

**Required Report:** Required - Public Distribution

**Date:** April 17,2020

**Report Number:** PA2020-0001

**Report Name:** Grain and Feed Annual

**Country:** Paraguay

**Post:** Buenos Aires

**Report Category:** Grain and Feed

**Prepared By:** Ken Joseph

**Approved By:** Melinda Meador

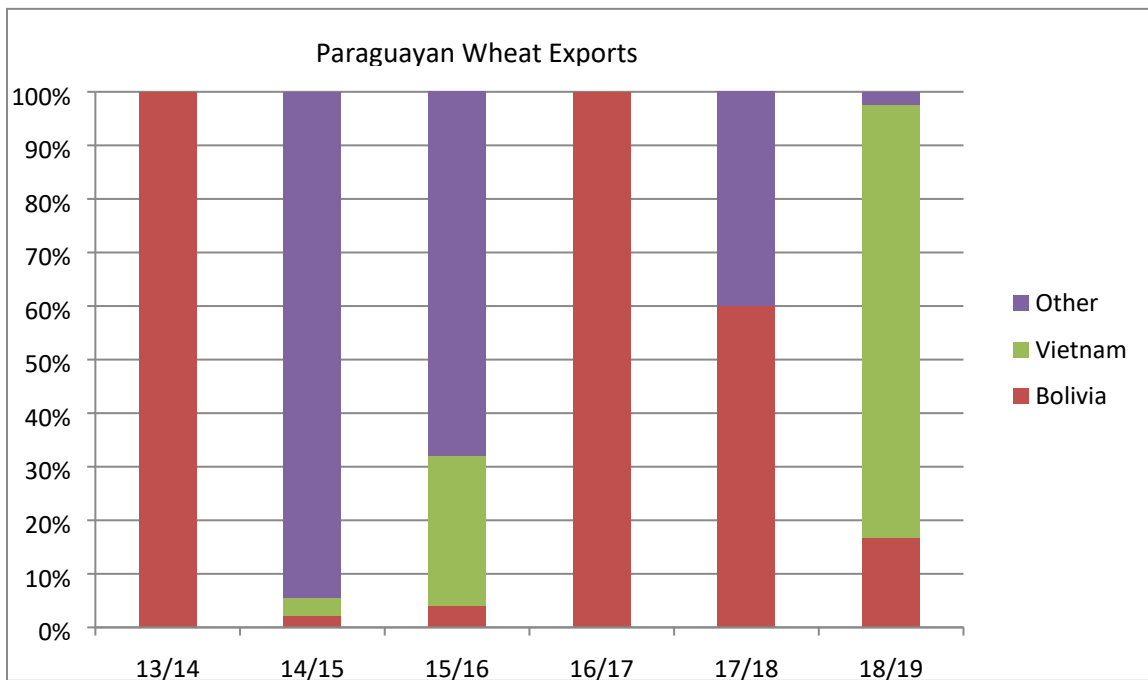
**Report Highlights:**

Wheat production in marketing year 2020/2021 is forecast up to 1.275 million tons, 21 percent more than the previous marketing season, on projections of an expansion in planted acreage. With stable domestic consumption, wheat exports are also expected to grow to 580,000 tons, 220,000 tons higher than in MY 2019/20. Corn production for MY 2020/2021 is forecast at 4.0 million tons, 5 percent higher than the previous year on increased yields, and with lower ending stocks, corn exports will rise by 200,000 tons. Positive returns to rice prices in 2019/2020 will spur farmers to increase acreage in MY 2020/21 by almost 4 percent. Production and exports are projected to remain stable.

**Wheat:** 2020/2021 wheat production is projected at 1.275 million tons, the largest in six years, as land left uncultivated with second crop soybeans due to a late soybean harvest may be planted with a wheat cover crop for weed control. Some moderate expansion may also take place in the primary wheat production area in southern Paraguay. Crop development may be impacted by reduced availability of chemical inputs due to sanitary controls on supply chain movements in response to covid-19 concerns. The quality of last year’s saved seed is reported to be good.

