

Required Report: Required - Public Distribution **Date:** February 26,2021

Report Number: BR2019-0069

Report Name: Poultry and Products Semi-annual

Country: Brazil

Post: Brasilia

Report Category: Poultry and Products

Prepared By: Camila Aquino

Approved By: Oliver Flake

Report Highlights:

Post forecasts chicken production at 14.15 million tons in 2021, growing at a two percent rate due to strong external demand and increased domestic consumption. Consumption for 2021 is forecast at 10.25 million tons Ready to Cook (RTC), growing one percent. Post forecasts that poultry prices will remain elevated in 2021, with strong global meat demand and a relatively devalued Real supporting the forecast export numbers, boosted by the spread of Avian influenza in some countries in Europe and Asia. Brazil is the world's largest chicken meat exporter and Post forecasts exports will represent 28 percent of all chicken production in Brazil and increase four percent in 2021. China is expected to remain Brazil's top destination for poultry.

EXECUTIVE SUMMARY

The Brazilian economy has suffered a difficult 2020 due to the pandemic, with a projected contraction of 4.5 percent of its GDP. For 2021, the economy is expected to recover and forecast to grow at 4.5 percent. For the chicken sector, 2020 showed a one percent growth when compared to 2019 in production numbers, and for 2021, Post forecasts chicken production will be 14.15 million tons, growing at a two percent rate. Domestic prices of poultry reached record levels last year. This was a result of the increased cost of production due to high costs of animal feed caused by a spike in corn and soybean meal prices, and poor economic conditions, with unemployment affecting over 14 percent of the Brazilian population. An overall 15.6 percent increase was seen in domestic retail prices in 2020. Post forecasts consumption for 2021 at 10.25 million tons Ready to Cook (RTC), growing one percent. Post forecasts that poultry prices will remain elevated in 2021, with global meat demand and a relatively devalued Real supporting the forecast export numbers, boosted by the spread of Avian influenza in some countries in Europe and Asia. Brazil is the world's largest chicken meat exporter and Post forecasts exports will represent 28 percent of all chicken production in Brazil, and increase four percent. China is expected to remain Brazil's top destination for poultry. However, Brazil's position as the largest halal chicken exporter opens possibilities for new markets and for improved sales to traditional buyers, such as Saudi Arabia and the United Arab Emirates.

1. POULTRY

Meat, Chicken	201	9	202	20	2021 Jan 2021		
Market Year Begins	Jan 20	019	Jan 2	020			
Brazil	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Beginning Stocks (1000 MT)	0	0	0	0	0	0	
Production (1000 MT)	13690	13690	13880	13880	14120	14150	
Total Imports (1000 MT)	5	5	5	5	5	5	
Total Supply (1000 MT)	13695	13695	13885	13885	14125	14155	
Total Exports (1000 MT)	3811	3811	3760	3741	3920	3905	
Human Consumption (1000 MT)	9884	9884	10125	10144	10205	10250	
Other Use, Losses (1000 MT)	0	0	0	0	0	0	
Total Dom. Consumption (1000 MT)	9884	9884	10125	10144	10205	10250	
Total Use (1000 MT)	13695	13695	13885	13885	14125	14155	
Ending Stocks (1000 MT)	0	0	0	0	0	0	
Total Distribution (1000 MT)	13695	13695	13885	13885	14125	14155	
(1000 MT)							

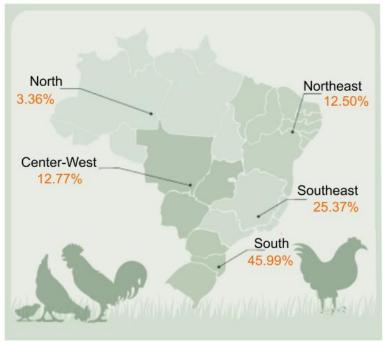
Note: Not Official USDA data

1.1 - Production

Chicken numbers

Post forecasts chicken production will be 14.15 million tons, growing at a two percent rate due to strong external demand and increased domestic consumption. The map below shows the five different regions of Brazil and their chicken population as of the end of 2019, which is the last year of available official data. In 2019, the top five producing states were Paraná, São Paulo, Rio Grande do Sul, Santa Catarina, and Minas Gerais, according to the Brazilian Institute of Geography and Statistics (IBGE). The South region – composed of the states of Paraná, Santa Catarina, and Rio Grande do Sul – continued to lead the country in chicken production, as it has since 1983, representing almost 46 percent of the total chicken population in Brazil. The Southeast region follows, with 25.37 percent of the total.

