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RECICLAGEM ANIMAL

# ABRA YEARBOOK

ANIMAL RENDERING SECTOR

# 2020





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# MESSAGE FROM THE CEO

Once again, ABRA honors its commitment to responsibility and representativeness with the animal rendering sector by publishing the ABRA 2020 Yearbook. This is an important consultative and updating document, both for the sector and for the productive chain of the national petition. We want this publication to continue fulfilling its role of reference, as we work seriously to deliver reliable data from our sector to society.

In this edition, it is possible to verify that 2020 was a challenging year for the sector, as well as for the rest of the world, due to the Covid-19 pandemic. However, even in a context of so many obstacles, the Association was able to adapt quickly to this new reality, even achieving extremely positive results and having optimistic prospects for the future. It also reinforced its role in supporting the barriers that companies in the sector had to face. Thus, our Association saw its representation grow even more, mainly serving as a reference in monitoring the impacts of the pandemic on the sector.



**Pedro Daniel Bittar**

Chairman of the Board  
Directive of **ABRA**



We intensify our active participation as a member of the Sectorial Chambers of the Production Chains maintained by the Ministry of Agriculture, Livestock and Food (MAPA) – they are: Beef, Poultry and Swine, Fish, oilseeds and Biodiesel, and Pets (Pet), as well as in the National Council for Beef Cattle (CNPC). Likewise, in the National Confederation of Industry (CNI), ABRA maintained its chairs as a full member in the Legislative Affairs Council (CAL); Environment and Sustainability Council (COEMAS) and Waste Network; in addition to being present in the Business Coalition for Trade Facilitation and Barriers (CFB) and in the Brazilian Business Coalition (CEB).

All this articulation kept our entity always up to date, close to its associates and within the issues that involved the sector in the domestic and international market. An example of this strong performance was the creation, in 2020, of the Working Group by the Technical Chamber (CAMTEC/ABRA), with the aim of formulating a proposal for the alteration of Normative Instruction 34/2008, and present it next to MAPA.

In January of the same year, a working group was created by the Ministry to review the National Program for the Prevention and Surveillance of Bovine Spongiform Encephalopathy (PNEEB) – again, we were present by the animal rendering sector.

Also through the Foreign Chamber of Commerce (CAMEX), ABRA worked tirelessly to increase export opportunities through the opening and reopening of markets, mediating the difficulties faced by each company to benefit the entire sector. Fostering exports with the support of the Brazilian Renderers project is a fundamental strategy for the success of the partnership with Apex-Brasil. It makes us increasingly recognized worldwide for the quality, sanity and commitment in the delivery of our products to our international customers.

Finally, I hope you will make the most of all the content of this publication. Enjoy your reading!

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# CHAPTER 1

The background of the page is a dark blue gradient. It features several geometric elements: a large, light blue triangle on the left side, a series of parallel light blue lines on the right side, and a bright blue diagonal line that runs from the top left towards the center. The overall design is modern and minimalist.



CHAPTER 1

# **ANIMAL RENDERING IN THE WORLD**

## International market

Animal rendering is an activity carried out worldwide, indispensable for the sustainability of the animal protein production chain. In addition to providing economic gains, this activity generates environmental benefits, as it prevents waste from the slaughter of animals from being disposed of incorrectly, such as in the beginning or simply with disposal in dumps and/or landfills. By carrying out the collection and correct disposal of waste from industries, the animal rendering sector produces ingredients that are used by various sectors: animal feed, food

for pets, agriculture, petrochemical sector, soap, pharmaceutical industry, civil construction, beauty industry, self-motivating industry and sports industry.

The ingredients produced by animal rendering are called Inedible Animal Products, the main ones being proteic and fatty by-products, such as animal meal and animal fat, respectively. Also manufactured by this industry are inputs and new products, such as gelatin and blood products:

### Use of products in other industries

INDUSTRY	EXAMPLES OF PRODUCTS
Animal feed	Petfood, Cattle feed, food supplies
Agriculture	Fertilizers
Chemical/Petrochemical industry	Biodiesel, biokerosene, solid fuels, grease and lubricants, explosives, candles
Soap industry	Bar soaps, Powder soaps, soaps, disinfectants
Pharmaceutical industry	Capsules, vaccines, antibiotics, cream
Civil construction	Paints, colorants, resins (tallow in the composition)
Beauty industry	Lipstick, nail polishers, make up, perfume, moisturizers and lotions, hair products, aesthetic treatment products, collagens
Automotive industry	tyres, rubber (tallow in the composition)
Sports industry	Supplies for athletes



**BOVINE MEAT AND BONÉ**



**SWINE MEAT AND BONÉ**



**FISH MEAL**



**HYDROLISED FEATHER  
MEAL**



**BLOOD MEAL**



**POULTRY OFFAL MEAL**



**POULTRY OIL**



**FISH OIL**



**SWINE GREASE**



**BOVINE TALLOW**



**GELATIN**



**HAEMOGLOBIN**



**PLASMA**



**PALATABILIZER**

Collagen, gelatin peptides, is destined for human consumption, as long as the industrial plant is qualified for this purpose by the Ministry of Agriculture, in conformity with Decree No. 9.103, from March 29, 2017.

## Largest producers of meals and fats from animal origin in the world

Million tonnes

### USA

-  Meals: **4.8**
-  Fat: **5.9**
-  Establishments: **343**
-  Exports: **2.0**

Animal meals and fats also vary according to the slaughtered animal that originated the waste to be processed: cattle, swine, poultry or fish. In some cases, there is also the processing of other animals, such as equidae. The existing restrictions in this activity vary according to the cultural origin and also health particularities of each country. The production of animal rendering industries has a direct relationship with livestock production. Since residues from the slaughter of animals are the main raw material for the manufacture of Inedible Animal Products, the greater the number of animals slaughtered, the greater the animal rendering industry can be. Therefore, the main world producers in the animal rendering sector are also the countries with the greatest expressiveness in livestock production.

To observe the numbers of the world market for animal rendering, animals must be separated by their terrestrial or aquatic nature, as some countries have a different production matrix. Likewise, it should be observed separately meals from fatty products, due to

### Brazil

-  Meals: **3.5**
-  Fat: **2.0**
-  Establishments: **318**
-  Exports: **0.2**

the different characteristics of the production processes of each country. The tables that follow bring data from international trade in the animal rendering sector, separating meals and fatty products from terrestrial and aquatic animals.



