



Required Report: Required - Public Distribution

Date: March 01, 2024 Report Number: BR2024-0001

Report Name: Livestock and Products Semi-annual

Country: Brazil

Post: Brasilia

Report Category: Livestock and Products

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Report Highlights:

Brazil is currently at the bottom of the cattle cycle, liquidating inventories since 2023. The oversupply of cattle for slaughter has led to a slow price recovery and longer-term impact to the replacement market. With increased volumes of cattle being slaughtered, Post forecasts record exports of beef in 2024. Domestic consumption of beef is forecasted to increase as well. The swine industry is forecasted to have increases in production and slaughter in 2024. As a result, Post forecasts pork production, domestic consumption, and exports to increase in 2024. Pork exports are forecasted to benefit from decreases in production in Brazil's major competitor markets.

EXECUTIVE SUMMARY

Cattle

- Brazil is the third-largest cattle producer in the world and is currently at the bottom of the cattle cycle.
- Post forecasts a two percent decrease in cattle crop in 2024 due to increased slaughter in 2023 and 2024.
- Higher slaughter of cows started in 2023 and is expected to continue at least until the end of the first half of 2024. Inventory liquidation will impact replacement market prices, pressuring prices down. Overall slaughter is forecast to increase four percent in 2024.
- The scenario of oversupply of cattle tends to continue in 2024, pointing to slow price recovery.
- Industry forecasts 2.5 percent increase in feed production in 2024, despite breaks in corn and soybeans crops.
- Live cattle exports had a good recovery in 2023, but in 2024 may be impacted by Türkiye's decision to impose an import quota on feeder cattle.

Beef

- Brazil is the second-largest beef producer and the largest exporter in the world, accounting for a fourth of all beef exports globally.
- Production: Post forecasts a four percent increase, reaching 11.37 million metric tons, consistent with increased slaughter.
- Consumption: Post forecasts a four percent increase, reaching 9.4 million metric tons, based on increased beef availability and better prices to consumers.
- Exports: Post forecasts record year for exports in 2024, reaching close to three million metric tons, increasing two percent. This forecast considers increased beef production, strong external demand, and foreign competitors facing challenges.

Swine

- Post forecasts a six percent increase in the pig crop, due to lower production costs, improved domestic consumption, and positive foreign demand.
- Post forecasts close to a four percent increase in slaughter for 2024.

Pork

- Production: Post forecasts a four percent increase, reaching 4.6 million metric tons in 2024, as a result of increased slaughter, reduced cost of feed, and investments made to increase production.
- Consumption: Post forecasts a four percent increase, reaching 3.18 million metric tons in 2024, due to improved availability domestically and cheaper prices to consumers.
- Exports: Post forecasts a six percent increase in 2024, based on increased slaughter, good external demand, increased purchases from new markets, export growth to existing consumers, and Brazil's sanitary status versus its competitors who are facing challenges with animal disease particularly Europe.

1. CATTLE

Figure 1

Cattle Production,	Supply,	and Distribution
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Animal Numbers, Cattle	202	2	202	23	2024			
Market Year Begins	Jan 20	022	Jan 2	023	Jan 2024			
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Total Cattle Beg. Stks (1000 HEAD)	193780	193780	194365	194365	193900	192572		
Dairy Cows Beg. Stocks (1000 HEAD)	38720	38720	38960	38960	37790	37790		
Beef Cows Beg. Stocks (1000 HEAD)	54900	54900	55280	55280	55100	55100		
Production (Calf Crop) (1000 HEAD)	47836	47836	48000	48000	47000	47000		
Total Imports (1000 HEAD)	0	0	0	0	0	0		
Total Supply (1000 HEAD)	241616	241616	242365	242365	240900	239572		
Total Exports (1000 HEAD)	195	195	583	583	575	475		
Cow Slaughter (1000 HEAD)	10050	10050	10100	11540	10150	11000		
Calf Slaughter (1000 HEAD)	300	300	310	310	300	300		
Other Slaughter (1000 HEAD)	31900	31900	32590	32560	33550	34850		
Total Slaughter (1000 HEAD)	42250	42250	43000	44410	44000	46150		
Loss and Residual (1000 HEAD)	4806	4806	4882	4800	4825	4825		
Ending Inventories (1000 HEAD)	194365	194365	193900	192572	191500	188122		
Total Distribution (1000 HEAD)	241616	241616	242365	242365	240900	239572		
(1000 HEAD)								

Source: Not Official USDA Data

1.1. Production

Post estimates calf crop in 2023 was stable from the previous year and reached 48 million head of cattle. For 2024, Post forecasts the calf crop will decrease, falling to 47 million head of cattle. The past fiveyear average, from 2019-2023, is 48.2 head of cattle. In 2023, Post estimates the beginning cattle herd at 194.36 million, and for 2024, Post estimates 192.57 million head – an inventory decrease of two percent due to increased slaughter in 2023. Since 2023, Brazil is at the bottom of the cattle cycle, which is expected to last for the next 12 to 18 months, with producers liquidating previously held inventories. Post forecasts are based on the socio-economic performance expected for the country, the cycle of cattle, improved costs of production, expected foreign demand, and on slaughter trends.

Socio-Economic Factors to Weigh on Production

Post forecasts sluggish economic performance in 2024. For 2024, the Brazilian Central Bank (BCB) forecast GDP to grow 1.75 percent and two percent in 2025. The Central Bank Focus survey published on February 23rd anticipates inflation at 3.80 percent for 2024 and 3.51 percent in 2025. The exchange

rate from Brazilian Reais to U.S. dollars is forecasted at R\$4.93 for 2024, and R\$5.00 for 2025 to US\$ 1.00.

The Institute of Geography and Statistics (IBGE) latest data reports that Brazil had 8.1 million unemployed people in 2023, which represents a 7.4 percent unemployment rate. However, there are an additional 3.5 million people that have stopped looking for a job. The total underutilized rate for 2023 is 17.3 percent.

Brazilian Central Bank Assessment

On December 19th, the Brazilian Central Bank Monetary Policy Committee (Copom) noted that "the recent set of economic activity indicators remains consistent with the economic deceleration scenario. The release of the third-quarter GDP figures confirmed the anticipated moderation in growth, but with resilience in household consumption". This resilience in consumption "which surprised positively again – may be related to an increase in gross household income, due to the expansion of the labor market, social benefits, and income gains related to disinflation in important segments of the consumer`s basket". Furthermore, the Committee noted that "the lack of commitment to structural reforms and fiscal discipline, the increase of earmarked credit granting, and the uncertainties about the stabilization of the public debt have the potential to raise the neutral interest rate of the economy, with harmful impacts on the power of the monetary policy and, consequently, on the cos of disinflation in terms of activity".

Brazilian Tax Reform and Implications to the Agricultural Sector

On July 7th, the Brazilian Chamber of Deputies approved a major tax reform in an attempt to simplify the Brazilian federal and state tax codes. The idea is that the federal, state, and local taxes – which often overlap – will be replaced by a simplified value added tax (VAT). The bill was promulgated on December 21, 2023, and the government has 90 days to propose draft bills to fully implement the reform. As previously mentioned on the Livestock Annual Report <u>BR2023-0017</u>, in general the agricultural sector was concerned about the measure, as it currently benefits from certain tax exemptions that slated to be removed with the establishment of the VAT. On December 28, 2023, President Luiz Inácio Lula da Silva signed a Provisional Measure, <u>MP 1202/2023</u>. The measure`s effects will enter into force as of April 1st, 2024. Post will continue monitoring the situation and the possible impacts to the agricultural sector.

Production Costs

Calf and Cattle Prices

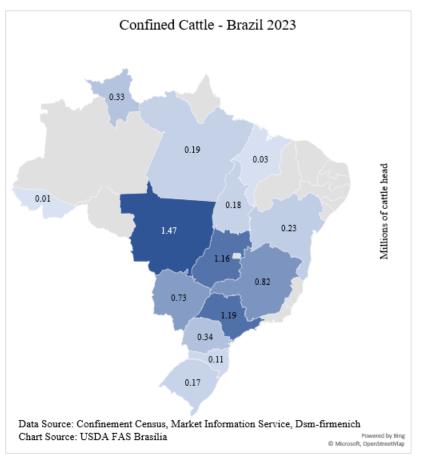
A key factor that drives cattle production's profitability is the cost of production. The price of calves and fed cattle in 2023 impacted the sector with lower values than those experienced in the previous year. Average calf prices were 14 percent lower in 2023, and are forecasted to remain low in the first half of

2024. Average fed cattle prices were 17.3 percent lower in 2023. The scenario of oversupply seen in 2023 tends to continue in 2024, pointing to a slow recovery in prices.

