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Post: Buenos Aires

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Report Highlights:

Paraguayan wheat exports in marketing year (MY) 2022/2023 are forecast up at 280,000 metric tons as a result of a projected larger production of 1 million metric tons (MMT). Post projects a similar acreage, but somewhat higher yields. Exports of corn in MY 2022/2023 are forecast at 2.8 MMT as production returns to more normal levels. In MY 2021/2022 corn planted acreage, production, and exports are all forecast at record levels with 6.4 MMT of production on 1.2 million hectares, leading to projected exports of 4.4 MMT. Exports of rice in MY 2022/2023 are forecast to recover to 630,000 metric tons, milled basis, following disappointing results in MY 2021/2022, when a severe drought negatively affected production and are expected to lower exports to 500,000 metric tons.

Wheat

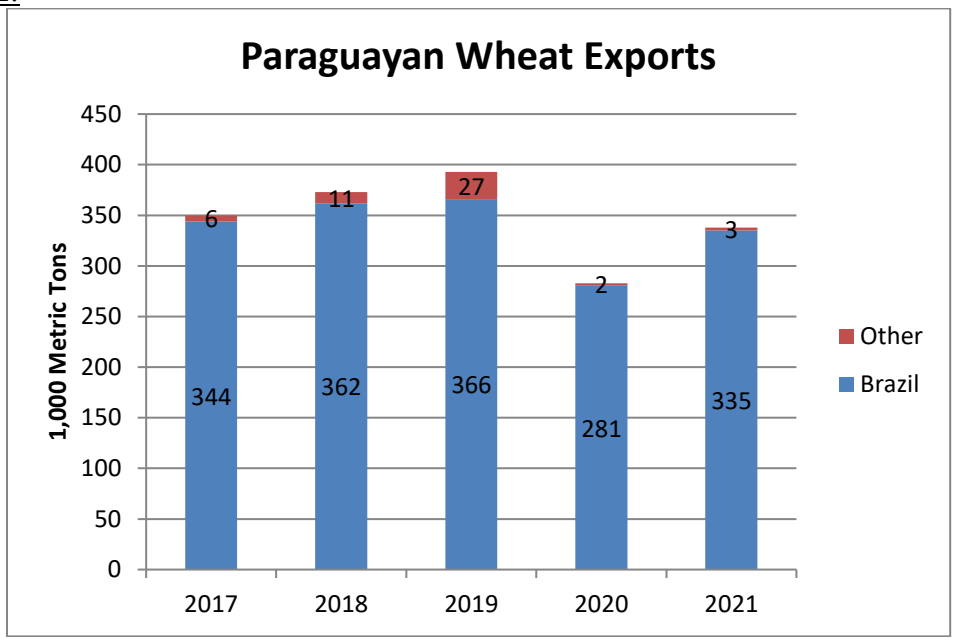
Production in marketing year (MY) 2022/2023 is forecast at 1 million metric tons (MMT), higher than the previous crop season and similar to MY 2020/2021. The area is expected to remain unchanged at 450,000 hectares despite projected positive margins due to high world wheat prices, that should be a stimulus for planting more area. One constraint is wheat's planting window in Paraguay. It can follow second crop soybeans, but not second crop corn, which requires more time before harvest. The severe drought that affected the main soybean crop in MY 2021/2022, constrained the availability of seed to plant the second soybean crop, which is normally harvested in April-May, just in time to plant wheat. This situation forced many farmers to plant a larger zafrinha acreage of corn which it is normally harvested later in June/July, after the wheat planting window is over. Therefore, the availability of area coming from second soybean crop will be much smaller than normal and thus will limit any possible expansion of wheat area. Currently, corn and soybeans prices are strong. Local wheat prices in late March 2022 were roughly $355 per metric ton at the mill, but farmers are concerned that future prices may decline. Paraguayan wheat producers do not have good options to hedge their wheat production, and they generally are reluctant to forward sell a large percentage of their expected production because of the financial risk of signing such contracts when faced with the possibility of a poor harvest.