European Union

- Meals: 4.5
- Fat: 3.0
- Establishments: 484
- Exports: 1.5

New Zealand

- Meals: 0.16
- Fat: 0.13
- Establishments: 26
- Exports: 0.3

Australia

- Meals: 0.65
- Fat: 0.61
- Establishments: 83
- Exports: 1.1

Source: Created by ABRA based on MIA, EFPRA, ABRA, IBIS WORLD, RENDER (2019)

To observe the numbers of the world market for animal rendering, animals must be separated by their terrestrial or aquatic nature, as some countries have a different production matrix. Likewise, the meals of fatty products must be observed separately, due to the different

characteristics of the production processes of each country. The tables that follow bring data from international trade in the animal rendering sector, separating meals and fatty products from terrestrial and aquatic animals.

## Meals and inedible fats from terrestrial animals

(Ruminants, pigs and birds)

**Table 1.1 – Main world exporters of meal meal (tonnes)**

Position	Exporters	2019	2020	Market Share
1	European Union	932.608	1.872.355	43,4%
2	United States	904.038	989.434	22,9%
3	Australia	277.435	253.873	5,9%
4	United Kingdom	270.162	232.672	5,4%
5	<b>Brazil</b>	<b>170.580</b>	<b>166.554</b>	<b>3,9%</b>
6	New Zealand	135.845	161.974	3,8%
7	Argentina	80.720	92.590	2,1%
8	Canada	77.322	88.762	2,1%
9	Paraguay	31.409	49.311	1,1%
10	Norway	31.408	35.127	0,8%
<b>TOTAL</b>		<b>4.283.256</b>	<b>4.316.465</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

**Table 1.2 – Main world buyers of terrestrial animal meal (tonnes)**

Position	Buyers	2019	2020	Market Share
1	European Union	1.034.105	992.894	23,0%
2	Vietnam	603.583	674.563	15,6%
3	Indonesia	543.064	528.886	12,3%
4	China	339.317	366.382	8,5%
5	Thailand	332.277	319.560	7,4%
6	Philippines	340.100	244.872	5,7%
7	Chile	172.090	135.715	3,1%
8	USA	117.412	113.980	2,6%
9	Myanmar	69.188	77.391	1,8%
10	South Africa	60.526	60.088	1,4%
<b>TOTAL</b>		<b>4.283.256</b>	<b>4.316.465</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

**Table 1.3 – Main world exporters  
of meal (tonnes)**

Position	Buyers	2019	2020	Market Share
1	European Union	1.389.634	1.475.642	42,3%
2	United States	763.750	902.891	25,9%
3	Australia	417.495	419.712	12,0%
4	Canada	233.192	245.887	7,0%
5	New Zealand	131.833	132.818	3,8%
6	Argentina	42.166	52.321	1,5%
7	Uruguay	67.829	51.674	1,5%
8	Malaysia	38.198	46.082	1,3%
9	Paraguay	42.478	44.989	1,3%
10	India	25.719	30.851	0,9%
<b>TOTAL</b>		<b>3.264.577</b>	<b>3.489.724</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)



**Table 1.4 – Main global purchasers of fat from meal (tonnes)**

Position	Buyers	2019	2020	Market Share
1	European Union	733.447	731.756	24,2%
2	Singapore	986.860	477.716	15,8%
3	USA	20.530	223.036	7,4%
4	Mexico	168.057	151.552	5,0%
5	China	96.342	83.550	2,8%
<b>6</b>	<b>Brazil</b>	<b>86.857</b>	<b>62.081</b>	<b>2,1%</b>
7	Canada	65.366	58.765	1,9%
8	Malaysia	36.078	46.209	1,5%
9	United Kingdom	39.228	38.922	1,3%
10	Philippines	25.766	30.830	1,0%
<b>TOTAL</b>		<b>3.264.577</b>	<b>3.489.724</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

## Fish non-edible meals and fats

**Table 1.5 – Main world exporters of meal fish (tonnes)**

Position	Buyers	2019	2020	Market Share
1	Peru	1.047.210	852.752	26,5%
2	European Union	399.542	419.778	13,0%
3	Chile	193.405	297.296	9,2%
4	Vietnam	115.258	189.204	5,9%
5	Morocco	154.786	163.698	5,1%
6	Thailand	107.681	152.147	4,7%
7	USA	170.721	142.463	4,4%
8	Mauritania	110.423	114.366	3,5%
9	Russia	75.334	87.825	2,7%
10	South Africa	44.242	80.700	2,5%
<b>TOTAL</b>		<b>3.181.275</b>	<b>3.222.844</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

**Table 1.6 – Main world buyers of meal fish (tonnes)**

Position	Buyers	2019	2020	Market Share
1	China	1.424.253	1.430.155	41,06%
2	European Union	473.930	408.494	11,73%
3	Japan	219.921	209.195	6,01%
4	Vietnam	129.472	185.644	5,33%
5	Turkey	178.068	154.307	4,43%
6	Norway	143.559	136.714	3,92%
7	Indonesia	104.596	122.047	3,50%
8	United Kingdom	107.836	111.337	3,20%
9	USA	51.911	60.812	1,75%
10	Canada	60.974	56.377	1,62%
<b>TOTAL</b>		<b>3.181.275</b>	<b>3.222.844</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

**Table 1.7 – Main world exporters of fish oils (tonnes)**

Position	Buyers	2019	2020	Market Share
1	European Union	242.319	267.040	12,4%
2	Peru	181.688	141.576	6,6%
3	Norway	117.719	139.373	6,5%
4	Chile	94.326	129.640	6,0%
5	United States	89.977	58.940	2,7%
6	Vietnam	17.850	50.729	2,4%
7	Morocco	35.796	46.050	2,1%
8	Mauritania	34.535	39.546	1,8%
9	Iceland	36.891	36.166	1,7%
10	China	27.585	27.214	1,3%
<b>TOTAL</b>		<b>2.118.462</b>	<b>2.333.710</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)



**Table 1.8 – Main world buyers of fish oils (tonnes)**

Position	Buyers	2019	2020	Market Share
1	European Union	529.926	622.336	20,6%
2	Norway	418.456	477.741	15,8%
3	China	224.194	258.811	8,6%
4	Chile	106.940	139.528	4,6%
5	Canada	126.121	137.563	4,6%
6	USA	122.357	121.037	4,0%
7	Turkey	85.353	88.161	2,9%
8	Japan	63.282	60.038	2,0%
9	United Kingdom	48.289	52.102	1,7%
10	Australia	48.280	47.709	1,6%
<b>TOTAL</b>		<b>2.118.462</b>	<b>2.333.710</b>	

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

The commercial flow of the animal rendering sector may be impacted by issues outside trade, such as sanitary barriers. Although the sector's products present a low health risk, due to the inherent heat treatment to which slaughter waste is submitted, each country has the autonomy to impose barriers that they believe are important for the maintenance of national health security. The industry constantly has to innovate and improve the quality of products to satisfy the requirements presented by buyers.