Confinement

Although Brazil still primarily grass-feeds its cattle, industry sources indicate there is a demand to increase feedlots and semi-feedlots to decrease the time of production. Whereas in the past these feeding arrangements were not as widespread in Brazil, as pastureland is converted for grain production – due to the profitability of having two to three crops per year – these techniques are becoming more common. With less pasture, there is higher concentration of cattle, and hence finishing animals on semi-feedlots becomes more profitable. Normally Brazilian cattle that are receiving supplemental feed, receive such treatment for 80 to 120 days, with the average being 105 days. According to the Confinement Census, Brazil had 7.03 million head confined in 2023. It is worth mentioning that confinement operations still respond to a very small proportion of the total herd, which Post forecasts at close to three percent of the total herd.





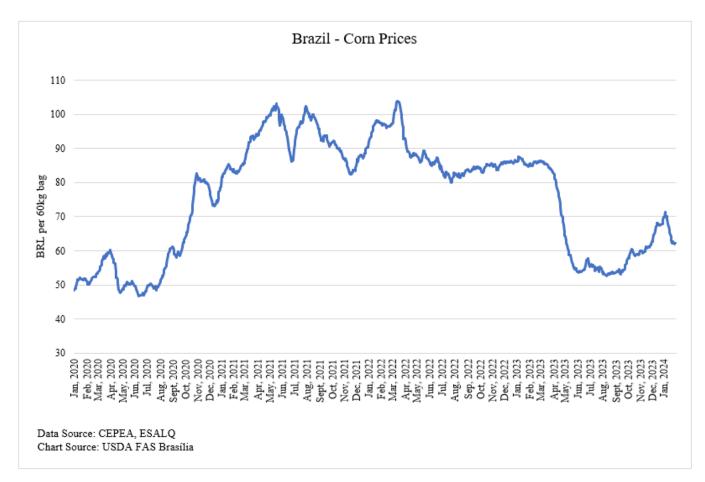
The five states which confined the most were Mato Grosso with 1.47 million head, São Paulo with 1.19 million head, Goiás with 1.16 million head, followed by Minas Gerais and Mato Grosso do Sul. In 2023, the first quarter was lucrative for producers who utilize confinement operations, and from April to September these producers suffered financial losses. Starting in October, 2023, the fed cattle prices started to improve for them. Post contacts forecast that 2024 will be a recovery year experiencing profits for this sector and that 2025 should be a great year for confinement operations.

Cost of Feed

The National Union for Animal Feed Industry (Sindirações) forecasts a 2.5 percent increase in feed production in Brazil for 2024. For both beef and dairy cattle, the top macro ingredient used for feed is corn. Soybean meal is also an important product in the feed mix. The feed industry is highly dependent on the animal protein sector – not just cattle, but also poultry and swine production. It is important to note that sources point to idle capacity in the feed industry, meaning they could vamp up production if needed.

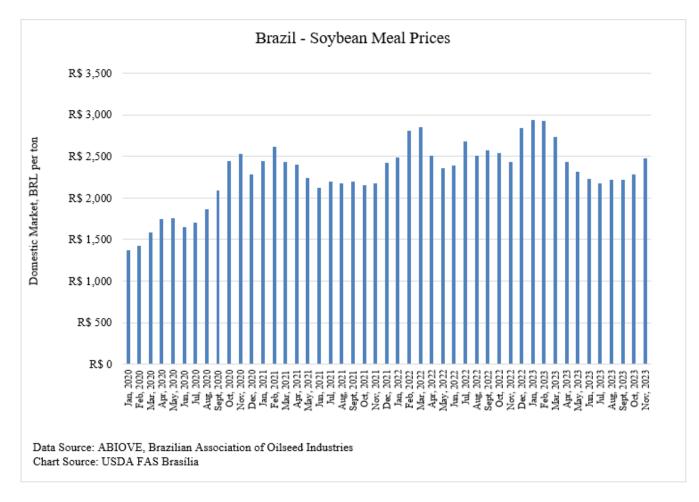
As a major producer of both corn and soybean meal, Brazil has a competitive advantage when producing cattle for subsequent slaughter, decreasing the cost of feed. The USDA World Agricultural Supply and Demand Estimates (WASDE) forecasts corn production for MY 2023/24 as of February 6th at 127 MMT. The cut in production is due to lower second corn crop area forecasts. Brazil is expected to be the third largest corn producer in the world, behind the U.S. and China. Corn prices remain low when compared to historical levels, as seen on the following graph.

Figure 3 Brazil – Corn Prices



As of February 6th, the WASDE currently forecasts soybean production to 157 MMT, down 3 MMT from last year's record crop of 160 MMT. Reduced rainfall in the Center West region and northeastern states lowered yield potential. Even with this decrease in production, Brazil remains the world largest soybean producer in the world.



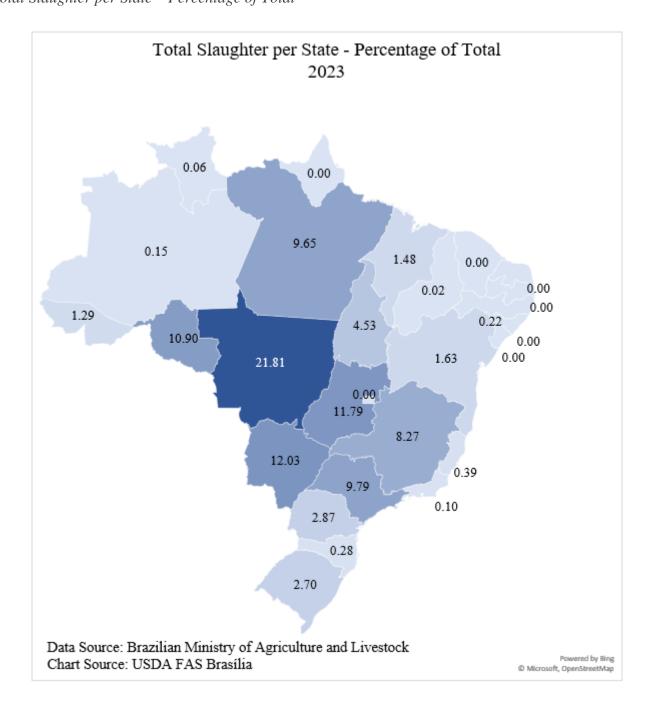


Slaughter

Post estimates a five percent increase in slaughter in 2023 reaching 44.1 million head. Post forecasts a close to four percent increase in 2024, with 46.1 million head to be slaughtered. This forecast is based on the 2023 trend of increased slaughter of cows and lower prices for cattle.

The Brazilian Ministry of Agriculture and Livestock (MAPA) data for federally inspected slaughters show that in 2023 the state of Mato Grosso had the highest volumes of slaughter, followed by Mato Grosso do Sul, and Goiás states. The map below indicates the percentages of total federally inspected slaughter per state in the year.

Figure 5 *Total Slaughter per State – Percentage of Total*

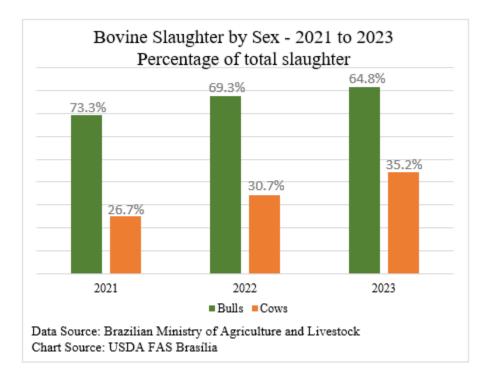


Increased Cow Slaughter

In 2023, the Brazilian cattle industry increased the supply of cows for slaughter by liquidating cattle inventory. The chart below shows cows and bulls slaughter under federal inspection from 2021 to 2023.

