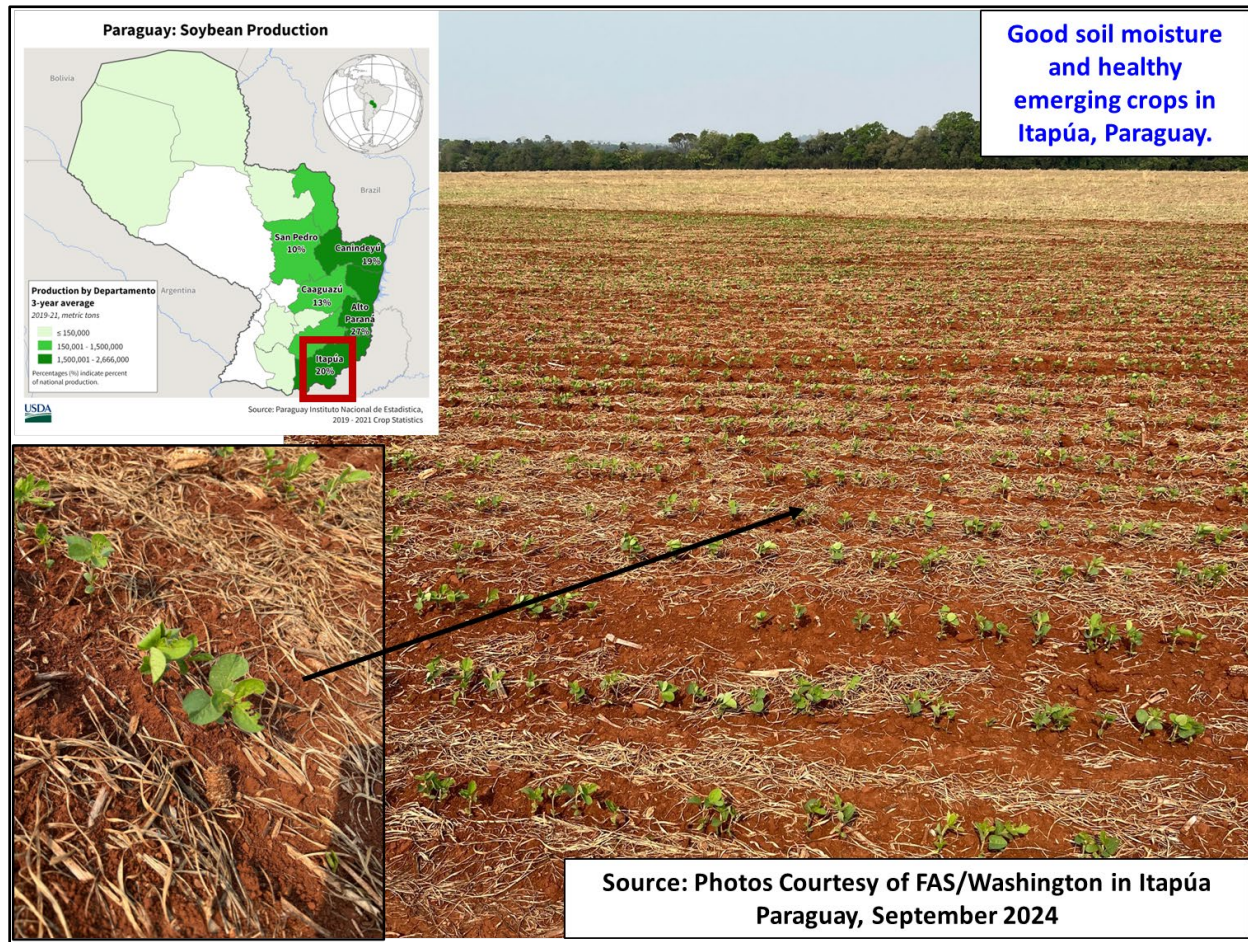


Figure 7. Emerging soybean crops in Itapúa, Paraguay in late September

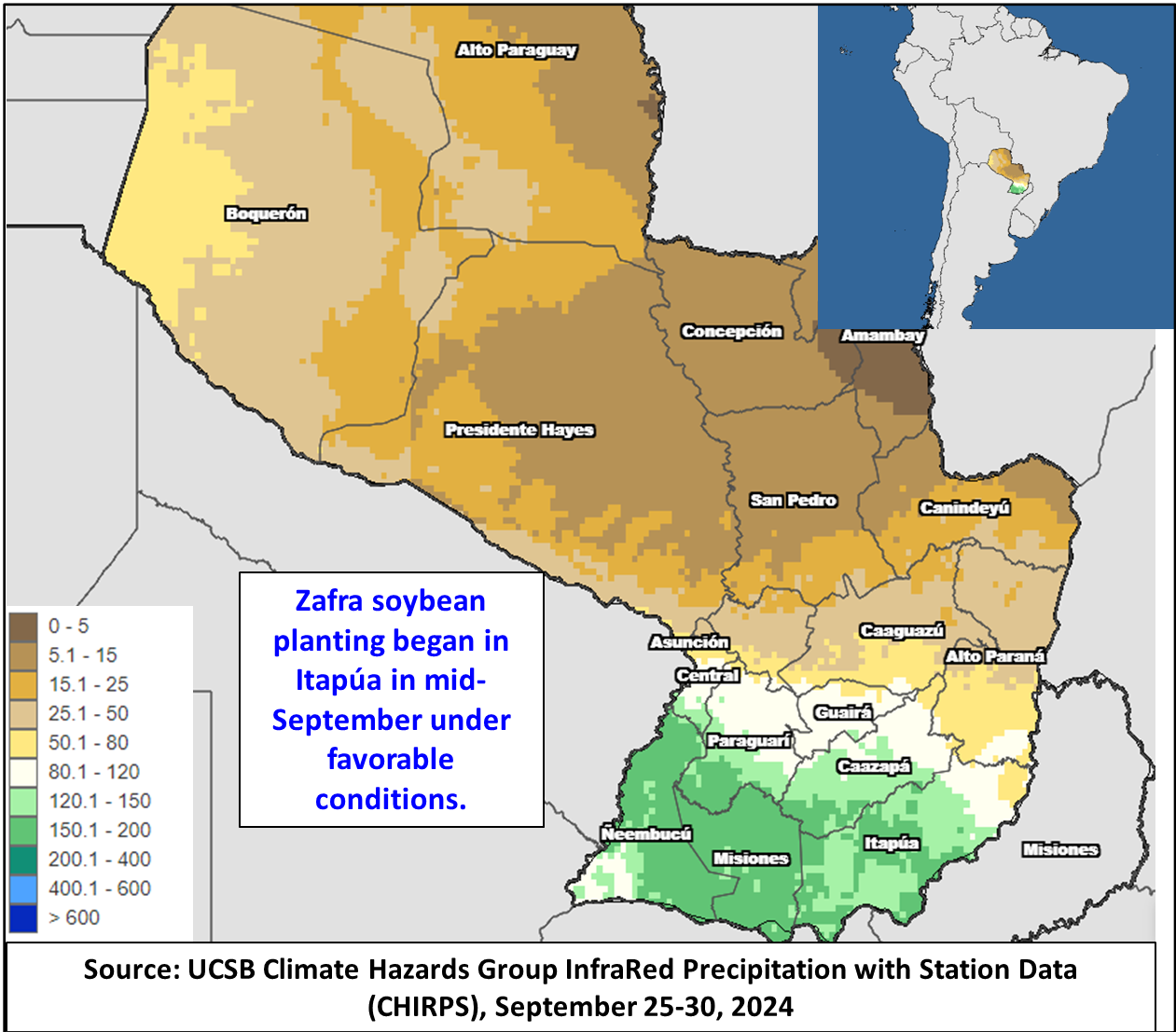


Figure 8. Rainfall was favorable during planting of the *zafra* soybeans, especially in Itapúa, Paraguay, as observed by FAS/Washington in late September.