In addition to animal meals and fats, protein and hard-gor products comprise animal blood products and gelatin. These can be considered supportive to the sector, because, despite benefiting from the animal rendering process, using raw materials such as blood, peptides and collagen, they are products of final industrial sectors, such as drugs and cosmetics.

**Table 1.9 – Brazilian Numbers of the Sector (2020)**

Product	Export tonnes	Position	Import tonnes	Position
Meals and meals of terrestrial animals	166.554	5°	4.285	18°
Fish meals	18.664	21°	2.853	33°
Fats from terrestrial animals	10.727	12°	62.081	6°
Fish oils	2.212	26°	14.055	22°

Source: Elaborated by ABRA based on UNComtrade and TradeMap (2021)

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BRASIL

# CHAPTER 2







CHAPTER 2

# **ANIMAL RENDERING IN BRAZIL**

## Made in Brazil

Nowadays, Brazil is today a world giant in the production of animal protein. We are among the main world leaders in the production of beef, pork and poultry, in addition to large fish production. The numbers prove this success. In the production process, the animal protein is extracted from the carcass flame, part of the animals, which represents the animal slaughtered, bled, skinned, eviscerated, devoid of the head, paws and tail, among other characteristics peculiar to each animal. These unused parts are slaughter residues, represented mainly by blood, head, viscera, feathers, hooves, fat shavings, in addition to residues from processing or industrialization of meat.

The animal rendering sector is formed by industries that process this waste and, when registered with the Federal Inspection Service (SIF), we have its standardization governed by the Ministry of Agriculture, Livestock and Supply (MAPA).

This way, legal framework that governs the Brazilian animal receipt sector at the federal level is formed by Law 1,283/1950, regulated by Decree 9,013/2017, the Regulation of Industrial and Sanitary Inspection of Animal Products, better known as RIISPOA, and, finally, by MAPA Normative Instruction 34/2008. According to Decree 9,013/2017, industries in the animal rendering sector are classified as establishments of animal products that carry out inter-dual and international trade, under federal inspection.

The Inedible Products Processing Units (UBPNCs) carry out the re-collection of animal waste in slaughterhouses, butchers and supermarkets, correctly disposing of this material and contributing to the environment. Without this industry, all this waste would be destined for landfills. In addition to using waste, these companies have a high capacity to generate income and contribute greatly to the sustainability, that is, the waste that would simply be eliminated can now generate money and contribute to the environment.

## Of the establishments that manufacture NON-EDIBLE products

### Brazilian legislation

#### More Ads By Meat and Derivatives

Dependencies attached to slaughterhouses for the processing of industrial by-products

#### More Ads By Non-edible products

Processing Unit for Non-edible Products UBPNCS

Source: Created by ABRA based on MDIC



The sector's production can also be carried out in facilities attached to the slaughter establishments for the processing of industrial by-products: Non-edible Products Processing Units Integrated with slaughterhouses.

Thus, the refrigerated slaughterhouses have two options for the disposal of their waste by means of animal rendering, processing them within their establishments or by means of collection by a Processing Units of Inedible Products.

In Brazil, there are a total of 318 attached facilities and UBPNs registered with SIF, as shown in the table below.

Unit FEDERATIVE (UF)	Dependencies attachments	UBPNCs	Total
AC	1	0	1
AL	1	0	1
AM	0	0	0
AP	0	0	0
BA	2	2	4
CE	0	2	2
DF	0	1	1
ES	0	1	1
GO	10	10	20
MA	0	1	1
MG	6	5	11
MS	12	8	20
MT	22	12	34
PA	5	4	9
PB	0	0	0
PE	0	2	2
PI	0	0	0
PR	26	20	46
RJ	2	1	3
RN	0	0	0
RO	6	3	9
RR	0	0	0
RS	8	11	19
SC	14	15	29
SE	0	0	0
SP	24	24	48
TO	2	0	2
<b>Total</b>	<b>141</b>	<b>122</b>	<b>263</b>

## GDP OF THE SECTOR

Years	Billion R\$
2020	18.05
2019	8,35
2018	7,94
2017	7,90
2016	7,75
2015	7,86
2014	7,94
2013	7,27
2012	7,45
2011	6,19
2010	5,81

Regarding the Brazilian GDP of Animal Rendering, it should be noted that 2020 was marked by a strong private price increase of endogenous and exogenous issues to the sector. In relation to endogenous factors, we mention the possible reductions in Brazilian cattle slaughter scales, which reduced the raw material for the production of meal, reducing supply and impacting the price. Also in relation to the internal economic context of the sector, there was also an increase in demand from some production sectors, especially poultry and pigs, given that the Pandemic generated a reduction in Brazilian income and, consequently, a substitution for the consumption of proteins of these two species, which also impacted the supply.

In relation to exogenous factors, there is the massive acquisition of products of plant origin by China, which caused an increase in the price of these commodities and, consequently, made animal meals and fats

more competing and requested than previous years. Thus, also what happened internally in the country, can also be seen externally, that is, an increase in demand and, consequently, an increase in prices. Also, as an exogenous, it is necessary to observe the exchange rate increase, which caused a greater absorption of international currencies by the sector.

These factors, together, explain the exaggerated increase in the Gross Domestic Product of the Animal Rendering sector to R\$18.05 billion reais. This is because this indicator is considerably impacted by the price and revenue of the industries. As a result, to better understand the growth of the sector, it is enough to observe the growth of this indicator in dollars, when in 2020 the sector earned US\$3.61 billion, an increase of 51% compared to 2019, when it reached the figure of US\$2.38 billion.

## Raw Material of the Sector

According to the World Health Organization (WHO), animal rendering is an activity of significant importance for sustainable development, being classified as an “activity of public interest” and important environmental relevance. This agro-industry receives this classification, as it is responsible for removing from the environment the re-waste from the slaughter of animals, which have high potential to cause environmental, sanitary and economic damage, transforming them into by-products used in various industries. There are two sources of raw materials from the animal rendering sector provided by law:

- **Meat slaughterhouses** – slaughterhouses and slaughterhouses
- **Retail establishments** – butchers, supermarkets and municipal markets.

Animal slaughter residues are parts that do not go for human consumption, either for reasons related to the population's food and cultural habits, or for being classified as unfit for human consumption by the official inspection system. For example, waste from animal slaughter: guts, bones, feathers, blood, scales, meat and fat trimmings and parts of the animal.