Figure 6

Bovine Slaughter by Sex – 2021 to 2023 – Percentage of total slaughter



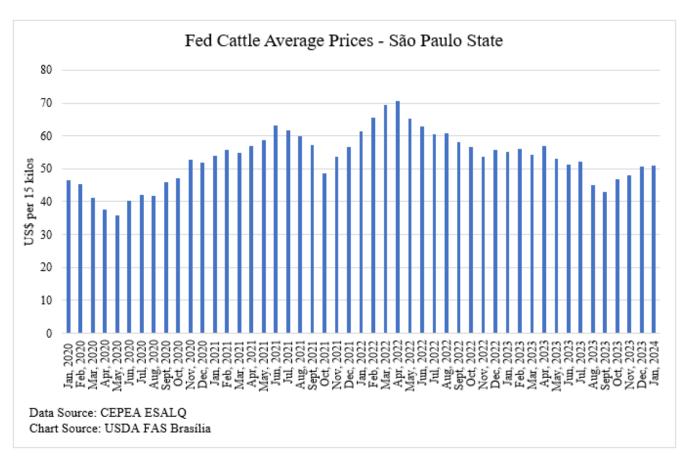
As seen on the previous graph, official Brazilian Ministry of Agriculture and Livestock data shows cow slaughter has been increasing in the past years. The significant cow slaughter was a main driver to the market in 2023. This increased slaughter can also be observed when considering the replacement market prices. For 2024, in conversations with contacts, Post learned that increased cow slaughter will continue at least until the end of the first half of 2024.

The cattle liquidation cycle will likely have future consequences to the industry. With fewer cows, birth rates are expected to decrease – which Post forecasts as a two percent decrease in production by the end of 2024. With decreased birth rates, the availability of animals at the replacement market is also expected to decline, and thus possibly lead to price increases. Therefore, as prices start to improve for producers, replacement producers are likely to start retaining their calves, and hence decrease the availability of animals for slaughter in the coming years.

Calf and Cattle Prices

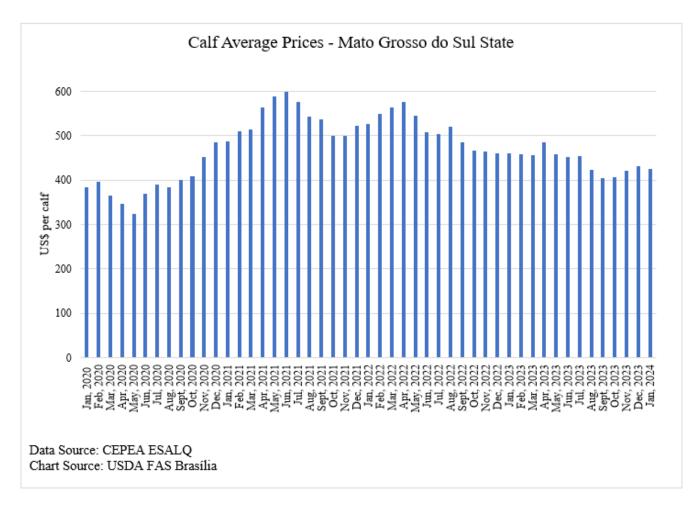
High slaughter rates are bringing supply above demand leading to a decrease in prices, as seen on the following graph "Fed Cattle Average Prices – São Paulo state, 2020 to January 2024". Average feed cattle prices in 2023 compared to the previous year show a 17.3 percent decrease. In late March 2022, fed cattle prices reached a record of R\$ 352 per 15 kilos (around US\$73), while the highest price achieved in 2023 was US\$58. The average was US\$50.94. In January 2024, the year started off with an average of US\$50.89 per 15 kilos, showing a continuation of the price scenario experienced in 2023. For the first half of 2024, Post forecasts prices will continue the trend observed in 2023 and improvements could appear in the second half of the year, when the corn second crop will be harvested.

Figure 7 *Fed Cattle Average Prices – São Paulo State, 2020 to January 2024*



In 2023, because of lower prices, producers increased calf purchases. In 2023, the average price of a calf was R\$2208.83 (US\$442.32), a close to 14 percent decrease from the previous year, which can be seen in the graph "Calf Average Prices – Mato Grosso do Sul state, 2020 to January 2024". In January 2024, the calf price averaged US\$ 424.89, pointing to a continuation of the lower prices seen in 2023.

Figure 8 Calf Average Prices – Mato Grosso do Sul State, 2020 to January 2024



Post estimates decreased calf crop in 2024, due to the increased slaughter of cows in 2023 resulting in Posts estimate of an increase of calf prices in the second half of 2024.

Weather conditions

Climate is an important factor in cattle production, especially considering the majority of production is pastureland. Increased or decreased rainfall directly impact pasture availability and quality, and hence, cattle production. The same is true for abrupt temperature changes.

Based on data from the National Meteorology Institute (INMET), weather temperatures in the Center-West region of Brazil, where over 46 percent of total slaughters were concentrated in 2023 – as seen on the previous map "Total Slaughter per State – Percentage of Total," – will be slightly above average in the months of January, February, and March, 2024. INMET forecasts more regular rainfall in most of the Center-West region in the period, except for Mato Grosso, which is forecasted to have rainfall below

historical average. The following maps show, to the left, the forecast of rainfall abnormalities in the country, and to the right, temperature abnormalities in the quarter.

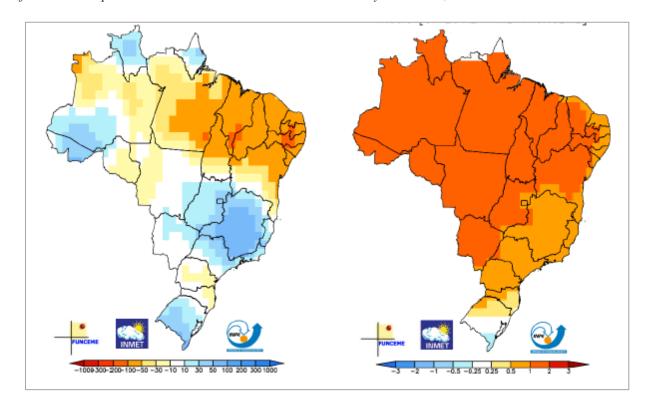


Figure 9 *Rainfall and Temperature Abnormalities Forecast – January to March, 2024*

Source: INMET Monthly Agricultural Weather Bulletin – January 2024

As previously reported, in June 2023, the National Oceanic and Atmospheric Administration (NOAA) has reported that the El Niño has restarted. Forecast point to 90 percent assurance that the conditions imposed by the El Niño will continue until the end of 2023. Consequences of the phenomenon in Brazil could include excess rainfall in the southern region of Brazil, diminished rainfall in the north and northeast regions of Brazil. This abnormal rainfall has a direct impact in grain production, and potentially on pastureland. The higher temperatures during the southern hemisphere autumn and winter makes frosts less likely but the thermal stress on cattle could affect productivity. The APEC Climate Center, a research center based in South Korea, points to 80 to 90 percent probability of the El Niño conditions continuing until May 2024, and 60 percent probability of the effects lingering until June 2024. NOAA predicted that the phenomenon La Niña has a 65 percent likelihood of returning in the period of August to October of 2024, which normally impacts producers in the South of Brazil, producing droughts that can compromise crops and pasturelands.

Animal Disease

Post forecasts that animal disease will not negatively impact cattle production in 2024.

On October 23rd, 2023, the Brazilian Ministry of Agriculture and Livestock opened a public consultation on norms of prevention and monitoring for Bovine Spongiform Encephalopathy (BSE). <u>Ordinance</u> <u>SDA/MAPA 909/2023</u> was open for comments until January 8, 2024. The goal was to set up official measures of prevention and monitoring specific to the disease so that it can continue to be classified as insignificant risk disease. The draft Ordinance sought to better align the local legislation to the recommendations of the World Organization for Animal Health (WOAH), and hence improve Brazil's agribusiness competitiveness. In May 2023, WOAH reduced the risk of classical BSE in the entire world and updated their guidance reflecting that new condition. The Ministry is currently reviewing all input received, and Post will continue monitoring the topic as developments take place on this updated legislation.

In regards to Foot-and-Mouth Disease (FMD), WOAH recognizes Brazil as a country free from FMD with vaccination, and portions of the country are recognized as free from FMD without vaccination. In 2023, Brazil started a process to prohibit FMD vaccination in different states, with the end goal of making the entire country free from FMD without vaccination by 2026, for recognition by WOAH. On December 12, 2023, the Ministry issued the decision to stop FMD vaccination in the seven additional states: Amapá, Bahia, Maranhão, Pará, Rio de Janeiro, Roraima, and Sergipe. As of May 1st, 2024, the movement of animals and products across states that have been authorized to suspend vaccination and the other states that still vaccinate their cattle will be restricted. According to the Ministry, Brazil`s request to be recognized as FMD-free without vaccination will be presented to WOAH in August, 2024. In May and November of 2024, the following states will still vaccinate their cattle: Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, and part of Amazonas. Together, the states that will still vaccinate their cattle comprise less than 0.5 percent of total slaughter in 2023.