Despite the financial impact of the poor soybean harvest, farmers will generally apply normal amounts of herbicides, fungicides, and insecticides to the coming wheat crop. Input distributors indicate that, as is customary, farmers purchased these products a year before, at the same time they purchased inputs for second crop corn and soybeans. Once exception is fertilizer, prices of which more than doubled in less than a year and thus farmers are expected to reduce their applications somewhat. Current direct costs for a hectare of wheat in Paraguay in MY 2022/2023 is estimated at USD $500 of which $200 is fertilizer.

Wheat is generally planted in the southeastern part of the country, concentrated primarily in Itapúa and center-south of Alto Parana. Wheat production in Paraguay is considered to be risky due to frosts and sometimes excessive rainfall, but certain farmers are very committed to wheat production, in part because the wheat harvest provides farmers with a source of funds shortly before the soybean planting season which requires a significant investment. In fact, productivity in MY 2021/2022 was hurt due to a significant number of strong frosts. Yields were somewhat lower than usual but resulted in good quality wheat. However, there were 50,000-70,000 tons of poor-quality wheat that was rejected by millers and purchased at fair prices by the animal feed industry due to a shortage of corn in the market.

In MY 2022/2023 Paraguayan wheat exports are forecast at 280,000 tons, with practically all exports going to Brazil. Wheat is exported by truck, primarily to the Brazilian State of Parana, which borders Paraguay and hosts the largest concentration of flour mills in Brazil. These mills mix Paraguayan wheat with local wheat to improve the quality of the flour as it normally has higher protein and better gluten quality. Paraguay also regularly exports between 15,000-30,000 tons of wheat flour per year, with Brazil again being the main destination followed by smaller volumes to Bolivia.

Figure 1:



Source: Trade Data Monitor

Total domestic consumption of wheat in MY 2022/2023 is forecast at 720,000 MT, in line with consumption figures for the previous two years. There are more than thirty flour mills with a processing capacity of 1.2 million metric tons of wheat that normally use about 600,000 tons a year. Roughly 15 percent of the flour sold domestically is in 1 and 5 kilogram bags intended for retail sale, and the rest is distributed in 25 and 50 kilogram bags to bakers and pasta manufacturers. The most important center of flour milling in Paraguay is near the town of Doctor Juan Eulogio Estigarribia, in the center of the country's eastern region. Flour mills owned by members of the Mennonite community in Paraguay account for approximately 60 percent of the nation's production. Some 50,000 tons of wheat is consumed to produce flour for export. While Paraguayan wheat and flour is generally prized for its relatively high quality in the region, some poorer quality wheat that doesn't meet domestic standards is normally exported or used for animal feed.

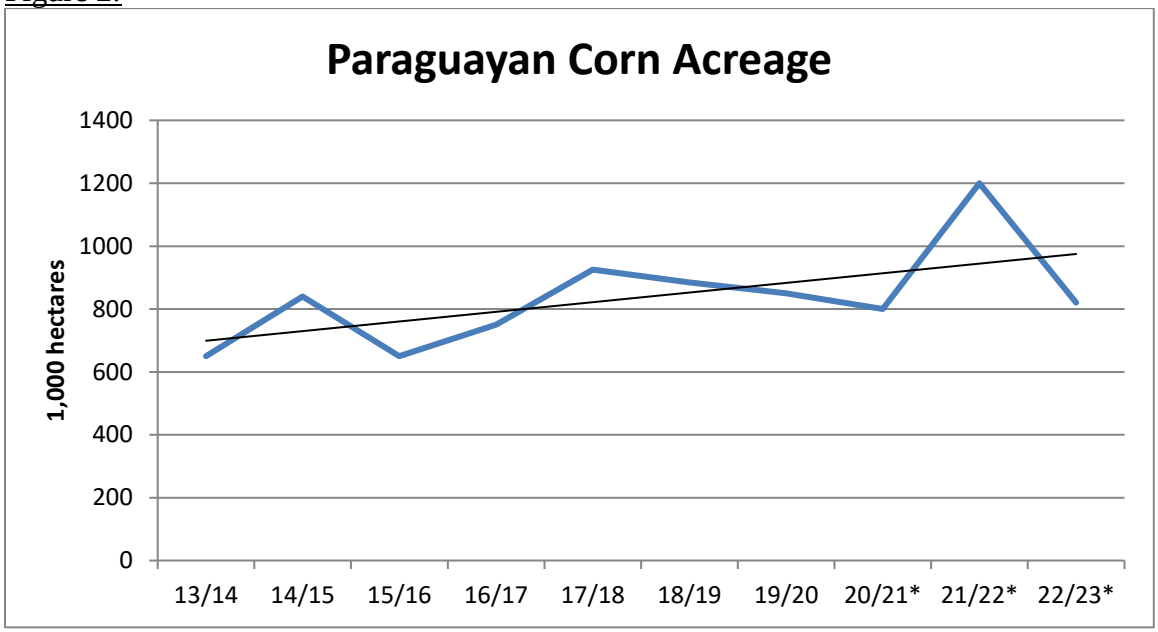
Industry contacts report that normal ending stocks range between 100,000 to 150,000 MT (or about 2-3 months of use) in August before the harvest of the new crop. This is significantly lower than the official USDA estimates of more than 600,000 MT.