Percentage of Chicken Population by Region



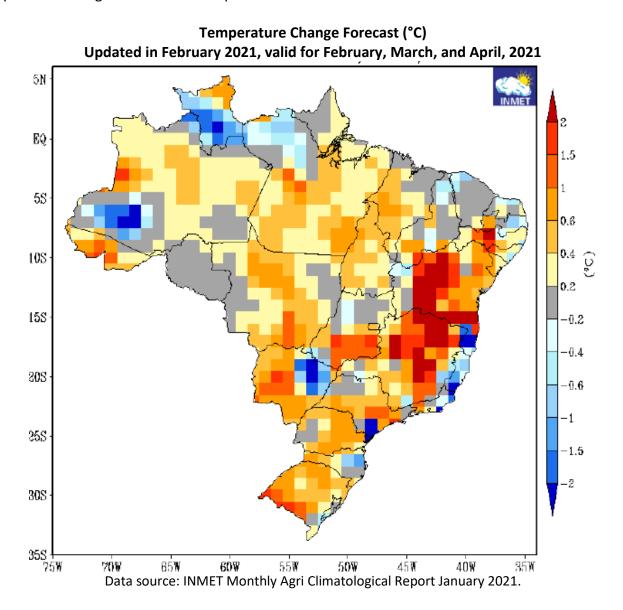
Data source: IBGE 2019 Livestock Production by Municipality 2019 (October 2020)

Weather Conditions

The temperature to which the chickens are exposed is an important factor in chicken production. The ideal temperature for chicken production is between 20°C to 25°C (68° to 77°F). Temperatures above this range impact their thermal balance. In October 2020, in the city of Bastos (São Paulo) – which is the largest egg producing city in Brazil, heat was so intense that it reached 41.5°C (106.7°F). As a result, chicken producers lost over 1 million chickens. Egg production was also affected as chickens tend to drink more water and eat less at high temperatures, hence producing less eggs. Fans were not

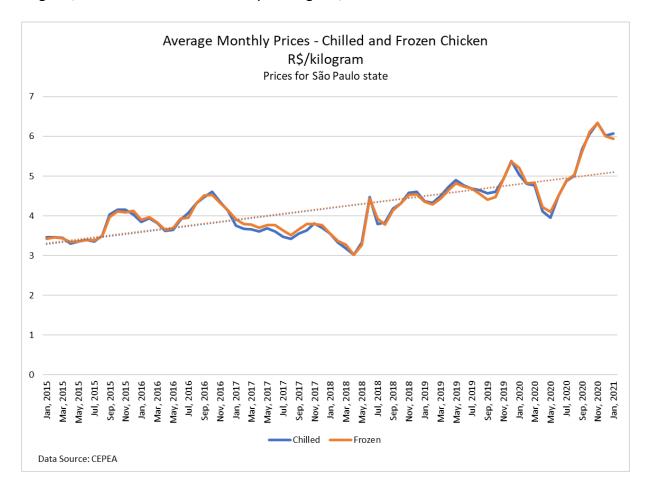
enough to decrease the temperature in production facilities in the region. The president of the Brazilian Association of Animal Protein (ABPA), Ricardo Santin, insists that the key to avoid further chicken deaths is to invest in technology. He reported that a temperature control system for a production facility with 100 thousand chickens costs an average of R\$ 200,000 (around 37,000 dollars at current exchange rate).

For the period of February to April 2021 (latest available), the National Meteorology Institute (INMET) forecasts temperatures above average in the most of the South region as well as in parts of São Paulo state and significantly above average in several parts of Minas Gerais. The graph below shows temperature changes forecast for the period.