For more on this WOAH's decision on BSE and MAPA's decision on stopping FMD vaccination, please consult this same section in the Annual Livestock, <u>BR2023-0017</u>.

Sustainability

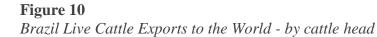
The largest cattle slaughterhouses in Brazil have been working on improved traceability and sustainability practices. Both the private sector individual companies and the government have made enormous efforts and financial investments in this issue.

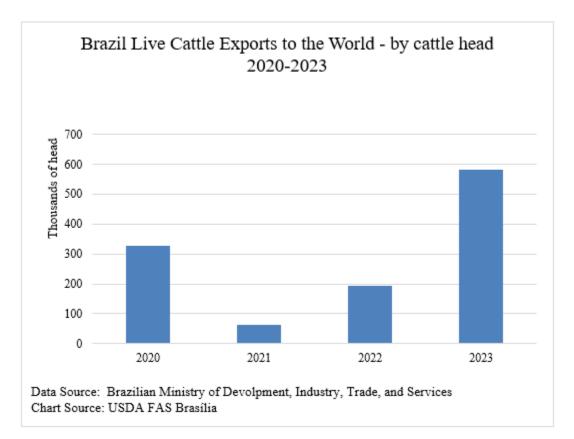
Industry sources have expressed concern with the new European Union deforestation law and its impacts on the entire global supply chains. Packers and banks have started their own internal programs to push for sustainability. The concern with the new EU legislation refers to the possible implications on trade. The Brazilian Association of Meat Exporting Industries (ABIEC), together with the Brazilian Export and Import Promotion Agency (ApexBrasil) prepared a campaign in October 2023 during the Anuga Food Fair in Germany to discuss Brazil's sustainable practices in the beef sector and specifically invited members of European importing associations for a presentation. Later in the month, ABIEC held an event in Brasília, which Post attended, called "Brazilian Beef – Sustainable future public and private contribution", which reinforced the sustainability message to the international community. For 2024, sustainability will continue being a key area of focus for the Brazilian cattle industries.

1.2. Live Cattle Trade

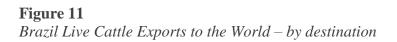
Exports

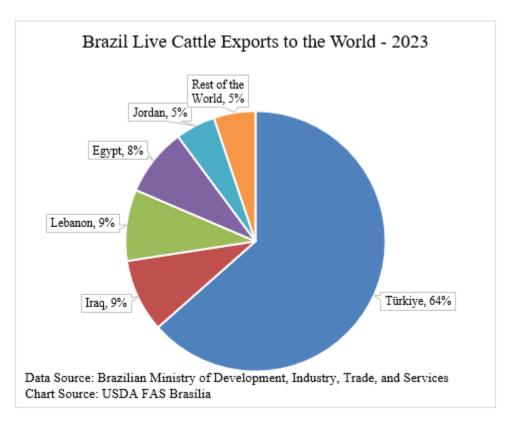
Post forecasts 2024 exports of live cattle at 475 thousand head of cattle for 2024, down from 18.5 percent from 2023. In 2023, Brazil had a significant increase in exports of live cattle at 583,000 head of cattle exported. The forecast for 2024 is decreased from 2023 as the main market to which Brazil exported to imposed trade restrictions in January 2024, see following section.





The 2023 export recovery is explained by a boost in exports to the Middle East, especially to Türkiye, which had not imported a single animal in the same period in 2021. Brazil exported nearly ten times more cattle to Türkiye in 2023 than in the previous year, reaching a little over 370,000 animal heads exported. As reported by Post Ankara in Report <u>TU2023-0013</u>, Türkiye is experiencing elevated prices for meat and milk products due to several reasons, amongst which are insufficient cattle inventories, and had the expectation of doubling imports of live cattle in 2023.





For 2024, Brazil may experience a decrease from the higher-than-average volume experienced in 2023. The reason is that in January 2024, the Turkish Government established an import quota for feeder cattle at 600,000 head. Considering that Brazil had a high dependence on Türkiye for its 2023 exports, Post forecasts Brazil will export 475 thousand cattle head in 2024 to the entire world.

Imports

For 2024, Post maintains its forecast that imports will remain minimal, not significant enough to be included on the official Production, Supply, and Distribution table. Brazil's imports of live animals are focused on genetic improvement, as Brazil only imports "cattle, live, purebred breeding", HS Code 010221. In 2023, Brazil has imported 58 head, almost seven percent lower than the same period in 2022. In value terms, Brazil's imports in 2023 sum up a little over US\$ 272,000 – a 49 percent decrease from 2022. Brazil's only two suppliers of live cattle: Bolivia, with 3 animals supplied, and the United States, which is firming up as a strong partner in genetic improvement of the Brazilian herd, both in live cattle, as well as in genetic material for artificial insemination.

2. BEEF

Figure 12

Meat, Beef and Veal	202	2	202	23	2024 Jan 2024				
Market Year Begins	Jan 20	022	Jan 2	023					
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post			
Slaughter (Reference) (1000 HEAD)	42250	42250	43000	44410	44000	46150			
Beginning Stocks (1000 MT CWE)	0	0	0	0	0	0			
Production (1000 MT CWE)	10350	10350	10560	10950	10835	11365			
Total Imports (1000 MT CWE)	72	72	55	55	55	55			
Total Supply (1000 MT CWE)	10422	10422	10615	11005	10890	11420			
Total Exports (1000 MT CWE)	2898	2898	2898	2898	2975	2955			
Human Dom. Consumption (1000 MT CWE)	7524	7524	7717	8107	7915	8465			
Other Use, Losses (1000 MT CWE)	0	0	0	0	0	0			
Total Dom. Consumption (1000 MT CWE)	7524	7524	7717	8107	7915	8465			
Ending Stocks (1000 MT CWE)	0	0	0	0	0	0			
Total Distribution (1000 MT CWE)	10422	10422	10615	11005	10890	11420			
(1000 HEAD) ,(1000 MT CWE)									

Source: Not Official USDA Data

2.1. Production

Post forecasts beef production at 11.36 million metric tons (MMT) carcass weight equivalent (CWE) for 2024, which represents a four percent increase from 2023. Brazil is the second-largest beef producer in the world, behind the United States.

These forecasts are consistent with increased cattle slaughter noted in Chapter 1 of this report, average carcass weight, improved economic conditions for consumers positively affecting domestic consumption, diminished competition abroad, and firm external demand, specially from China.

An important element that is working in favor of the increased Brazilian beef production is that its main competitors, such as the United States, European Union, and Argentina are forecast to scale back production in 2024, per official USDA data. The oversupply of cattle for slaughter, together with exports, will help drive production upwards in 2024, as it has in 2023.

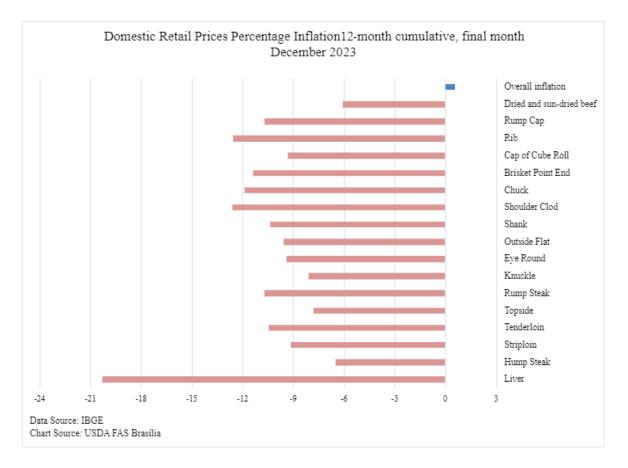
2.2. Consumption

Post projects domestic beef consumption in 2024 at 8.5 MMT CWE, a four percent increase from 2023. The year 2023 was marked by a recovery in domestic consumption of beef, which Post estimates to having reached 8.1 MMT. This forecast is based on increased availability of beef in the domestic market, because of increased slaughter rates and an improving – albeit slowly - economic scenario.

Inflation is expected to reach 3.81 percent by the end of 2024 according to the latest data available from the Brazilian Central Bank. As interest rates are forecasted lower, the tendency is for quality-of-life improvements.