In 2020/2021, wheat domestic consumption is forecast at 670,000 tons, lower than the previous year as demand spikes during the Covid-19 crisis return to more normal levels in 2021. Retail outlets currently report strong demand for flour due to its low cost, versatility and long shelf life. Wheat flour consumption in Paraguay is historically consistent at approximately 60 kilos per capita.

In 2020/2021, wheat exports are projected at 580,000 tons, a significant increase from the previous year on forecast larger production. Brazil is expected to receive over 90 percent of exports, trucked primarily to the State of Parana, and to a lesser extent, the States of Santa Catarina and Rio Grande do Sul, with the largest volumes delivered between July and September prior to Brazil’s harvest. The remaining wheat exports, destined primarily to northeastern Brazil, Bolivia and Vietnam, an increasingly active export market since late 2018, will be barged via the Parana River to the Port of Rosario in Argentina or the Port of Nueva Palmira in Uruguay for loading onto larger vessels.

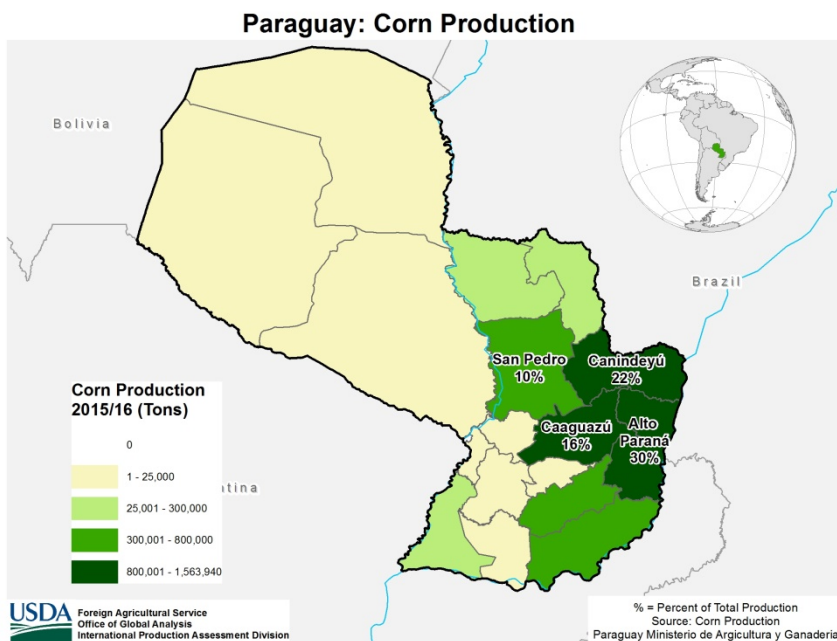


In 2019/2020, Paraguayan wheat exports through August 2020 are expected to reach 360,000 tons, primarily to Brazil. September 2019 to February 2020 exports totaled 174,000 tons with an additional 185,000 tons expected to ship in the next few months to Brazil. In general, Brazilian mills close to the border source wheat from Paraguay to expand supply sources beyond Argentina.

For 2020/2021 wheat ending stocks are forecast at approximately 200,000 tons, somewhat higher than the past several seasons based on smaller supplies, however, the final number will depend on total exports. According to industry sources, Paraguay's typical range of ending stocks is between 150-200,000 tons. The milling industry rolls over 120-140,000 tons of "old" wheat to blend with the new crop in the first four months of the marketing year with the remaining stocks held by town elevators, producers and farmers with saved seed.

**Corn:** 2020/2021, production, (June 2021 through May 2022), is forecast at 4.0 million tons, 5 percent higher than the previous marketing year. Planting area is projected unchanged at 720,000 hectares although several situations could modify this projection. For example, producer's in the central Departments of Canindeyú and San Pedro who were unable to plant corn due to a drought in February/March 2020 could increase acreage under crop rotation. Or, under favorable weather conditions in September/October 2020, farmers could plant summer soybeans in time to plant zafrinha soybeans in January/February 2021. If this were the case, zafrinha soybean area would rebound from the reduced area in 2019/2020, when some of the unplanted area was used for zafrinha corn. Under this scenario, corn acreage in the eastern central-south region could diminish to some extent.