Price and Profitability Outlook

Post forecasts that poultry prices will remain elevated in 2021, with global meat demand and a relatively devalued Real supporting the forecast export numbers, boosted by the spread of Avian influenza in some countries in Europe and Asia. In Brazil, prices climbed due to the devaluation of the national currency, the Real, which lost about 30 percent of its value in the first half on 2020. In 2020, the government granted a voucher to poor families due to the Covid-19 pandemic. Many of these families used the funds to purchase basic food supplies. As of February 22, the government had not decided if the "Corona voucher" will be renewed in 2021 and if so, under which terms. Due to the pandemic, many families lost their jobs — ramping the unemployment rate in Brazil in 2020 to 14.3 percent. As a result of the hardened economic situation, many families resorted to purchasing lesser expensive meat, hence, boosting the domestic prices of poultry, which reached record levels in 2020. In 2020, the average price for the year for frozen chicken was R\$ 5.14 per kilogram, and a record R\$ 6.51 per kilogram in mid-November. For frozen chicken, the yearly average was a bit lower at R\$ 5.09 per kilogram, and the record was R\$6.52 per kilogram, also in mid-November.



While the price outlook is robust, Post also forecasts that input prices will weigh on the sector's profitability. Post anticipates that feed prices, mainly corn and soybean prices, will remain well above their average of recent years. Poultry production profitability is highly dependent on the price of animal feed – corn, for instance, represents around 70 percent of the feed given to poultry. As

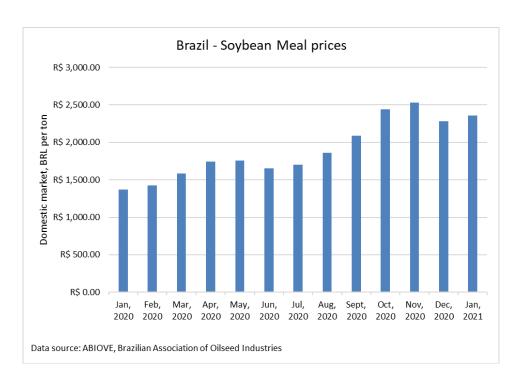
previously reported by Post in GAIN report numbers <u>BR2020-0045</u> and <u>BR2020-050</u>, the prices for corn and soybean meal in Brazil greatly increased in 2020, due to weather conditions that impacted the crops and due to a favorable exchange rate for exports. As domestic inflation spiraled, the animal sector pressured the government to eliminate soybean and corn tariffs for non-Mercosur trade block members. The industry argued that this would tamp down feed costs and thereby drive down domestic meat prices. The soybean meal tariff exemption expired on January 15 but the corn tariff waiver is in place until March 31, 2021 – though Post does not anticipate that either measure will lead to substantial volumes of corn and soybean imports outside of Mercosur.

The Brazilian National Union for the Animal Nutrition Industry (Sindirações) forecasts 2021 production of animal feed to increase by six percent from last year, due to improved demand for animal feed both for livestock and poultry production to support meat demand from the domestic and export markets. For 2021, post expects prices of corn and soybean meal to remain high and continue presenting a challenge to poultry producers.

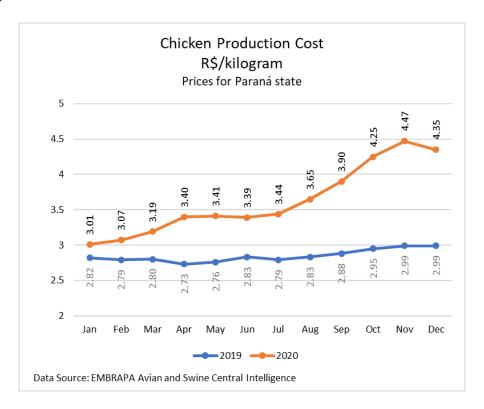


Data source: Rabobank Brazil Agribusiness Outlook 2021

*Basis: ESALQ/B3



In the reference state of Paraná, production costs ramped up in 2020 when compared to 2019. The following table and chart show that in 2020, for every single month, Paraná producers experienced higher production costs when compared to the previous year. The biggest difference was in November, which showed an overall 49.5 percent increase. The effects of such an increase in production costs are noticeable in the table "Prices for Paraná state", which shows the increase in the price of inputs, as well as that of live chicken.