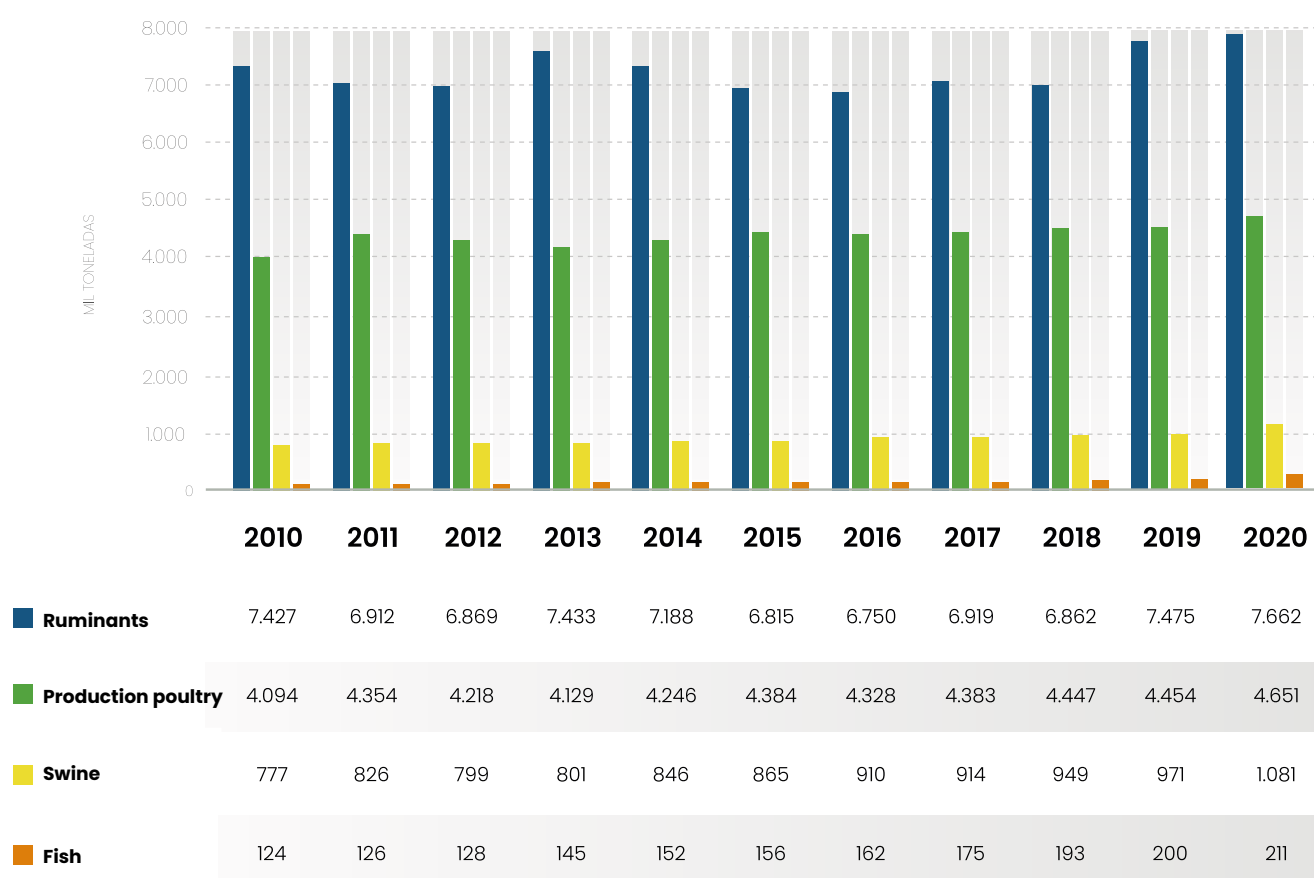
### Representation of animal rendering in the livestock sector

Specie	Live weight produced (tonnes)	% for rendering	Raw material rendering (ton)
<b>Ruminants</b>	20.205.322	38%	7.662.023
<b>Birds</b>	16.823.452	28%	4.651.085
<b>Swine</b>	5.517.413	20%	1.081.413
<b>Fish</b>	469.916	45%	211.462

Source: ABRA



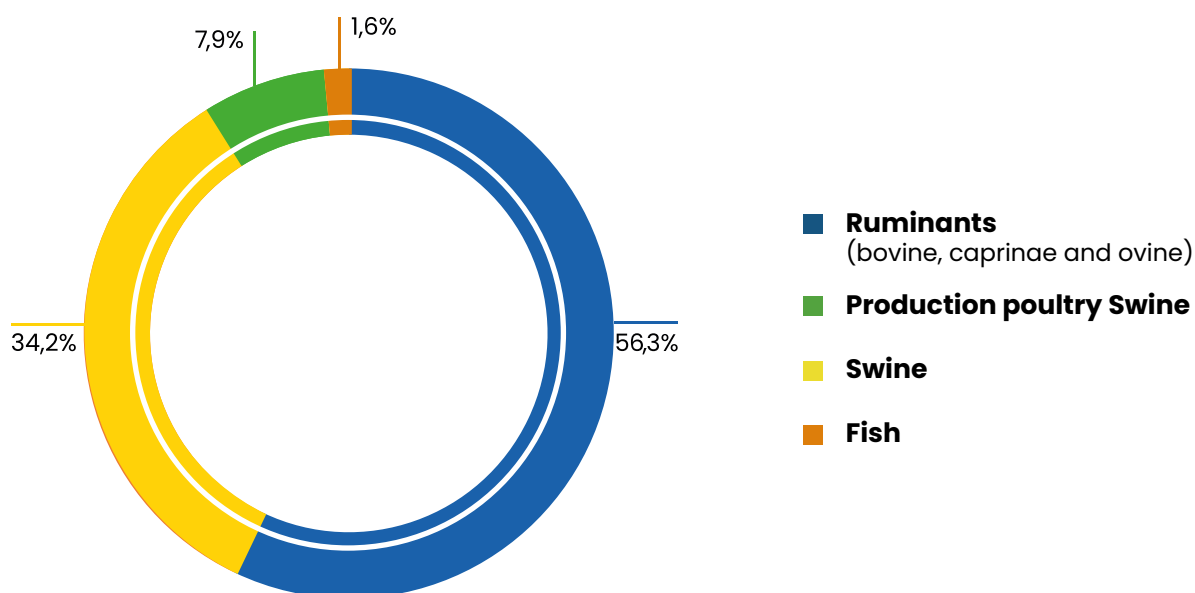
## Amount of residues processed from animal slaughter