As seen on the following table, inflation on domestic retail prices of beef have decreased in the past 12month cumulative, per official IBGE data. The expectation for the year is to have prices relatively low for beef cuts, favoring consumption. For 2024 prices tend to increase in the second half of the year, when a lot of the disposals from inventories will have already taken place, moving towards an end of this phase of the cattle cycle.

Figure 13 Domestic Retail Prices Percentage Inflation – Meat Cuts



This scenario, along with increased availability and governmental social benefit paying programs, tend to favor domestic consumption, as beef remains as the preferred source of animal protein for Brazilians. For 2024, specialists have noted that not only beef consumption will increase, but that of other animal proteins as well. Therefore, it is important to caveat that despite the forecasted increase in domestic consumption, poultry and pork meat remain more affordable. Therefore, if the economic situation of the country deteriorates, beef would normally be on the first list of items to be cut by Brazilian consumers.

2.3. Trade

Exports

Post forecasts Brazil will remain the world's largest exporter of beef in 2024. Per official USDA data, this is a position Brazil has held – with the exception of four years - since 2004, and uninterruptedly since 2017. In 2023, per official USDA data, Brazil exported close to 2.90 MMT CWE, which was

almost twice more than the second largest exporter, Australia. For 2024, beef exports are forecast at 2.95 MMT CWE, representing a two percent increase from 2023. Post forecasts exports will account for 26 percent of all production in Brazil. Brazil reached the record monthly export in December 2023, with over 295.6 thousand tons CWE. For January 2024, news outlets reported that Brazil had a record (for the month of January), however official data in tonnage was not available at the time this report was being prepared. Preliminary Government of Brazil data shows Brazil exported US\$ 757.88 million in the first month of this year.

The forecast considers the increased cattle supply, which is boosting beef production, strong external demand for beef – especially from China and the United States, and competitor exporters facing challenges with production. In conversations with industry in 2023, Post has learned that their plan is to increase exports, despite an unfavorable trend on prices received from exports.

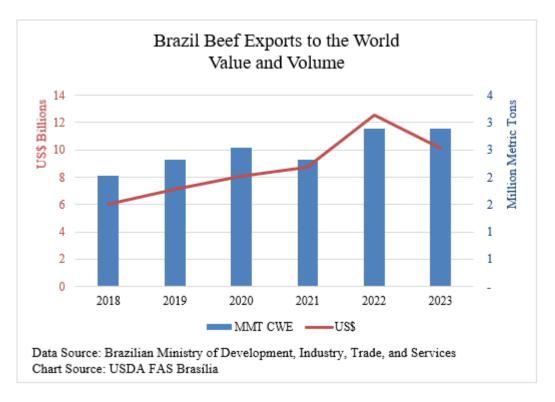


Figure 14 *Brazil Beef Exports to the World – Value and Volume*

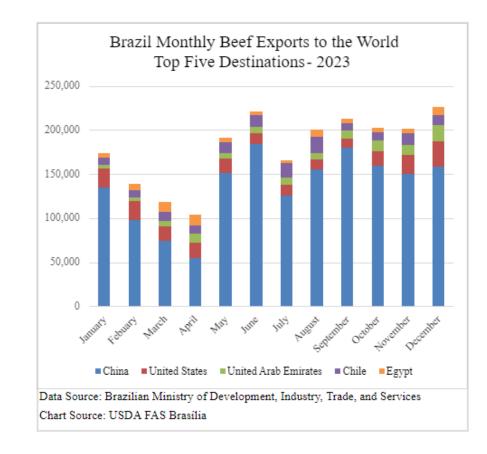
Per official USDA data, Brazil currently accounts for a quarter of global exports of beef. Brazil is followed in the top five beef exporters in 2023 by Australia, India, the United States, and Argentina, respectively. Together, the other top four competitors hold 43 percent of global exports.

Largest Trading Partner: China

Brazil's main market since 2009 is China, and the expectation is for China to remain as Brazil's top destination for beef – and other animal protein – for the foreseeable future. In 2023, China was the destination of over 56 percent of all exports. Official USDA data shows that China has imported 3.57 MMT in 2023 and is forecasted to import 3.55 MMT in 2024. This forecast for Brazil's largest foreign customer sustains Post's forecast for a record year for Brazil's beef exports. Industry contacts have expressed optimism about long-term sales to China over the next years, as the population grows more familiar with beef.

In February 2023 Brazil had a detection of an atypical BSE case in the state of Pará, which per the health certificate agreed upon between Brazil and China triggers a voluntary suspension of exports whether it be a typical or atypical case. This has resulted in a drop in exports until exports were reinstated. The following graph shows the total world exports in 2023 as well as the top five destinations for Brazilian beef, by month. Per the graph, it is noticeable that the trade suspension from China impacted the total exports for Brazil and that it does not seem that Brazil sent all the – at that point – excess cargo to a single trading partner, but rather it diluted it across different partners, and kept most of the products in the domestic market.





Brazil Monthly Beef Exports to the World – Top Five Destinations 2023

Exports to China are forecasted to peak on the second half of 2024 due to the preparations for the Chinese New Year, which in 2025 will be celebrated on January 29, 2025.

Diversifying export markets

Because of its dependence from the Chinese market, Brazilian authorities continuously work to diversify the markets to which it exports. For 2024, it is expected that the new markets which Brazil opened in 2023 - such as Indonesia, Thailand, Mexico, the Dominican Republic, and Singapore will bring more diversification to the export market. In 2023, Brazil exported to 139 countries. The Government of Brazil also works constantly to consolidate its presence in countries which already receive Brazilian beef, but in smaller proportions. Some of the target markets for Brazil to consolidate its presence are Indonesia, Taiwan, South Korea, and Japan.

Industry also continuously monitor competitor's production and exports to bridge possible gaps. As some of the largest competitors for Brazil are facing challenges with production domestically, Brazil jumps in as a credible and steady beef supplier. This is the case in some Caribbean countries, where Brazil is replacing US beef, with a cheaper alternative in large volumes. Post contacts have indicated that they are they are optimistic that they may have opportunities in Asian markets if Australia focuses more on supplying other markets such as the United States.

The overall scenario for Brazil's competitors, the strong foreign demand, the constant work to increase and diversify customer pool, and to open new markets support Post's forecasts for improved exports in 2024.

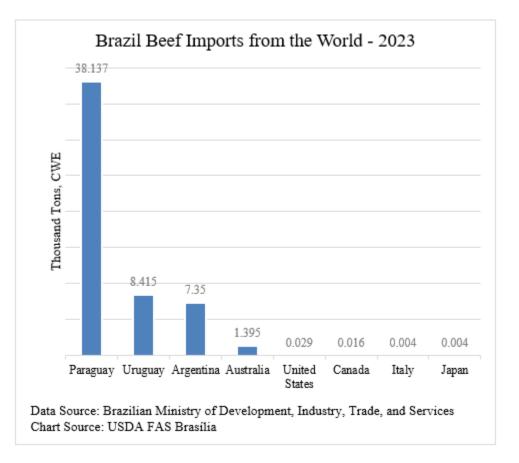
Imports

Post forecasts beef imports for 2024 at 55,000 metric tons CWE. This forecast considers the increased availability of beef domestically, at lower prices, as seen earlier in this report.

Brazil normally imports specialty cuts. As these tend to be more expensive, taking into account the economic scenario in the country laid out on the "Socio-Economic Factors to Weigh on Production" portion of the Cattle section of this report, and also the increased availability of beef in the domestic market for 2023, this paints a hard scenario for imports.

In 2023, the largest provider of beef to Brazil was Paraguay, accounting for close to 69 percent of all imports. From Paraguay, Brazil imports tenderloins and medallions, among other cuts. Paraguay is followed by Uruguay and Argentina, respectively. Together, the three Mercosur partners account for over 97 percent of total beef imports into Brazil. Australia is the fourth largest provider of beef to Brazil, accounting for 2.5 percent of the total. The United States currently ranks fifth, with 0.05 percent of total imports, with 29 tons exported to Brazil in 2023. The following graph shows the countries from which Brazil imported beef in 2023.

Figure 16 Brazil Beef Imports from the World – 2023



For 2024, Post forecast suppliers of beef to Brazil to remain stable from 2023.