Corn

Paraguayan corn production in MY 2022/2023 is forecast at 4.5 MMT, a significant drop from the abnormally high production seen in MY 2021/2022. This is due to a projected smaller planted area as the zafrinha soybean crop is expected to return to a more normal acreage if weather conditions allow. Assuming normal weather conditions, Paraguayan producers should be able to plant the main soybean crop on time in the second half of

2022 which would then be harvested in January 2023. With good soybean seed supply and normal weather, the corn area is forecast to drop at 820,000 hectares, more in line with historic levels. Many farmers in MY 2021/2022 will have rotated their soils in a greater proportion than normal so they will not be in need to expand corn planting next season. In MY 2021/2022 the corn planted acreage rose dramatically, primarily due to the severe drought in late 2021 and early 2022 which greatly diminished the soybean crop and thus the availability of seed to plant the zafrinha crop in January and February. As a result, farmers opted to increase the corn area. Although corn acreage has been growing year after year, most farmers still prefer to produce as much soybeans as possible, because of the preference given to elevators and exporters. In contrast with Argentina, production costs are quite similar as both corn and soybeans crops demand large volumes of fertilizer in Paraguayan soils.

Figure 2:



Source: FAS PSD and FAS Buenos Aires
** Post estimation*

Paraguay has two distinct corn crops. The summer crop, called zafra which is planted in August and harvested in late January, normally covers a small acreage which ranges between 30,000-60,000 hectares every year. With normal weather, farmers can expect to produce average yields of about 8 tons per hectare. Some beef and dairy producers plant corn during this time to make silage for feed. Additionally, some small local corn seed producers, who produce seed called *casera*, meaning home-made, plant during this early season to have seed ready to plant the second corn crop called zafrinha in February of each year. During the zafrinha crop, farmers plant significantly more corn, usually planting in fields that were recently harvested from soybeans. Zafrinha corn production has grown in popularity, partially as farmers have begun to take into account the long-term negative consequences of growing two soybean crops in a single year and see the benefits of crop rotation between corn and soybeans. Average yields in the zafrinha crop are highly variable and dependent on the weather which can easily and rapidly change the

condition of the crop. Generally, farmers expect yields to range between 5-6 tons per hectare.

During normal years, roughly 80 percent of the corn area is planted with high-quality commercial hybrids developed by multinational seed companies. Most seed is imported from Brazil. The remainder is casera seed produced locally. In MY 2022/2023 contacts believe that due to the lack of abundant seed in Brazil and the higher costs of production, the use of lower quality seed could expand significantly as its cost is about one third of a branded hybrid seed, despite yielding less.

The availability of fertilizer for the corn crop in MY 2022/2023 remains a concern. Retail prices of fertilizers have more than doubled in the past year, greatly increasing production costs. While a significant portion of the coming year's fertilizer needs are already in country or under contract, fertilizer companies still need to contract additional volume and accept delivery of priorly purchase shipments. This may prove more challenging than normal due to global supply and distribution challenges. Farmers intend to plant regardless of the volume of fertilizer they are able to afford or obtain and hope that soil nutrient stocks will allow for a successful year.