Corn rotation with soybeans, instead of double-cropping soybeans, is growing more common in Paraguay due to positive corn returns which could see corn expansion continue an upward trend. Although the cost of producing corn, which ranges between \$550-650 per hectare, is somewhat higher than soybeans farmers can still gain \$70-100 more per hectare with corn. If soybeans need to be sprayed against rust, the returns are even higher. The replacement of zafrinha soybeans with corn is occurring primarily in the southeastern region of the country. However, sources report roughly 50-70,000 hectares of crops, much of it planted to corn, have also been established in the Chaco region in northern Paraguay.



Corn production for 2019/2020 is currently estimated at 3.8 million tons on lower yields following dry conditions in February and March in parts of the central-north crop area, a drop from early March production estimates of between 4.0-4.4 million tons. Farmers plant roughly 30-50,000 hectares of early corn in August/September, primarily for use as silage for cattle feed. Since only a small volume enters the commercial market, most local brokers do not count this production. The main corn crop, zafrinha, is planted in February/March following the summer soybean crop which is harvested in June/July. Although corn yields are improving due to the use of high-yielding hybrid seeds, the expected average yield for the zafrinha crop ranges between 5-6 tons per hectare with some 20-30 percent of the area planted with less expensive "homemade" seed producing lower yields.

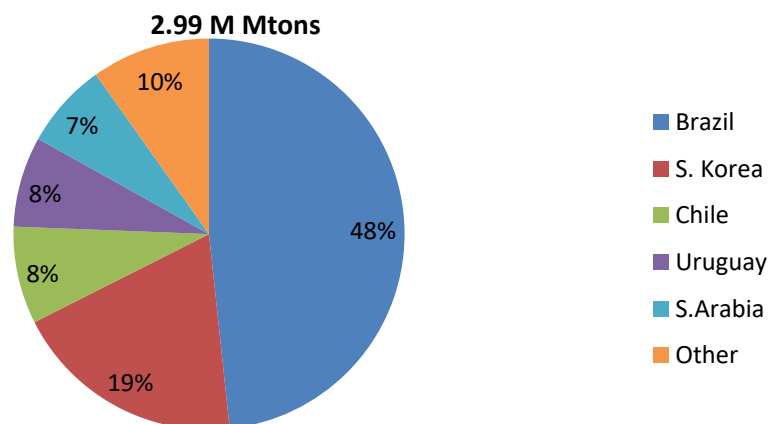
Corn consumption in 2020/2021 is forecast at a record 1.68 million tons based on expectations of an economic rebound following the Covid-19 crisis from the animal feed and biofuel sectors. Paraguay's bioethanol sector, consisting of two large and five smaller bioethanol plants, normally consumes about 1 million tons of corn, with the animal feed, seed and corn flour sectors consume the balance. Although feed demand in the livestock sector has been on the rise, contacts indicate that much of that growth is being filled by dried distiller's grains with solubles from Paraguay's two large ethanol plants.

Corn consumption in 2018/2019 and 2019/2020 is forecast lower than earlier expectations as the demand for gasoline plunges under Covid-19 quarantine conditions. Gasoline in Paraguay contains 25-27 percent bioethanol.

Corn exports in 20/21 are projected at 2.4 million tons, 200,000 tons more than forecast for 2019/2020 due to larger exportable supply as a result of higher beginning stocks and larger production. Brazil is expected to receive about 50 percent of total corn exports, followed by South Korea, Chile and Uruguay. In the past five years these four markets have accounted for approximately 80 percent of Paraguay's corn exports.

Corn exports in 2019/2020 are projected at 2.2 million tons. Brazil is expected to take roughly 850-950,000 tons for its swine and poultry companies in Santa Catarina and, to a lesser extent, in Parana and Rio Grande do Sul. Uruguayan feedlots and dairies typically purchase approximately 200-250,000 tons of corn annually delivered by truck or container if more cost effective. Corn exports to other markets, such as Chile and South Korea, may move by barge through the Parana River for transshipment in the southern ports in Argentina (Rosario) or Uruguay (Nueva Palmira). Other minor export markets include Saudi Arabia, Vietnam and Tunisia.