Prices for Paraná state - R\$/kilogram													
	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Live	2019	2.89	2.82	3.07	3.04	3.10	3.06	3.11	3.08	3.06	3.10	3.11	3.11
Chicken	2020	3.42	3.23	3.23	3.19	3.20	3.45	3.54	3.60	3.86	4.16	4.59	4.00
Soybean	2019	1.30	1.25	1.26	1.29	1.30	1.35	1.68	1.30	1.34	1.34	1.40	1.45
Meal	2020	1.45	1.44	1.58	1.78	1.82	1.77	1.82	1.96	2.20	2.71	2.93	2.82
Coun	2019	0.59	0.60	0.59	0.55	0.53	0.58	0.58	0.57	0.57	0.62	0.66	0.71
Corn	2020	0.75	0.75	0.81	0.78	0.77	0.74	0.77	0.86	0.94	1.11	1.26	1.19

Data Source: EMBRAPA Avian and Swine Central Intelligence

The EMBRAPA index below for poultry production costs, called *ICPFrango*, details the various costs that are factored in production costs. The index shows that nutrition (feed) costs increased a cumulative 33.02 percent in 2020. Poultry producers saw their total cost of production increase a cumulative 38.93 percent for the year. Nutrition costs accounted for 73.76 percent of total costs in 2020, as shown in the following table. For 2021, Post believes that the costs of production will be near the same levels of 2020.

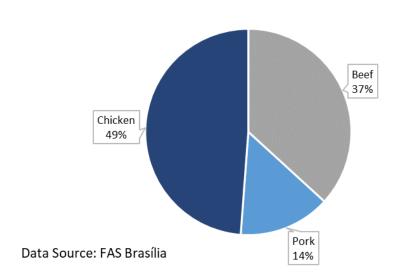
Poultry Production Costs - 2020							
ltem	Value increase compared to 2019	Percentage of total					
Nutrition (feed)	+33.02%	73.76%					
One day chick	+4.16%	13.37%					
Labor	-0.20%	3.78%					
Transportation	+0.68%	2.97%					
Depreciation	+0.45%	2.01%					
Capital Cost	+0.48%	1.64%					
Eletric Energy/ Bed/ Hea	+0.14%	1.46%					
Maintenance/Financial/	+0.09%	0.65%					
Diverse/ Others	+0.01%	0.18%					
Sanity	+0.09%	0.18%					
Total	+38.93%	100%					
Data Source: EMBRAPA Swine and Poultry, ICPFrango							

1.2 - Consumption

Consumption in 2020 increased 3 percent over 2019 and Post forecasts consumption for 2021 at 10.25 million tons Ready to Cook (RTC), growing just one percent. This forecast for a reduced growth in consumption (compared to 2020) is based on the forecast production numbers, a favorable scenario for exports, a hardened domestic economic situation, and the increase in domestic prices. Post forecasts that chicken consumption in 2021 will represent 49 percent of the total meat consumption in Brazil. Beef remains the preferred source of protein for most Brazilians. Overall, Post believes 2021

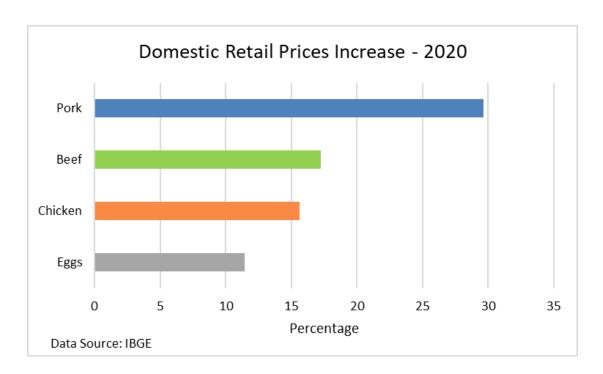
will be marked by economic uncertainties, continued high external demand, high retail prices, and a slightly increased domestic consumption of chicken.