Post projects the MY 2021/2022 corn production at 6.4 MMT, the highest on record. This crop, which should be harvest in June-July will set a record for the largest planted acreage ever at 1.2 million hectares and has benefited from the use of high levels of inputs and excellent weather to date. The average yield for the whole crop is estimated at 5.33 tons per hectare. Corn in Paraguay is generally harvested with 22-25 percent moisture, and it is then dried to 14 percent.

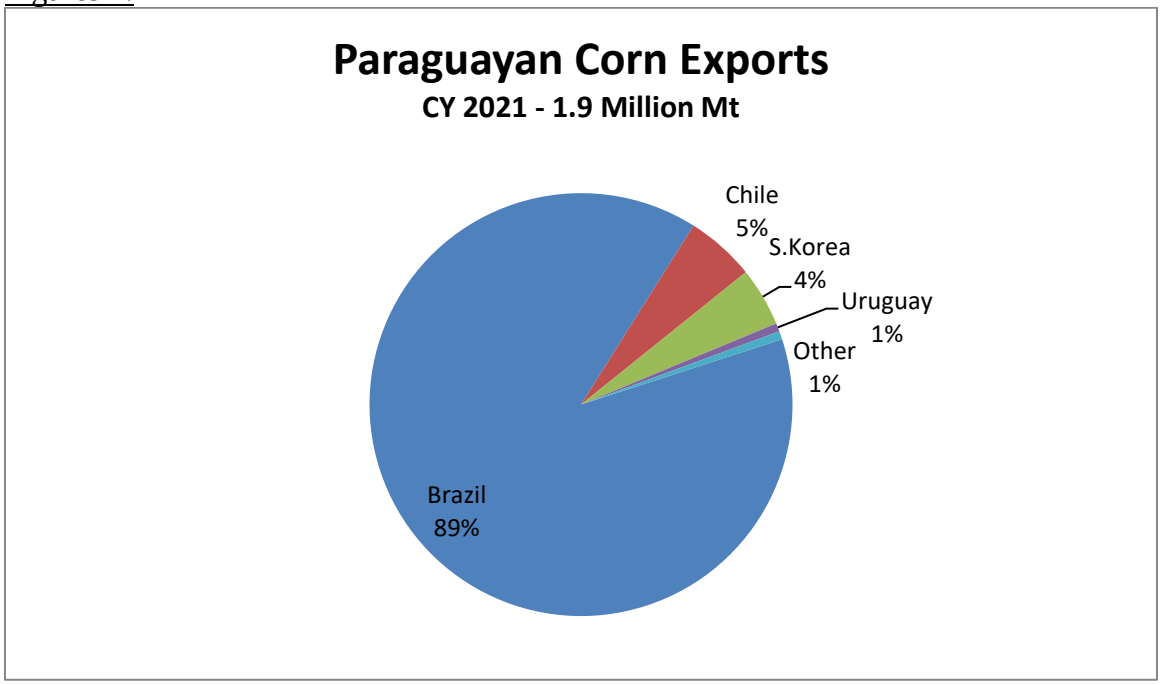
Figure 3:

Zafrinha corn near San Cristobal, Alto Parana Department, Paraguay – March 2022
Source: FAS Buenos Aires

Corn exports in MY 2022/2023 are forecast at 2.8 million tons, significantly lower than in the previous year, but in line with historic averages for good crop years. As usual, most exports are expected to be trucked to Brazil to supply poultry and pork producers. The remaining corn will be exported primarily to other South American countries, with a few shipments outside the region. New investments in ethanol and meat packing plants in Brazil, very close to the border with Paraguay, are expected to increase local demand for corn beginning in MY 2023/2024. The

Corn exports in calendar year 2021 totaled 1.9 million tons. The three main exporters were a local distributor of agricultural inputs, followed by a Brazilian agricultural cooperative with a large presence in Paraguay and a multinational grain trader. The following graph shows Paraguay's corn exports in 2021 by destination (in percentage of volume):

Figures 4:



Source: Post with Trade Data Monitor

Corn exports in MY 2021/2022 are forecast at a record 4.4 million tons as a result of an expected bumper crop. There are some discussions if Paraguay will be able to handle such a large export of corn, but a significantly smaller soybean crop (less than half of its normal volume), will make room at town elevators, trucking companies, port facilities and barges. A major limiting factor is the capacity of Brazilian customs to process a volume of incoming trucks

Although the Production, Supply and Distribution table does not take into account broken corn trade (HTS 110423), Paraguay imported 116,000 MT of broken corn from Argentina in the second half of 2021 and this was primarily used by the bioethanol industry. The

impact of Argentine broken corn has also been felt on the export side as it has displaced some Paraguayan corn exports to Uruguay.