Source: ABRA

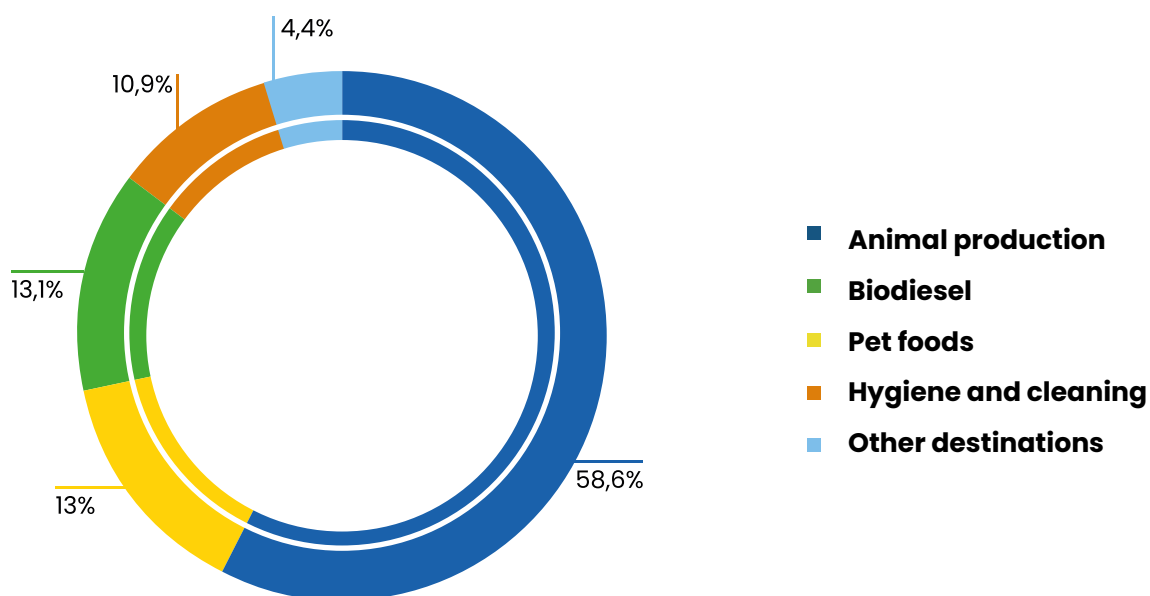


## Amount of residues processed from animal slaughter



Source: ABRA

## Consumer market



Source: ABRA

## Trade balance

The main export product of the animal rendering sector is animal meal. The fat produced is absorbed almost entirely by the national market, in particular by the biofuel

impacting less on exports and more on imports, thus, the Brazilian trade balance of the sector is superavitary.

### Trade Balance of the Sector in 2019

Trade balance	US\$
Exports	113.788.016
Imports	85.419.368
<b>Balance</b>	<b>28.368.648</b>

Source: Created by ABRA based on MDIC



## Brazilian Exports

The international market is an important destination of products in the Brazilian animal rendering sector. In 2020, we exported 201 thousand tonnes that yielded

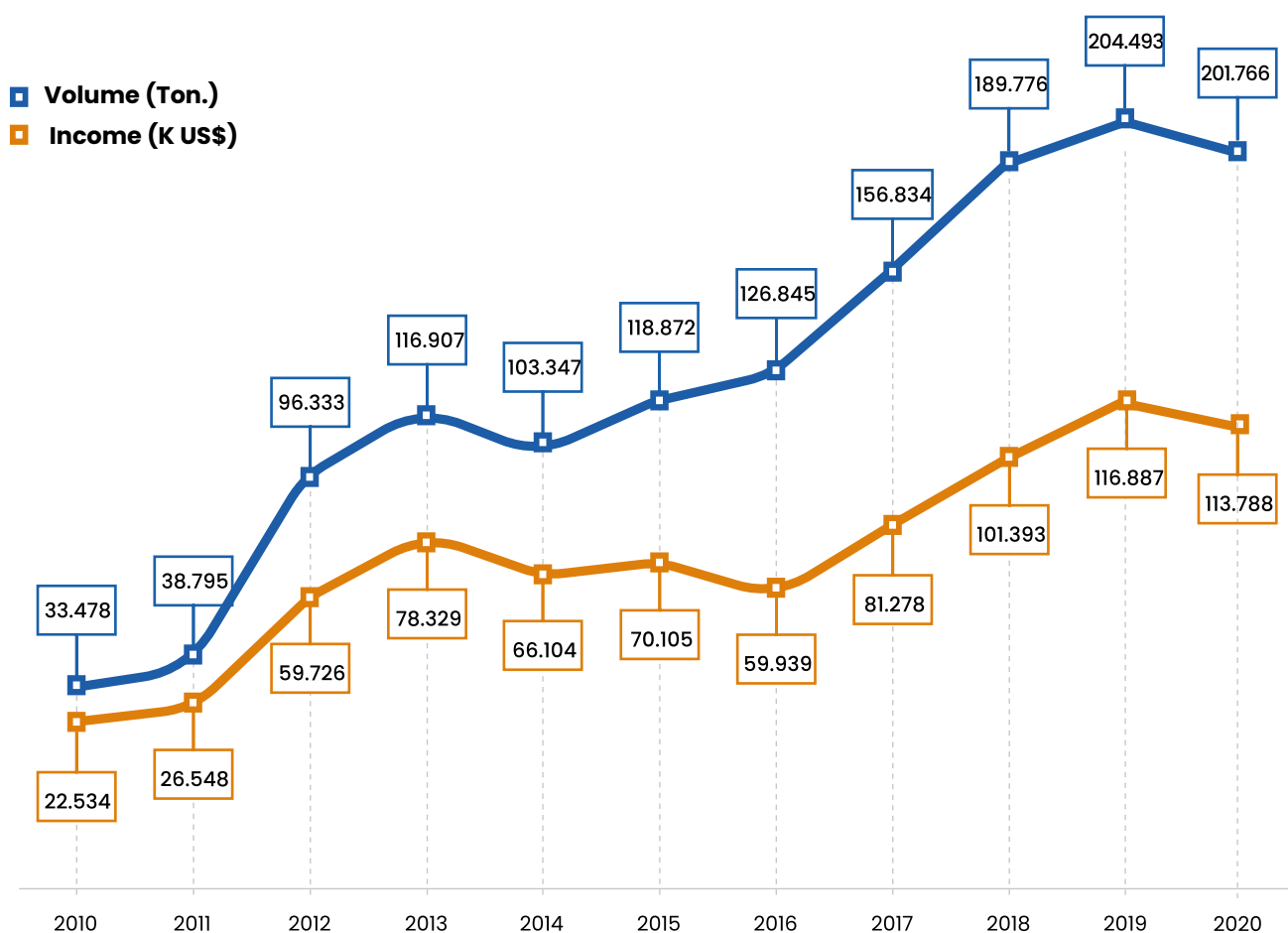
US\$ 113 million, which is equivalent to 3.6% of total production of that year.