Brazilian Meat Consumption 2021 Forecast

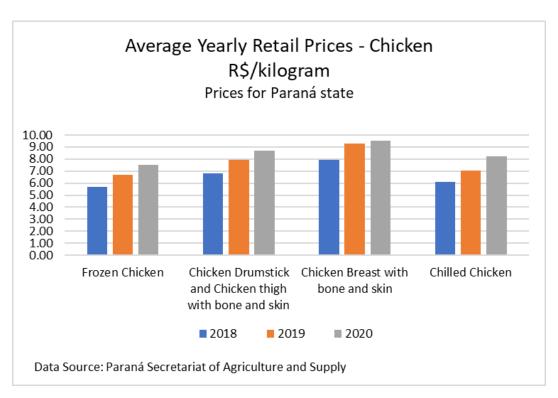


The Brazilian economy has been greatly affected by the pandemic with official GDP for the third quarter of 2020 (the latest data available) showing a cumulative contraction of 3.4 percent. The International Monetary Fund (IMF) projects that 2020 will end at a 4.5 percent retraction. For 2021, the Brazilian economy is expected to recover, and the IMF forecasts 3.6 percent growth. The economic recovery, however, will depend on how the pandemic evolves in 2021 and at this point it is already known that a new variant of the Coronavirus has originated in the North of Brazil, in Manaus, and it is believed to be spreading quickly. The pandemic resurgence, the return to stricter social isolation measures, delays in a nation-wide vaccination plan, and domestic fiscal challenges are factors that should be kept in mind and can impact total GDP for 2021. This economic scenario significantly impacts domestic consumption of chicken and all other sources of protein. In 2020, the government granted a voucher to poor families due to the Covid-19 pandemic. As of February 22, the government had not defined if the "Corona voucher" will be renewed in 2021, and if so, under which terms. There is talk that the vouchers could be paid in 2021, but it depends on approval of the national budget, which has little space for additional expenses. Currently, 94 percent of the Brazilian budget is marked as mandatory expenses. Due to the pandemic, many families lost their jobs - ramping the unemployment rate in Brazil in 2020 to 14.3 percent.

Therefore, considering the current economic scenario, a shift towards purchasing less-expensive sources of protein, primarily chicken and eggs, has been evident. The price of chicken in 2020 remained the most affordable from the three main meats, as exemplified on the graph below, and that continues to be the case in 2021. In 2020, Brazilian consumers saw retail prices of chicken increase an average of 17.16 percent for whole chicken and 14.08 percent for chicken cuts.



The state of Paraná, which serves as the reference for chicken production in Brazil, monitors more cuts than IBGE does, and their data shows an increase in prices for all types of chicken cuts.