Corn consumption for MY 2022/2023 is forecast at 1.9 MMT, unchanged from the previous year. The main consuming sector by far is the domestic bioethanol industry which consumes roughly 1 million tons of corn per year. The sector also utilizes some sugarcane during 2-3 months a year. The consumption of the livestock sector is expected to remain quite stable. Corn use in 2020 and 2021 was strong as severe droughts forced cattlemen to use more feed alternatives to the regular pastures which were less productive. The poultry and dairy sectors are facing high input prices, especially feed, and a strong competition of products from neighboring countries which have lower retail prices. The feedlot sector is growing, but Paraguay's cattle herd has been diminishing over the past few years,

Local brokers and industry contacts indicate that beginning stocks in MY 2020/2021 and MY 2021/2022 ranged between 50,000-150,000 MT, significantly lower than those showed by USDA which represents the production of about half of a normal crop. Ending stocks in MY 2021/2022 could be higher due to an expected record high crop, but it will depend primarily on the volume of exports and how efficiently the logistics work out. Stocks are normally kept by cooperatives and elevators.

Rice

Production of rice in MY 2022/2023 is forecast at 1.12 million tons, rough basis, 19 percent higher than the current crop which was severely affected by drought. The area is projected to increase to 170,000 hectares, the same area that had been projected to be planted in MY 2021/2022 but was not achieved due to dry conditions. There are several large investments in new rice fields which continue to incorporate acreage every year. These farms are primarily located on the Paraguay River in Presidente Hayes and Villa Oliva. The basin of the River Tebicuary, a very important rice area has lately had serious problems with water levels after several dry seasons. Many small and medium producers here have had to abandon several thousand hectares this year due to drought. Many of these farmers will probably not continue in the rice business in MY 2022/2023.

Rice in Paraguay is normally planted in July and August. The harvest begins in late December and normally goes through April each year. Farmers are quite concerned about the availability of fertilizers for the coming crop, as they believe there is very little in stock and that while some purchases have been made, the physical delivery could face logistical difficulties. Because of high prices of fertilizers the cost of production will increase roughly $200 per hectare, and despite good rice prices, this could lead some farmers to reduce their planted acreage in the coming crop.

Rice production in MY 2021/2022 is estimated at 940,000 tons on 144,000 hectares. However it is possible that both area and production could be even lower as a very dry and hot conditions through January 2022, severely affected rice plantations, with farmers abandoning many fields and lower-than-normal yields in many cases.

Figure 5:

Rice irrigation canal and rice fields near Villa Oliva, Neembucu Department – March 2022
Source: FAS Buenos Aires

Paraguayan rice exports in MY 2022/2023 are forecast at 630,000 tons, milled basis, a significant recovery from the previous year as the output is expected to increase. Brazil, which in the past several years was the destination of 65-70 percent of Paraguay's rice exports, is projected to account for even more of the coming crop. Local brokers believe Brazilian rice production could drop in MY 2022/2023 due to dry conditions in the southern production area due to the low water levels in reservoirs. Other destinations are expected to be the EU, Chile, Mexico and several countries in Africa. Paraguay exports mainly milled and brown rice. The average export price in 2021 was the highest of the past 7 years, but FOB prices in the first two months of 2022 were more than 20 percent lower than the same months a year ago.

Rice consumption for MY 2022/2023 is forecast at 120,000 tons, milled basis, unchanged from last year. This volume is higher than the official USDA estimate. There are no official data on rice consumption, but the local industry contacts estimate that it ranges between 180,000-200,000 tons, rough basis, per year. This volume includes seed.

Ending stocks for the three years under analysis are estimated to be very small due to the need of farmers to sell to be able to finance the new crop season and to great demand especially from neighboring Brazil.