### BRAZILIAN EXPORTS

Year	FOB value (US\$)	[unit code NT] net ton
2020	113.788	201.766
2019	116.887	204.493
2018	101.393	189.776
2017	81.278	156.834
2016	59.939	126.845
2015	70.105	118.872
2014	66.104	103.347
2013	78.329	116.907
2012	59.726	96.333
2011	26.548	38.795
2010	22.534	33.478

Source: Created by ABRA based on MDIC

## History of Sector Exports Series



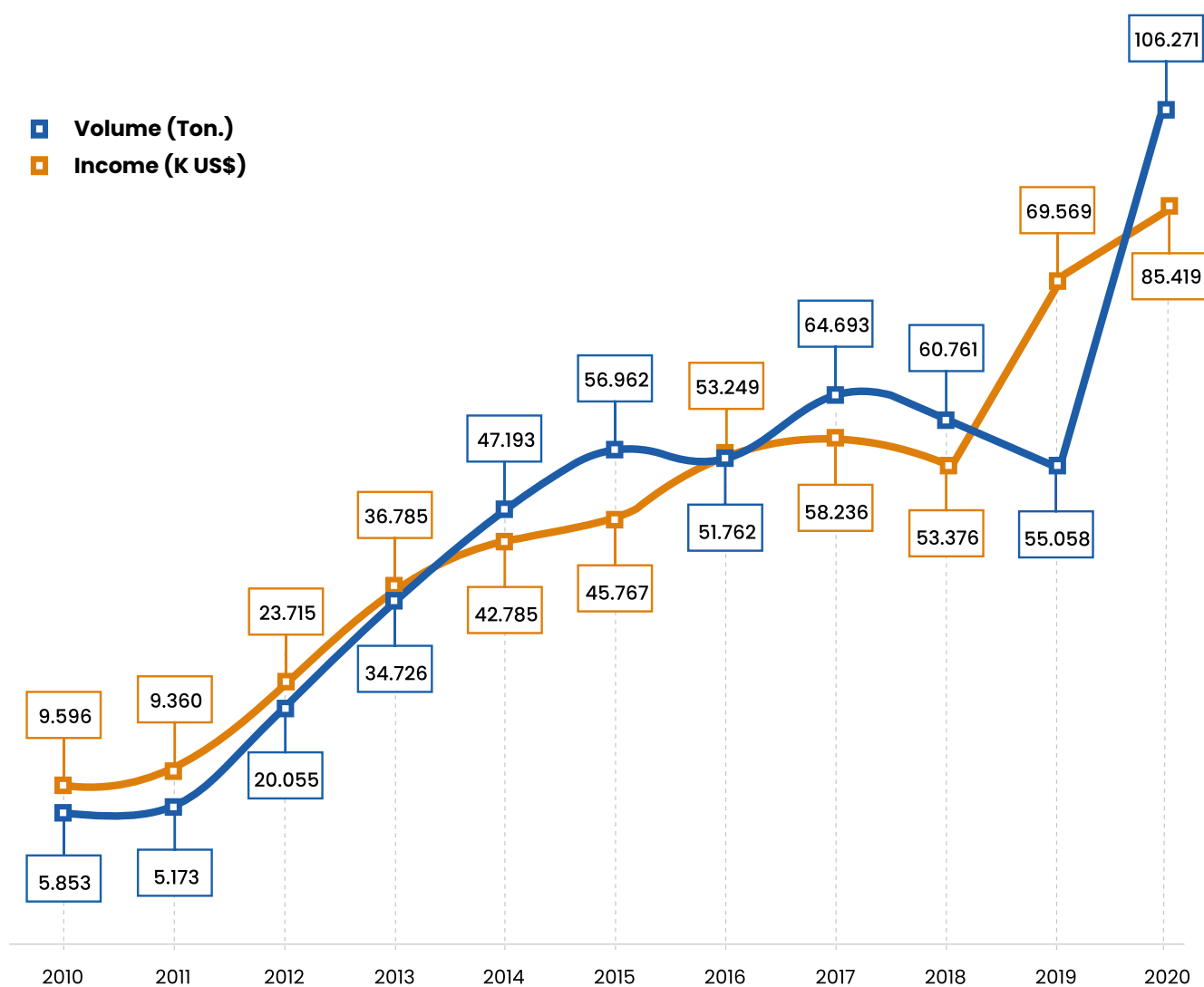
Source: Created by ABRA based on MDIC

## Brazilian Imports

Year	FOB value (US\$)	[unit code NT] net ton
2020	85.419	106.271
2019	55.058	69.569
2018	53.376	60.761
2017	58.236	64.693
2016	53.249	51.762
2015	45.767	56.962
2014	42.785	47.193
2013	36.785	34.726
2012	23.715	20.055
2011	9.360	5.173
2010	9.596	5.853

Source: Created by ABRA based on MDIC

## History of Sector Imports Series



Source: Created by ABRA based on MDIC



## Mercosur Common Nomenclature (NCM)

Mercosur common nomenclature (NCM). é a derivation of the Harmonized System for the Designation and Coding of Domestic Markets (HS), covering the Mercosur countries. Both the NCM and the HS have the function of allowing countries to have a way to standardize the categories of products they market, making it possible to treat each product similarly with regard to the customs issue.

In animal rendering, NCMs are limited to product categories, unfortunately with less binding to the slaughtered animal that gave rise to the waste that was processed.

This type of classification makes it impossible to understand the behavior of the international scenario in relation to a given product. For example, it is only possible to observe through the NCM and the HS which countries import meat meal, and it is not possible to identify whether it is a beef or pork meal, for example. The NCMs of the sector are formed mainly by the codes that identify animal meals and fats, as well as animal gelatins and blood products.