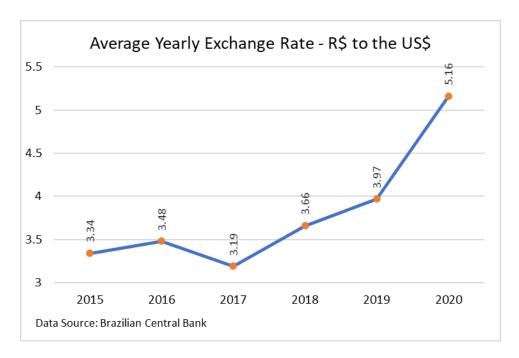


1.3 - Trade

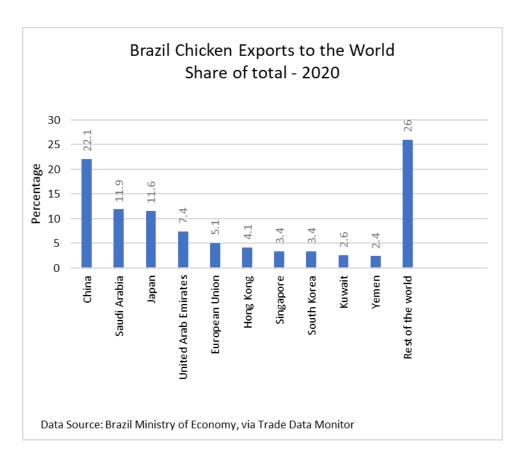
Exports

Brazil is the largest global exporter of chicken, followed by the United States, Thailand, and the European Union. Post forecasts a four percent increase in Brazilian chicken exports in 2021 from 2020, summing a total of 3.9 million tons RTC, mainly due to continued strong Chinese demand and the reopening of Middle Eastern markets. In 2021, Post forecasts exports will represent 28 percent of total production.

Since the outbreak of African Swine Fever in China in 2018 and its spread to other parts of the world, such as some European countries, and also outbreaks of Avian influenza across the globe, Brazil has benefitted from increased world demand for all meats – beef, poultry, and pork, and has been able to supply much of the unfilled demand. Producers benefited from a favorable exchange rate in 2020 and have targeted production for foreign markets. Domestic chicken prices have risen 17.2 percent in 2020 and export prices have also been strong.



Brazil closed last year with US\$ 5.23 billion and 3.74 million tons RTC in chicken exports to the world, exporting 27 percent of all its production. These numbers do not account for chicken paws, which are a popular product in certain parts of the world. When considering total chicken exports, Brazil exported US\$ 5.73 billion and 3.99 million tons RTC. China, for instance, imported US\$416.7 million in chicken paws from Brazil in 2020. The top markets for overall chicken exports were, in order: China, Saudi Arabia, Japan, the United Arab Emirates, and the European Union.



In 2020, China increased its chicken meat imports by 95.89 percent, and Brazil was the largest supplier to that market, followed by the competitors Argentina, Thailand, and Russia. China was the destination of 22 percent of all Brazilian chicken exports, followed by Saudi Arabia with almost 12 percent of exports, and Japan was the destination of 11.6 percent of all Brazilian chicken exports. During 2020, Brazil had some slaughterhouses temporarily delisted by Chinese sanitary authorities due to allegations of the presence of the Coronavirus in the packaging of different meats. Nevertheless, that did not have a marked impact on export volumes, which increased 27.8 percent from 2019. For 2021, China is expected to continue being a top performing market, and market analysts expect that there will continue to be short supplies of poultry in the next three to four years.

The Brazilian industry is taking advantage of current overseas demand while domestic demand is impacted by high prices. Some poultry operators are investing in export capacity, such is the case of the conglomerate Aurora. On February 22nd, Aurora´s CEO announced a R\$ 500 million investment to increase production capacity to grow exports of chicken meat and pork to China. They have already submitted authorization requests to the Chinese sanitary authorities for the approval of three additional exporting plants. Based on data from the Brazilian Ministry of Agriculture's website (as of February 7, 2021), Brazil has 46 plants authorized to export chicken meat and parts to China, 38 of which are from the top five producing states. Furthermore, the Brazilian industry is monitoring the outbreak of Avian influenza in Scotland, France, and in Japan to see if additional export demand may arise.

Japan was the third largest destination of Brazilian exports in 2020, and worldwide was the second largest importer, only behind China. As of mid-December, 2020, Japan was affected with its worst ever Avian influenza outbreak, which at that point affected 20 percent of all Japanese prefectures. In January 30, 2021, the Japanese Ministry of Agriculture, Forestry, and Fisheries had confirmed Avian influenza outbreaks at 39 farms, resulting in the slaughtering of about 6.2 million birds, considered a record number for one season. According to the farm ministry's inspection of affected chicken farms, 90 percent of the poultry farms in Japan that have been hit by avian influenza since last year had flaws in preventing wild birds and other animals from accessing their chicken coops. This scenario will surely impact Japanese domestic production of chicken, likely leading the country to boost its imports. Brazil was the second largest supplier to that market, falling behind Thailand in 2020.