3. SWINE

Figure 17

Animal, Swine Production, Supply, and Distribution

Animal Numbers, Swine	202	2	202	23	2024			
Market Year Begins	Jan 2	022	Jan 2	.023	Jan 2024			
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Total Beginning Stocks (1000 HEAD)	35688	35688	34250	34250	32900	32900		
Sow Beginning Stocks (1000 HEAD)	2980	2980	3025	3025	3175	3175		
Production (Pig Crop) (1000 HEAD)	44850	44850	45750	45750	48500	48500		
Total Imports (1000 HEAD)	2	2	6	6	6	6		
Total Supply (1000 HEAD)	80540	80540	80006	80006	81406	81406		
Total Exports (1000 HEAD)	3	3	3	3	3	3		
Sow Slaughter (1000 HEAD)	150	150	140	140	140	140		
Other Slaughter (1000 HEAD)	45000	45000	45850	45850	47500	47500		
Total Slaughter (1000 HEAD)	45150	45150	45990	45990	47640	47640		
Loss and Residual (1000 HEAD)	1137	1137	1113	1113	1113	1113		
Ending Inventories (1000 HEAD)	34250	34250	32900	32900	32650	32650		
Total Distribution (1000 HEAD)	80540	80540	80006	80006	81406	81406		
(1000 HEAD)								

Source: Not Official USDA Data

3.1. Production

Per official USDA data, Brazil is currently the fifth largest swine producer in the world. Post forecasts a six percent increase in production, reaching 48.5 million head in 2024, after the estimated two percent increase in 2023. Sow inventories are forecasted to be up by five percent to reach 3.18 million head in 2024. Brazilian producers have experienced negative profit margins in recent years, but in 2023 started seeing improved margins. For 2024, Post forecasts industry will take advantage of lower production costs and improved domestic consumption to increase production. This forecast also considers expected higher China pork imports in 2024, which results in more animals coming into the production line now in preparation to meet future demand.

Socio-Economic Factors to Weigh on Production

Sluggish economic performance is expected for 2024 in Brazil. The Brazilian Central Bank forecasts GDP growth at 1.75 percent in 2024 and two percent in 2025. BCB reports inflation will decrease and reach 3.80 percent in 2024 and 3.51 percent in 2025. The forecasted exchange rate to dollars will range from R\$4.32 to R\$5.00 in both years. A major Tax Reform is in progress and can have impacts to the

agricultural sector. For more details, please reference the subsection with this same title under chapter 1.1 of this Report.

Production costs

A key factor that impacts swine production in Brazil is the cost of feed. For the swine industry, feed represents at least 70 percent of all costs. With the forecasted decreases in corn and soybeans production in Brazil, concerns arose on possible impacts to the animal proteins industry. The National Union for Animal Feed Industry (Sindirações) forecasts the sector will need 55 million tons in 2024. Although the animal sector is closely monitoring the corn and soybean crops in Brazil, the forecasted productions should be enough to cover the animal proteins sector – even considering projections of increases in all three-main animal proteins production in Brazil.

The Brazilian Agricultural Research Corporation (EMBRAPA) has an entire unit dedicated to swine and poultry studies. Besides other attributions, the Swine and Poultry unit tracks production costs for major producing states. The below table has the overall costs for swine production in December 2023 and demonstrates the difference in prices when compared to the previous 12 months. As shown, the category that had the most increase by December 2023 was electric energy/bed/heating, increasing 5.80 percent.

Swine Production Costs - December, 2023							
Item	Value difference compared to previous 12 months	Percentage of total					
Nutrition (feed)	+1.61%	74.83%					
Sanity	0.00%	2.07%					
Labor	0.00%	2.69%					
Transportation	0.00%	2.54%					
Eletric Energy/ Bed/ Heating	+5.80%	1.15%					
Maintenance/ Financial/ Funrural	+1.22%	2.40%					
Diverse/ Others	+1.84%	3.84%					

Figure 18 Swine Production Costs – December, 2023

Data Source: EMBRAPA Swine and Poultry, ICPSuínos Chart Source: USDA FAS Brasília

Another significant cost in the swine industry is the live hog itself. As seen on the following graph, the price of live hogs is a large percentage in the proportion of costs to produce swine in Santa Catarina

state, which serves as reference state for swine and pork production, as it is the largest producer in Brazil.

Prices for Santa Catarina state - R\$/kilogram													
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	2021	6.66	6.44	6.37	6.17	6.41	6.36	6.45	6.45	6.41	6.35	6.27	6.24
Live Hog	2022	5.91	5.27	5.1	5.5	5.1	5.1	5.61	5.72	5.73	5.74	5.93	5.95
	2023	5.71	5.86	6.09	6.07	5.95	5.54	5.51	5.47	5.55	5.63	5.65	5.65
Sovbean	2021	2.64	3.13	2.95	2.64	2.66	2.50	2.54	2.39	2.30	2.29	2.22	2.30
Meal	2022	2.61	2.85	3.00	2.80	2.61	2.65	2.69	2.66	2.78	2.81	2.80	2.93
	2023	2.84	2.97	2.87	2.67	2.35	2.33	2.20	2.24	2.23	2.18	2.21	2.20
	2021	1.46	1.48	1.51	1.71	1.77	1.61	1.73	1.79	1.72	1.67	1.61	1.64
Corn	2022	1.78	1.78	1.78	1.61	1.60	1.59	1.53	1.57	1.58	1.60	1.61	1.60
	2023	1.62	1.62	1.50	1.33	1.10	1.05	0.88	0.88	0.89	0.90	0.92	0.94

Figure 19

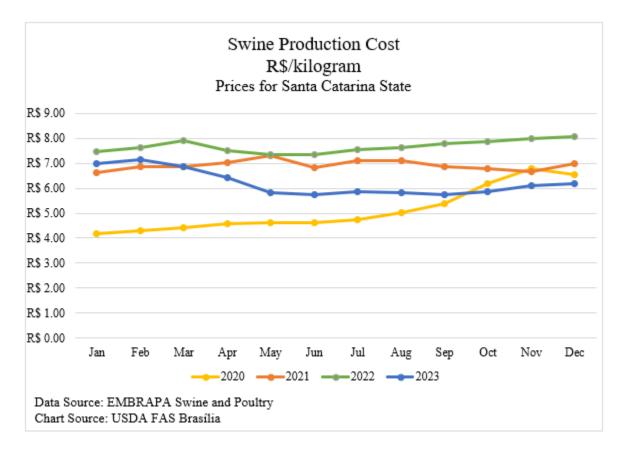
Prices for Santa Catarina state – R\$/kilogram

Data Source: EMBRAPA Swine and Poultry and Santa Catarina State Secretariat of Agriculture and Livestock Chart Source: USDA FAS Brasília

Please note that as of September 2023, EMBRAPA stopped publishing the table with these prices and point to the source databases. Data until June 2023 had been extracted from EMBRAPA directly. For July 2023 data onwards, Post consulted the Santa Catarina Secretariat of Agriculture and Livestock database. For corn and soybean meals, the secretariat published data by the 60-kilos sac, not by the R\$/kilogram, as EMBRAPA.

Post's expectation for increased production in 2024 considers that overall production costs in 2023 were below the previous two years, which furthers the incentives for production. However, as seen on the following graph, the overall production costs for 2023 were still above pre-pandemic levels.

Figure 20 Overall Swine Production Costs



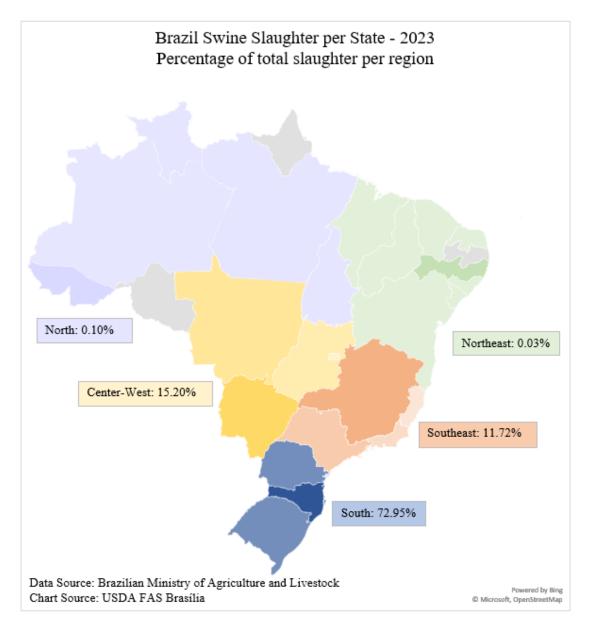
Slaughter

Post forecasts a 3.6 percent increase in slaughter for 2024. This forecast considers increased production and positive external demand for the pork products globally.