## Main NCMs in the Animal Rendering sector

### Farinhas de Origem Animal <sup>3</sup>

#### Meat and bone meal

Product	HS code	NCM	Description
<b>Meat Meal</b>	2301.10	2301.10.10	Meals, meals and pellets, carcasses greaves, unsuitable for food

#### Gut and feather meal

Product	HS code	NCM	Description
<b>Chicken meat and blood; Offal and feathers</b>	2301.10	2301.10.90	Meals, meals and pellets of meal ten; greaves, unsuitable for human consumption

#### Fish meal

Product	HS code	NCM	Description
<b>Chicken</b>		2301.20.10	Meals, meals and pellets, fishes , unsuitable for use as food human consumption
<b>Fish</b>	2301.20	2301.20.90	Meals, meals and pellets, of crustaceans, molluscs or other aquatic invertebrates, unfit for consumption humane

<sup>3</sup>Classification based on guidelines given by the Explanatory Notes of the Harmonized Commodity Description and Coding System, adopted by the Federal Revenue Service of Brazil.

## Animal Fats <sup>4</sup>

### Tallow

Product	HS code	NCM	Description
<b>Bovine Tallow</b>	1502.10	1502.10.11	Raw bovine tallow
		1502.10.12	Rendered bovine tallow (including premier jus)
		1502.10.19	Other bovine fats
		1502.10.90	Other bovine fats

### Ovine and Caprine Fat

Product	HS code	NCM	Description
<b>Ovine and Caprine Fats</b>	1502.90	1502.90.00	Ovine or caprine fats

### Swine Fats

Product	HS code	NCM	Description
<b>Swine fats</b>	1501.10	1501.10.00	Swine fats
	1501.20	1501.20.00	Other swine fats

### Fish Oils

Product	HS code	NCM	Description
<b>Fish Oil</b>	1504.20	1504.20.00	Fish fats and oil With fractions other than liver oil
<b>Liver Oil</b>	1504.10	1504.10.90	Other fish liver oils
		1504.10.11	Cod liver oil gross
		1504.10.19	Other cod liver oils

*4 Classification based on guidelines given by the Explanatory Notes of the Harmonized Commodity Description and Coding System, adopted by the Federal Revenue Service of Brazil.*

### Poultry fat

Product	HS code	NCM	Description
<b>Poultry Fat</b>	1501.90	1501.90.00	Poultry Fat

### Other Fats

Product	HS code	NCM	Description
<b>Other Fats and Animal Oils</b>	1516.10	1516.10.00	Animal fats and oils and small fractions
	1506.00	1506.00.00	Other animal fats and oils, and their fractions, whether or not refined but not chemically modified

## Animal gelatin and blood products

### Animal Gelatin

Product	HS Code	NCM	Description
Gelatin	3503.00	3503.00.11	Gelatin and their derivatives of osseine, of a purity by weight of 99,98 % or more
		3503.00.12	Gelatin and their derivatives of osseine, of a purity of less than 99,98 % by weight
		3503.00.19	Other gelatin and their derivatives
		3503.00.90	Ichthyocola, other original glues animal, except casein glue

### Animal blood products

Product	HS code	NCM	Description
Blood products for animal feed	0511.99	0511.99	Other animal products poorly, unfit for human food
Blood products for uses Prophylactic or for diagnostic purposes	3002.12	3002.12.29	Other blood fractions, except those prepared as bags

### Raw inedible products nomenclature

Product	HS code	NCM	Description
Non-products edible in natura	050400	05040090	Bladders and stomachs of animals, except fish, fresh etc.
	050590	05059000	Skins and other parts of birds, with their feathers, down, etc.
	050690	05069000	Other corneal bones and nuclei, in crude, defatted etc.
	051199	05119999	Animal products unfit for human consumption