## Paraguayan Corn exports - CY 2019



Ending stocks for 2020/2021 are forecast at 232,000 tons, modestly lower than the previous year. Contacts indicate that in normal years corn ending stocks range between 100-200,000 tons, but in 2019/2020 the value could escalate to 300,000 tons due to an expected drop in consumption by bioethanol processors. Despite higher than normal stock levels for the previous two years based on large production and low exports, Post estimates beginning stocks for 2018/2019 at 1.03 million tons versus USDA's official beginning stocks for 2018/2019 at 1.68 million tons.

**Rice:** Production for MY 2020/2021 is forecast at a record high 750,000 tons, milled base, on 168,000 hectares. Brazilian seed varieties cover roughly 90-95 percent of the rice area. The average yield in 2019/2020 is expected at 6.8 tons per hectare. With production costs between \$1100-1300 per hectare and prices of \$210-220 per ton versus \$150-180 per ton in the past several years, rice producer's profitability has improved. Stronger returns for the 2019/2020 crop, which is approximately 70-80 percent harvested, are expected to sway farmers toward expanding planted area.

Although Paraguay has approximately 250 rice producers, most rice is produced by large companies with integrated mill facilities with more cost-efficient operations than smaller producers who generally lack the latest technology. Many of the less-efficient producers have abandoned operation over the past few years.

The southern Departments of Misiones, Itapua, Caazapa, and Neembucu are the center of rice production. Nevertheless, production is expanding beyond the existing several thousand hectares of rice in the central region of Bajo Chaco close to the Paraguay River with a rice mill planned nearby in Concepcion. In the absence of official data, establishing total planted area for rice in Paraguay is difficult. A variety of estimates among different sector associations and industry contacts place the amount from 150-165,000 hectares with some reporting as high as 180,000 hectares.

Paraguay's average rice yield normally runs between 6.0-6.5 tons per hectare, although some farmers have produced 10 tons per hectare. The highest yields are generally from fields planted early in August/September that benefit from long hours of sunlight. Red rice, the most widespread weed, remains a problem with some progressive producers adopting a rotational scheme of planting high-yielding soybeans for three years on rice fields in production for six years. Contacts indicate that the sector needs additional investment in field water management as well as logistics during harvest. The harvest generally begins in late December, with half finished by February and the other half finished by the end of April.

Post forecasts rice domestic consumption in 2020/2021 at 105,000 tons, milled base, a slight drop from 2019/2020 due to strong demand for rice under the Covid-19 crisis as a versatile, low cost and long shelf life staple food source. Once the pandemic is over, consumption is expected to return to normal levels. Although Paraguay does not have official data for rice consumption, industry estimates range between 150-200,000 tons annually, rough base.

More than 20 companies market rice in Paraguay, including 4-5 large ones, with generally stable price and consumption conditions. Supermarkets, grocery stores and distributors are the most common sales channels. 1-kilo bags are common in supermarkets and  $\frac{1}{4}$  and  $\frac{1}{2}$  kilo bags are sold by distributors primarily in the interior of the country where price and quality are lower. Retailers also sell from 30-kilo bags from which customers choose their quantity. The current retail price of rice in a large supermarket in Asuncion is about \$0.62 per 1-kilo bag.

Paraguayan rice exports in 2020/2021 are forecast at 630,000 tons, milled base, a 3 percent drop from 2019/2020. In calendar year 2019 Paraguay exported 689,000 tons of rice, milled base, to 40 different countries. Milled rice accounted for 53 percent of total exports, followed by brown rice with 28 percent, broken rice with 12 percent and paddy rice with 7 percent. Overall, Brazil accounted for 74 percent of total exports, particularly in exports of milled, brown and paddy rice. Other key markets include Chile, for purchases of broken and milled rice, the EU for brown rice, and Iraq for milled rice. Rice is primarily exported via trucks to Brazil. Exports to other markets are barged via the Parana River and transshipped at Uruguayan ports.