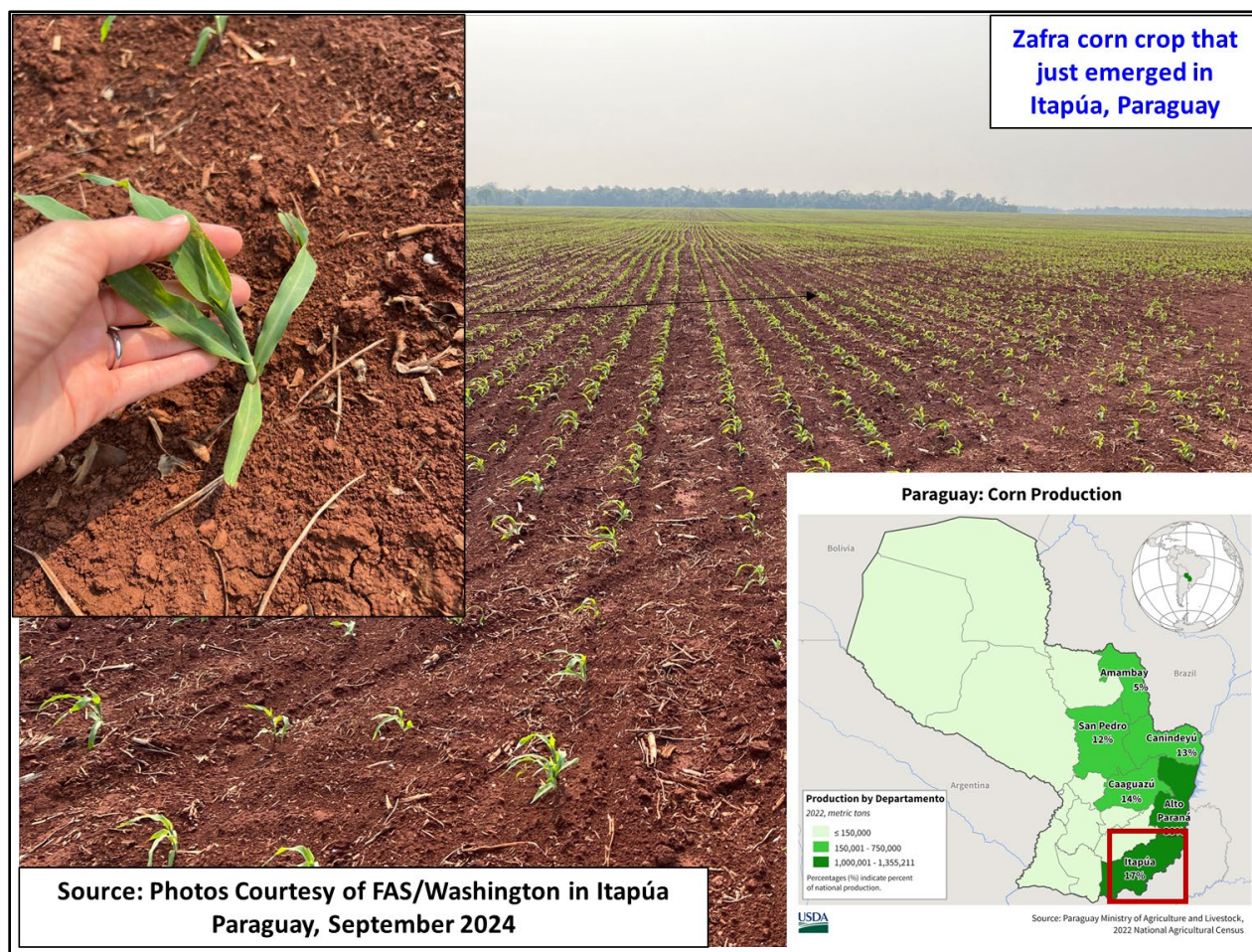


Figure 9. Zafra corn in Itapúa, Paraguay in September 2024. Zafra corn is a small portion of the total corn crop.

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