In 2023, close to 73 percent of the national production was in the southernmost region of Brazil. According to MAPA, the state of Santa Catarina was responsible for a 33.2 percent of slaughter in Brazil in 2023, followed by Paraná with 19.9 percent, and Rio Grande do Sul with 19.8 percent of total slaughter. The top five producing states are completed by Minas Gerais and Mato Grosso do Sul.

The following map shows the states in Brazil where swine slaughters took place in 2023. The map is divided per region. Within each region, the darker the color of the state, per official data from the MAPA, the higher the slaughter rate. States in gray have not slaughtered swine in 2023. For 2024, Post does not forecast any significant changes in the distribution of slaughters throughout the country.

Figure 21 *Brazil 2023 Swine Slaughter per Region*



Animal Disease

Brazilian swine producers understand that their advantage to their competitors is their high commitment to sanitary issues related to animal disease, such as African Swine Fever (ASF), Classical Swine Fever, and Porcine Reproductive and Respiratory Syndrome. As such, the Brazilian government and the producers make heavy investments in training, providing constant updates to employees in the production chain, in order for them to be able to safeguard production at all levels. MAPA enforces heavy monitoring and control of any signs of such diseases through their official veterinarian service

that is spread-out in all states and in the Federal District. Both MAPA and the industry make investments in securing production.

Per WOAH's African Swine Fever Situation Report 45, published on January 12, 2024, there are no cases of ASF in Brazil at the moment. In regard to Foot-and-Mouth Disease, Brazil has some states that are considered by WOAH as free of the disease without vaccination, as previously detailed in the Cattle portion of this report. For 2024, Post does not foresee animal disease becoming an issue for the swine industry.

Sustainability

Both the private sector individual companies and the government have made and continue to make enormous efforts and financial investments on sustainability. As another tool on this issue, ABPA, in partnership with ApexBrasil, launched the second phase of the international animal protein sustainability campaign during the Anuga Food Fair that took place in Germany in October, 2023. Per ABPA, the main highlight of the campaign was the launch of a portal focused on disseminating examples of sustainability initiatives promoted by agro-industries and the Brazilian productive sector, accessible at the website www.braziliansustainableprotein.com, in English. Organized as a news website, the portal will make available several cases of agribusinesses in the poultry, pig, egg, genetics and duck sector in Brazil. The portal will be constantly updated, including information, articles, videos and other initiatives involving environmental preservation actions, economic and social development and company governance.

Weather conditions

Based on data from the National Meteorology Institute (INMET), weather temperatures in the South region of Brazil, where over 72 percent of total slaughters concentrated in 2023 – as seen on "Figure 21 - Brazil 2023 Swine Slaughter per Region," – will be above average in the months of January, February, and March, 2024. INMET forecasts rain above average in the state of Rio Grande do Sul and irregular rainfall in Santa Catarina and Paraná states.

3.2. Live Swine Trade

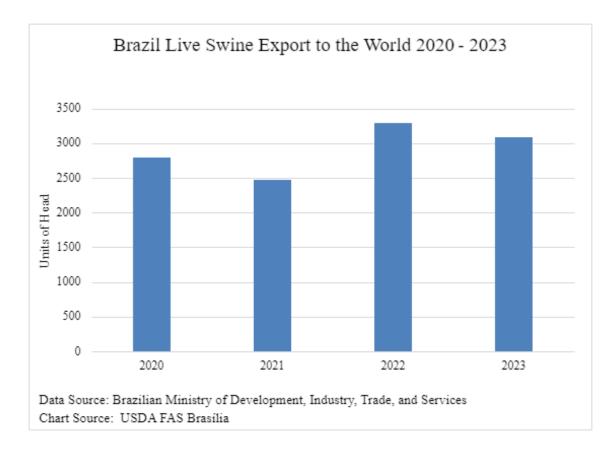
Exports

Post forecasts exports of live swine animals at 3 thousand heads for 2024. This forecast is consistent with 2023's exports of live swine animals, as demonstrated by the following graph. In 2023, Brazil has exported live swine to six countries – Paraguay, Argentina, Uruguay, Bolivia, Panama, and Angola, in

order of size of imports. Together, the Mercosur partners account for almost 92 percent of total exports. Paraguay alone accounts for 50 percent of live swine exports.

Figure 22

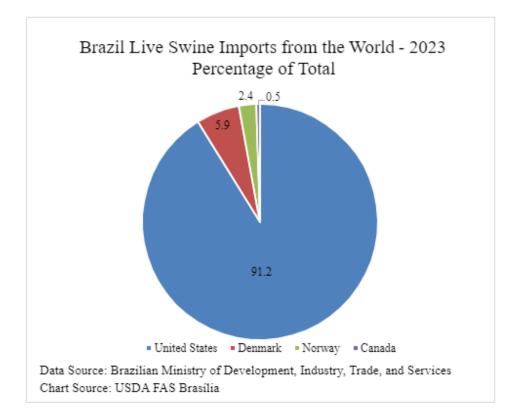
Brazil Live Swine Exports to the World – 2020 to July 2023



Imports

Post forecasts imports of live swine animals at 6 thousand heads in 2024, stable from 2023. As with cattle, Brazil's imports of live animals are focused on genetic improvement, as Brazil only imports "swine, live, purebred breeding animals", HS Code 010310. In 2023, Brazil has imported 6.4 thousand head, close to 295 percent increase from 2022. In 2023, Brazil imported live swine from the United States, Denmark, Norway, and Canada for the genetic improvement of the Brazilian herd. The graph below shows imports from the world, and the proportion. The U.S. was responsible for over 91.1 percent of total live swine imported by Brazil in 2023, with 5.8 thousand head.

Figure 23 *Brazil Live Swine Imports to the World – 2023*



4. PORK

Figure 24

Swine Meat- Production, Supply, and Distribution

Meat, Swine	202	22	202	23	2024 Jan 2024		
Market Year Begins	Jan 2	022	Jan 2	023			
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Slaughter (Reference) (1000 HEAD)	45150	45150	45990	45990	47640	47640	
Beginning Stocks (1000 MT CWE)	0	0	0	0	0	(
Production (1000 MT CWE)	4350	4350	4475	4475	4675	4675	
Total Imports (1000 MT CWE)	2	2	2	2	2	2	
Total Supply (1000 MT CWE)	4352	4352	4477	4477	4677	4677	
Total Exports (1000 MT CWE)	1319	1319	1414	1414	1500	1500	
Human Dom. Consumption (1000 MT CWE)	3033	3033	3063	3063	3177	3177	
Other Use, Losses (1000 MT CWE)	0	0	0	0	0	(
Total Dom. Consumption (1000 MT CWE)	3033	3033	3063	3063	3177	3177	
Ending Stocks (1000 MT CWE)	0	0	0	0	0	(
Total Distribution (1000 MT CWE)	4352	4352	4477	4477	4677	4677	
(1000 HEAD),(1000 MT CWE)							

Source: Not Official USDA Data

4.1. Production

Brazil is the world's fourth-largest pork producer in the world, behind China, the European Union, and the United States, respectively. Post forecasts pork production to increase four percent reaching 4.68 million metric tons carcass weight equivalent (MMT CWE) in 2024, reducing previous Post forecast of 4.88 MMT CWE for 2024. The lowered forecast is motivated by concern about feed prices and availability, and sluggish economic conditions locally. For more on feed, please consult item "Cost of feed" under the Production section, in the first chapter of this report – Cattle. The reduced forecast still represents an increase in pork production.

In the past years, industry has been making significant investments in order to boost production of pork – counting on improved domestic and international markets. Some of the challenges still faced by the sector are taxation issues, logistics – as some of the corridors used to send product abroad are the same as those for grains, - strengthening Brazil's image abroad, and protectionism. Brazil is currently working on a Tax Reform which will impact the agricultural industry – please refer to the section "Socio-Economic Factors to Weigh on Production" in the first chapter of this report – Cattle.