In an effort to expand its market opportunities as well as reduce its dependence on Brazil, Paraguay is seeking to increase exports to existing markets, such as Costa Rica, Guatemala, Panama and Mexico, which opened to Paraguayan rice imports in 2017. In 2018, Paraguay exported 20,000 tons of paddy rice to Mexico but only 625 tons of milled rice in 2019. However, exports in calendar year 2020 are reported to be significantly higher. Local brokers indicate that 80,000 tons of paddy rice divided in three shipments has been committed, with 25,000 tons already loaded. Paraguay has increased its rice exports ten-fold since calendar year 2008, displacing both Argentine and Uruguayan rice in the Brazilian market.

## **Statistical Tables**

Wheat	2018/2019		2019/2020		2020/2021	
	Sep 2018		Sep 2019		Sep 2020	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Begin Year						
Paraguay						
Area Harvested	485	485	480	465	0	530
Beginning Stocks	187	187	342	152	0	167
Production	1360	1160	1140	1050	0	1275
MY Imports	3	3	5	5	0	4
TY Imports	3	3	5	5	0	4
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	1550	1350	1487	1207	0	1446
MY Exports	538	538	450	360	0	580
TY Exports	505	505	450	360	0	580
Feed and Residual	100	50	100	50	0	50
FSI Consumption	570	610	580	630	0	620
Total Consumption	670	660	680	680	0	670
Ending Stocks	342	152	357	167	0	196
Total Distribution	1550	1350	1487	1207	0	1446
Yield	2.8041	2.3918	2.375	2.2581	0	2.4057
(1000 HA) ,(1000 MT) ,(MT/HA)						

Corn	2018/2019		2019/2020		2020/2021	
	Jun 2019		Jun 2020		Jun 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Begin Year						
Paraguay						
Area Harvested	750	680	800	720	0	720
Beginning Stocks	1685	1685	595	210	0	300
Production	3700	3618	4400	3800	0	4000
MY Imports	10	10	10	10	0	12
TY Imports	10	10	10	10	0	12

TY Imp. from U.S.	0	0	0	0	0	0
<b>Total Supply</b>	5395	5313	5005	4020	0	4312
<b>MY Exports</b>	2900	2900	2000	2200	0	2400
<b>TY Exports</b>	2559	2259	2500	2500	0	2400
<b>Feed and Residual</b>	600	500	800	520	0	550
<b>FSI Consumption</b>	1300	1050	1500	1000	0	1130
<b>Total Consumption</b>	1900	1550	2300	1520	0	1680
<b>Ending Stocks</b>	595	210	705	300	0	232
<b>Total Distribution</b>	5395	4660	5005	4020	0	4312
<b>Yield</b>	4.9333	5.3206	5.5	5.2778	0	5.5556
(1000 HA) ,(1000 MT) ,(MT/HA)						

Rice, Milled	2018/2019		2019/2020		2020/2021	
	Jan 2019		Jan 2020		Jan 2021	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Market Begin Year						
Paraguay						
Area Harvested	150	155	158	162	0	168
Beginning Stocks	136	136	36	40	0	19
Milled Production	647	693	657	737	0	750
Rough Production	966	1034	981	1100	0	1119
Milling Rate (.9999)	6700	6700	6700	6700	0	6700
MY Imports	2	2	2	2	0	2
TY Imports	2	2	1	2	0	2
TY Imp. from U.S.	0	0	0	0	0	0
<b>Total Supply</b>	785	831	695	779	0	771
<b>MY Exports</b>	689	689	600	650	0	630
<b>TY Exports</b>	689	689	600	650	0	630



<b>Consumption and Residual</b>	60	102	60	110	0	105
<b>Ending Stocks</b>	36	40	35	19	0	36
<b>Total Distribution</b>	785	831	695	779	0	771
<b>Yield (Rough)</b>	6.44	6.671	6.2089	6.7901	0	6.6607
(1000 HA) ,(1000 MT) ,(MT/HA)						

**Attachments:**

No Attachments