Production, Supply and Distribution Tables

Wheat	2020/2021		2021/2022		2022/2023	
Market Year Begins	**Sep 2020**		**Sep 2021**		**Sep 2022**	
Paraguay	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Area Harvested (1000 HA)	450	475	500	450	0	450
Beginning Stocks (1000 MT)	620	620	673	513	0	458
Production (1000 MT)	1140	1000	1100	900	0	1000
MY Imports (1000 MT)	3	3	5	5	0	4
TY Imports (1000 MT)	3	3	5	5	0	4
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	1763	1623	1778	1418	0	1462
MY Exports (1000 MT)	390	390	400	250	0	280
TY Exports (1000 MT)	421	421	400	250	0	280
Feed and Residual (1000 MT)	50	70	50	50	0	40
FSI Consumption (1000 MT)	650	650	660	660	0	680
Total Consumption (1000 MT)	700	720	710	710	0	720
Ending Stocks (1000 MT)	673	513	668	458	0	462
Total Distribution (1000 MT)	1763	1623	1778	1418	0	1462
Yield (MT/HA)	2.5333	2.1053	2.2	2	0	2.2222

(1000 HA) ,(1000 MT) ,(MT/HA)
MY = Marketing Year, begins with the month listed at the top of each column
TY = Trade Year, which for Wheat begins in July for all countries. TY 2022/2023 = July 2022 - June 2023

Corn	2020/2021		2021/2022		2022/2023	
Market Year Begins	Jun 2021		Jun 2022		Jun 2023	
Paraguay	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	720	800	825	1200	0	820
Beginning Stocks (1000 MT)	1641	1641	1316	1716	0	1832
Production (1000 MT)	3200	3200	3300	6400	0	4500
MY Imports (1000 MT)	75	75	30	16	0	20
TY Imports (1000 MT)	47	47	50	16	0	20
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	4916	4916	4646	8132	0	6352
MY Exports (1000 MT)	1500	1400	1900	4400	0	2800
TY Exports (1000 MT)	2563	2563	1700	4400	0	2800
Feed and Residual (1000 MT)	1000	800	650	800	0	750
FSI Consumption (1000 MT)	1100	1000	1100	1100	0	1150
Total Consumption (1000 MT)	2100	1800	1750	1900	0	1900
Ending Stocks (1000 MT)	1316	1716	996	1832	0	1652
Total Distribution (1000 MT)	4916	4916	4646	8132	0	6352
Yield (MT/HA)	4.4444	4	4	5.3333	0	5.4878

(1000 HA) ,(1000 MT) ,(MT/HA)
MY = Marketing Year, begins with the month listed at the top of each column
TY = Trade Year, which for Corn begins in October for all countries. TY 2022/2023 = October 2022 - September 2023

Rice, Milled	2020/2021		2021/2022		2022/2023	
Market Year Begins	Jan 2021		Jan 2022		Jan 2023	
Paraguay	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	155	155	164	144	0	170
Beginning Stocks (1000 MT)	83	83	10	10	0	21
Milled Production (1000 MT)	616	681	700	630	0	751
Rough Production (1000 MT)	919	1016	1045	940	0	1121
Milling Rate (.9999) (1000 MT)	6700	6700	6700	6700	0	6700
MY Imports (1000 MT)	1	1	0	1	0	1
TY Imports (1000 MT)	1	1	0	1	0	1
TY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	700	765	710	641	0	773
MY Exports (1000 MT)	640	640	630	500	0	630
TY Exports (1000 MT)	640	640	630	500	0	630
Consumption and Residual (1000 MT)	50	115	50	120	0	120
Ending Stocks (1000 MT)	10	10	30	21	0	23
Total Distribution (1000 MT)	700	765	710	641	0	773
Yield (Rough) (MT/HA)	5.929	6.5548	6.372	6.5278	0	6.5941

(1000 HA) ,(1000 MT) ,(MT/HA)
MY = Marketing Year, begins with the month listed at the top of each column
TY = Trade Year, which for Rice, Milled begins in January for all countries. TY 2022/2023 = January 2023 - December 2023

Attachments:

No Attachments