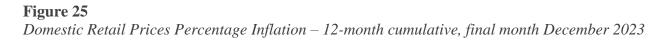
4.2. Consumption

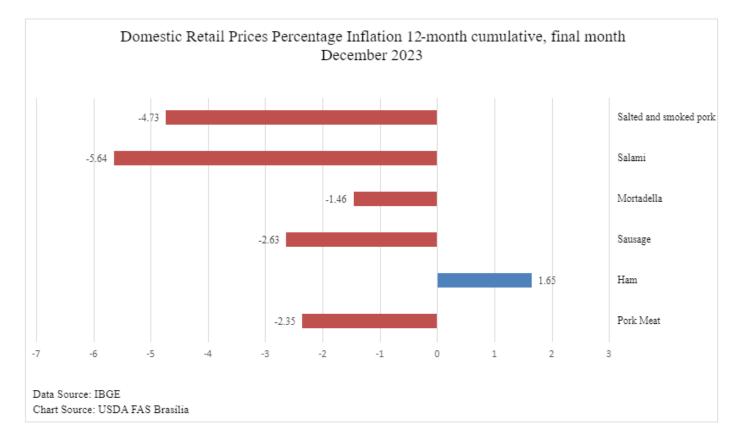
Post forecast pork consumption in Brazil will increase four percent in 2024 to 3.18 MMT CWE, due to improved availability of pork domestically and cheaper prices to the consumers, which has gained competitiveness in 2023 against other protein sources.

Pork remains as the third option of preference between the animal proteins in Brazil. The overall preference amongst Brazilians is beef, chicken, and then pork. As pork prices at the local market have decreased, there is an additional incentive for the consumption of pork. The increased consumption forecasted is not necessarily related to a taste preference, but rather an economic choice. Although some parts of Brazil tend to eat more pork because of cultural preferences, the pork industry continues to work diligently in market campaigns to incentivize pork consumption throughout Brazil. In some regions, where production is more concentrated, prices are smaller, so consumption is also improved there.

A challenge faced by the pork industry is that pork prices are still more expensive than chicken prices. Therefore, the prices paid by final consumer is of great importance when deciding which animal protein to purchase. Another factor influencing domestic consumption of pork is seasonality. Brazilian consumers tend to increase consumption of pork during the end of year, for Christmas and New Year`s celebrations. According to industry sources, per capita consumption in Brazil is about 18 kilos per person, which has been stable for some time, and is one of the industry's challenges. Industry contacts also relay that when the domestic consumption is weak on the actual pork meat, it is the pork products – such as ham, bacon, and sausages, for instance – that help make ends meet for industry, together with exports.

The following graph demonstrates domestic retail prices percentage inflation to the end consumer. The graph shows pork meat and pork products.





As with the beef industry, another point of attention that can impact the pork industry in 2024 could be the possibility of Highly Pathogenic Avian Influenza reaching poultry commercial plants in Brazil. As the world's largest poultry exporter, if HPAI were to reach the commercial industry, it would likely impact chicken meat being embargoed in certain countries, and consequently staying in the domestic market. This would lead to a drop in chicken meat prices domestically, which naturally would impact the prices of the other animal proteins, bringing them down. As a lot the players in the beef industry are also on the poultry industry, they are fully aware of the scenario and are doing what they can to prevent this.

The availability of pork domestically increased in 2023, as a result of increased production which was facilitated by improved feed prices, a slightly improved domestic economy, and decreased inflation on pork meat support.

4.3. Trade

Exports

Brazil is the third-largest pork exporter in the world, per official USDA data. Post forecasts exports to increase six percent in 2024, following a seven percent increase in 2023. Post's export forecast is based on increased pork availability, good external demand, increased purchases from new markets, furthering exports to existing consumers, and the sanitary status of Brazil versus its competitors who are facing challenges with ASF – particularly Europe. Post forecasts exports will represent 32 percent of total production.

As mentioned in Chapter 1 of this report, under "Animal Disease", the entire country of Brazil is considered free from FMD with vaccination. However, WOAH has granted recognition as free from FMD without vaccination for certain areas of Brazil. The expectation is that as more countries adopt WOAH's understanding, this will increase exports from different states, since a good portion of exports come from Santa Catarina state, which received this recognition in 2007.

In 2023, Brazil exported 1.41 MMT CWE to the world. The following graph demonstrates that Brazil has been increasing exports globally in the past few years. The graph also shows a recovery in prices paid to Brazilian exporters.

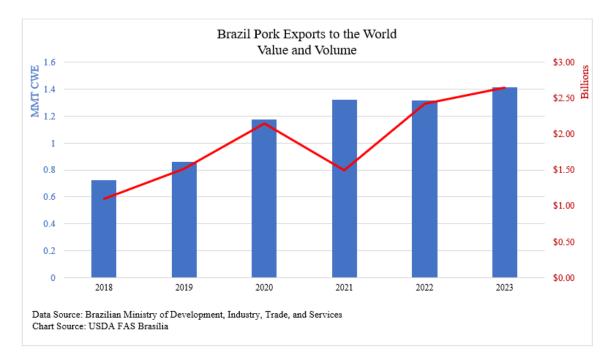


Figure 26 Brazil Pork Exports to the World

Brazil has been doing an intensive job on securing new markets for pork. Recently in 2023, Brazil has secured market access to Peru, Canada, Mexico, the Dominican Republic, and Singapore, among others. Because of the breadth of Brazilian pork consumer pool globally, Brazil is able to – despite its high exports to China – spread its products to other countries. In 2023, Brazilian pork reached homes in 121 different countries.

Industry relays that some of the destination countries that are priorities for the Brazilian pork industry are China, Hong Kong, Chile, Mexico, Japan, Singapore, the Philippines, and – still closed to Brazil`s pork – Thailand. The below graph shows the top 10 destinations in the period, and the percentage of total exports.

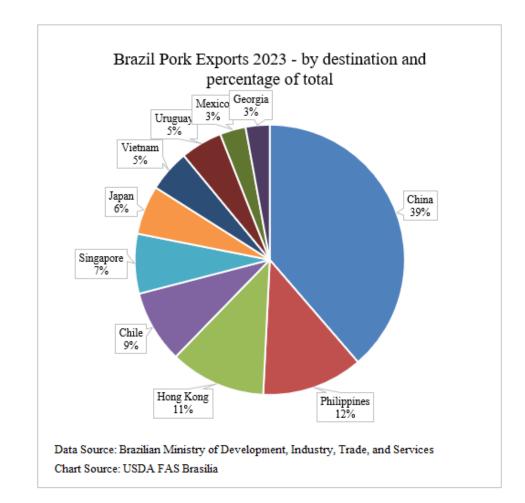


Figure 27 Brazil Pork Exports Top 10 Destinations, 2023 – Percentage of Total

China

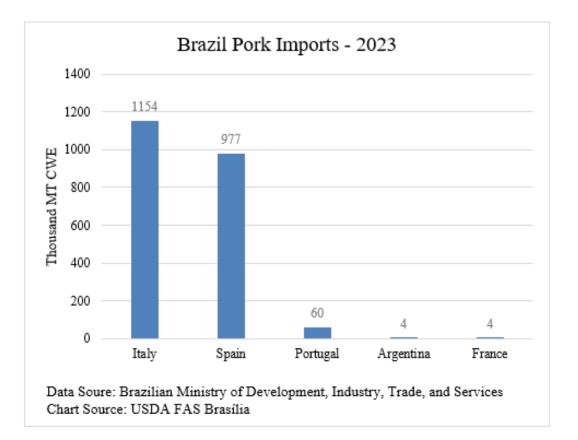
Except for China – which reduced pork imports globally by 9.13 percent in 2023, - Brazil was able to increase its market share in all of the other top nine markets to which it exports pork. This is an outstanding performance, which lessens its dependency on the Chinese market, while at the same time secured Brazil's record export in value and volume in 2023.

USDA official data forecasts China to import 2.25 MMT CWE of pork in 2024. In 2023, Brazil surpassed Spain and became the largest exporter of pork to China, in both volume and value, having exported close to 518.5 thousand MT CWE. As widely reported in the media, some European competitors are facing challenges with animal disease, and their exports may continue to be negatively impacted, favoring Brazil.

Imports

Post forecasts pork imports at 2,000MT CWE for 2024, stable from 2022 and 2023 numbers. In 2023, Brazil has imported close to 2,200 MT CWE. In 2023, the Brazilian market was serviced by the following countries: France, Italy, Portugal, Spain, and Argentina. Italy accounts for close to 52.5 percent of the products imported into Brazil, and Spain for 44.4 percent in 2023. From Italy, 98 percent of the products imported are under HS Code 021019 – Meat of swine, nesoi, salted, in brie, dried or smoked. From Spain, 87 percent of the products imported are under the same HS Code, and the remainder is mostly ham.

Figure 28 *Brazil Pork Imports 2023*



Annex 1



Attachments:

No Attachments