The spread of Avian influenza in some of Brazil's competitors worldwide, such as France, for instance, could also bolster Brazilian chicken exports in 2021. Not only can Brazil be expected to supply its traditional markets, but also cover for the gaps from other suppliers, as well exporting to its competitors to cover for their domestic consumption needs, depending on the gravity of local outbreaks.

As the world's largest exporter of halal chicken, Brazil is seeking to increase its exports to the Arab world. The main states that produce halal meat are: Paraná, Rio Grande do Sul, Santa Catarina, Mato Grosso do Sul, and Goiás. According to the Federation of Muslim Associations in Brazil (FAMBRAS Halal) there are 37 certified halal chicken slaughterhouses in Brazil. In 2020, Saudi Arabia was the second largest destination for Brazilian chicken and the United Arab Emirates assumed the fourth position. The pandemic affected exports to the Middle East, and an overall 18 percent decrease for all halal meats exports was seen in 2020 when compared to 2019. However, Post believes that Brazil is likely to see growth in those markets in 2021. According to the Vice President of FAMBRAS, Ali Zoghbi, twenty percent of the Islamic population consumes halal products, and those countries have great consumption capacity because of the size of their populations, as well as strong purchasing power. The United Arab Emirates is the largest halal importer in the world, followed by Saudi Arabia, Iran, Oman, and Bahrain. Together, these five countries imported US\$ 1.25 billion in chicken meat from Brazil in 2020.

The Brazilian Ministry of Agriculture is working towards opening new halal markets, such as Indonesia, Pakistan, and others. Indonesia is one of the largest Islamic countries in the world, and could be an important market for Brazil, as Indonesians eat almost 12 kilograms of chicken a year, about four times as much as Brazilians, according to the Brazilian Association of Animal Protein (ABPA). Since 2014, Brazil has been in discussions at the World Trade Organization (WTO) on measures imposed by Indonesia blocking access to the chicken market. Brazil has already won the case, but Indonesia requested a reasonable deadline to adopt the measures suggested by the WTO. In December 2020, Indonesia appealed to the WTO Dispute Settlement Appellate Body, delaying even further the adoption of the recommendations. The Brazilian Ministry of External Affairs, Itamaraty, is seeking to start conversations with Indonesia on a free trade deal. The president of ABPA has released a note on January 26, 2021 to the Ministry of Agriculture, Economy, and Itamaraty, in which he stated that he is not against free trade with Indonesia but there cannot be barriers to food and that an FTA with Indonesia should be conditioned on market access for Brazilian halal chicken exports.

As evident in the above table "Brazil Chicken Exports to the World – Share of total 2020", Brazil's chicken exports are very diversified. Aside from the top three markets, no other Brazilian chicken market corresponds to more than ten percent of the total share. Among the 111 markets Brazil exported to in 2020, 98 of them were below two percent of the total market share. Though China is the top market for Brazilian chicken, the industry is less dependent on China than is the case for other meats. For instance, for pork, China accounted for a little over half of total pork shipments from Brazil.

Imports

Despite being the world's largest chicken exporter, in 2021 Post forecasts Brazil will import 5 thousand tons of chicken meat. In 2020, chicken meat imports from Brazil were also 5 thousand tons. Brazil's top suppliers of chicken meat in the past six years are: Argentina, Chile, and France.

Brazil Imports from World Commodity: Group PSD-Meat, Chicken

Annual Series

Partner	Unit	2015	2016	2017	2018	2019	2020
Argentina	USD	8,944,822.00	5,411,243.00	8,319,977.00	10,836,592.00	9,918,582.00	7,856,044.00
Chile	USD	501,588.00	668,592.00	-	ı	1,489,291.00	1,771,016.00
France	USD	-	318.00	-	ı	1	ı
Total	USD	9,446,410.00	6,080,153.00	8,319,977.00	10,836,592.00	11,407,873.00	9,627,060.00

Data Source: Brazil Ministry of Economy, via Trade Data Monitor

Attachments:

No Attachments