# CHAPTER 3







## CHAPTER 3

# ANIMAL MEALS

## National Production

Fish meals

**48.6**

THOUSAND TONNES

Meat and  
bone meals

**2.1**

Million Tonnes

**PRODUCTION OF  
3.6 MILLION  
TONNES**

Offal meals

**680.6**

THOUSAND TONNES

Blood  
meals

**122.5**

THOUSAND TONNES

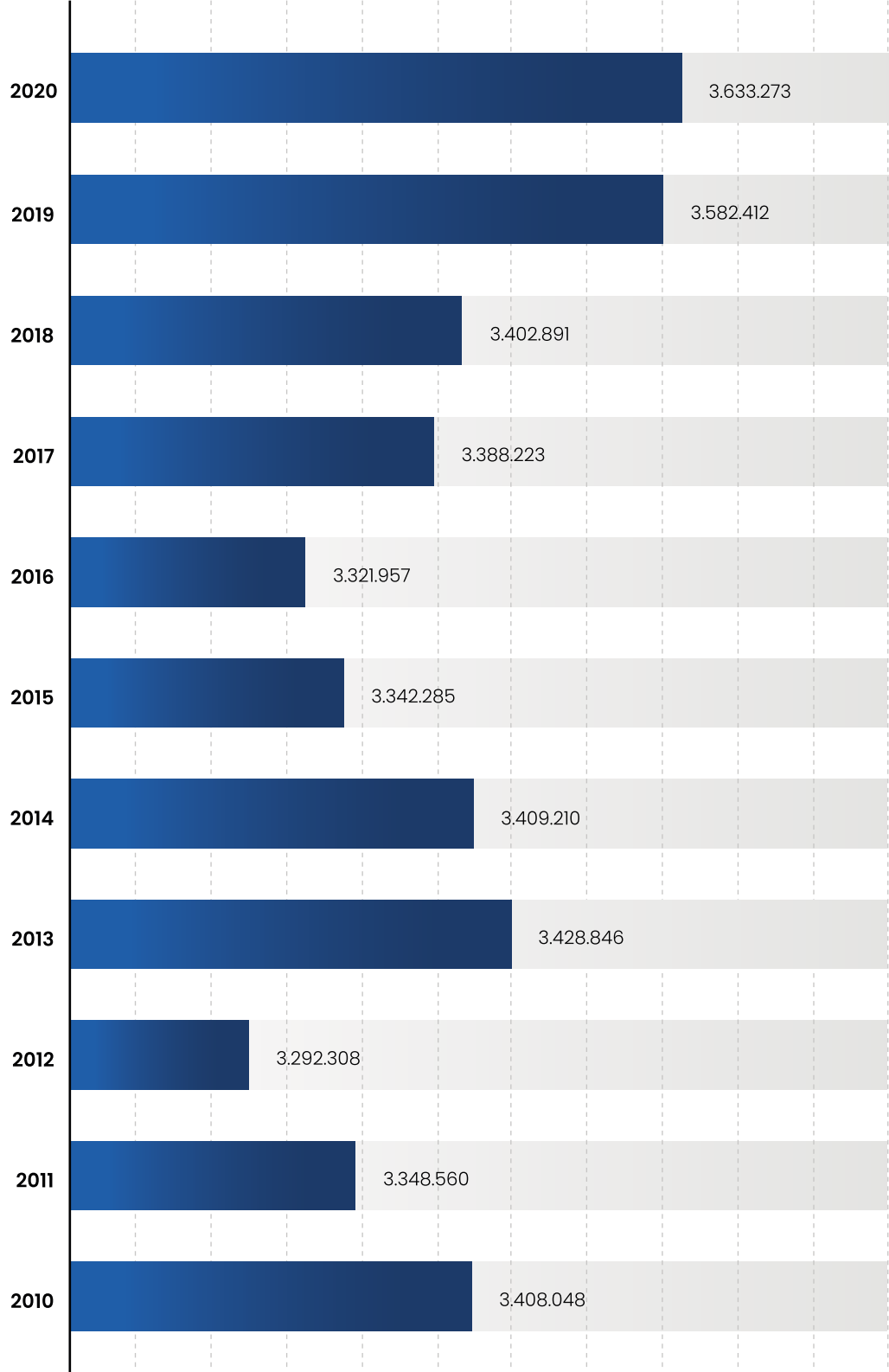
Feather  
meals

**582.3**

THOUSAND TONNES

## Historical Series of National Production

tonnes



## Production of animal meals by the type of residue processed

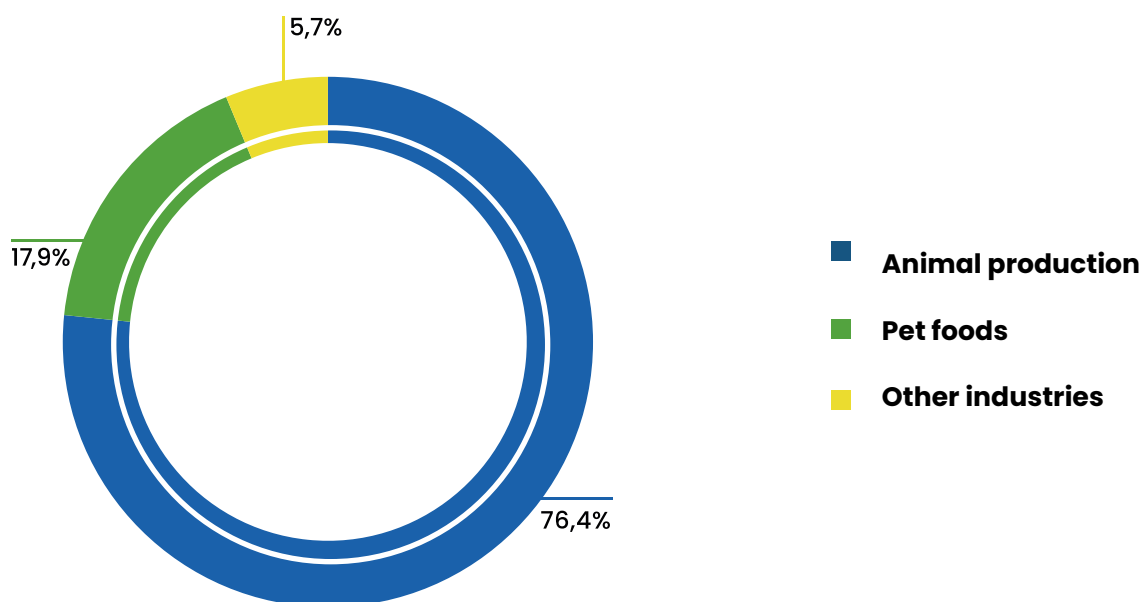
tonnes

	Meat and Bones	Offal	Feathers	Aspiration	Fish	TOTAL
<b>2010</b>	2.151.623	600.779	513.864	113.370	28.412	<b>3.408.048</b>
<b>2011</b>	2.026.529	638.739	546.627	107.703	28.962	<b>3.348.560</b>
<b>2012</b>	2.005.967	618.937	529.518	108.338	29.548	<b>3.292.308</b>
<b>2013</b>	2.155.585	606.006	518.024	115.835	33.396	<b>3.428.846</b>
<b>2014</b>	2.102.938	623.229	532.884	115.093	35.066	<b>3.409.210</b>
<b>2015</b>	2.005.673	641.221	548.999	110.625	35.767	<b>3.342.285</b>
<b>2016</b>	1.998.616	633.325	541.953	110.722	37.341	<b>3.321.957</b>
<b>2017</b>	2.044.585	641.396	548.827	113.087	40.328	<b>3.388.223</b>
<b>2018</b>	2.037.769	650.801	556.857	113.103	44.361	<b>3.402.891</b>
<b>2019</b>	2.205.149	651.827	557.713	121.809	45.914	<b>3.582.412</b>
<b>2020</b>	2.199.043	680.619	582.382	122.593	48.636	<b>3.633.273</b>

Source: ABRA

## Consumer market for animal meals

Percentage of animal meals intended for production

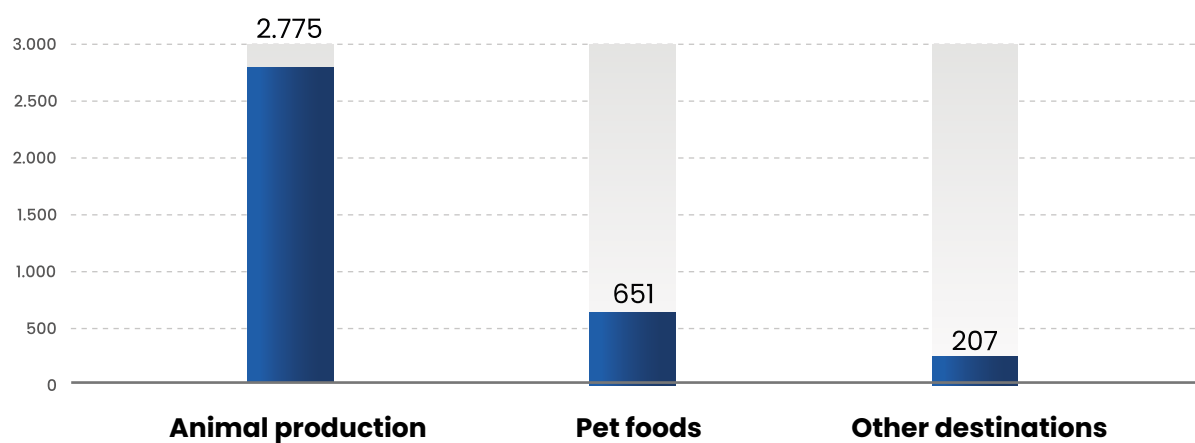


Source: ABRA



## Volume of animal meals by consumers' market

THOUSAND TONNES



Source: ABRA

## Brazilian exports of animal meals

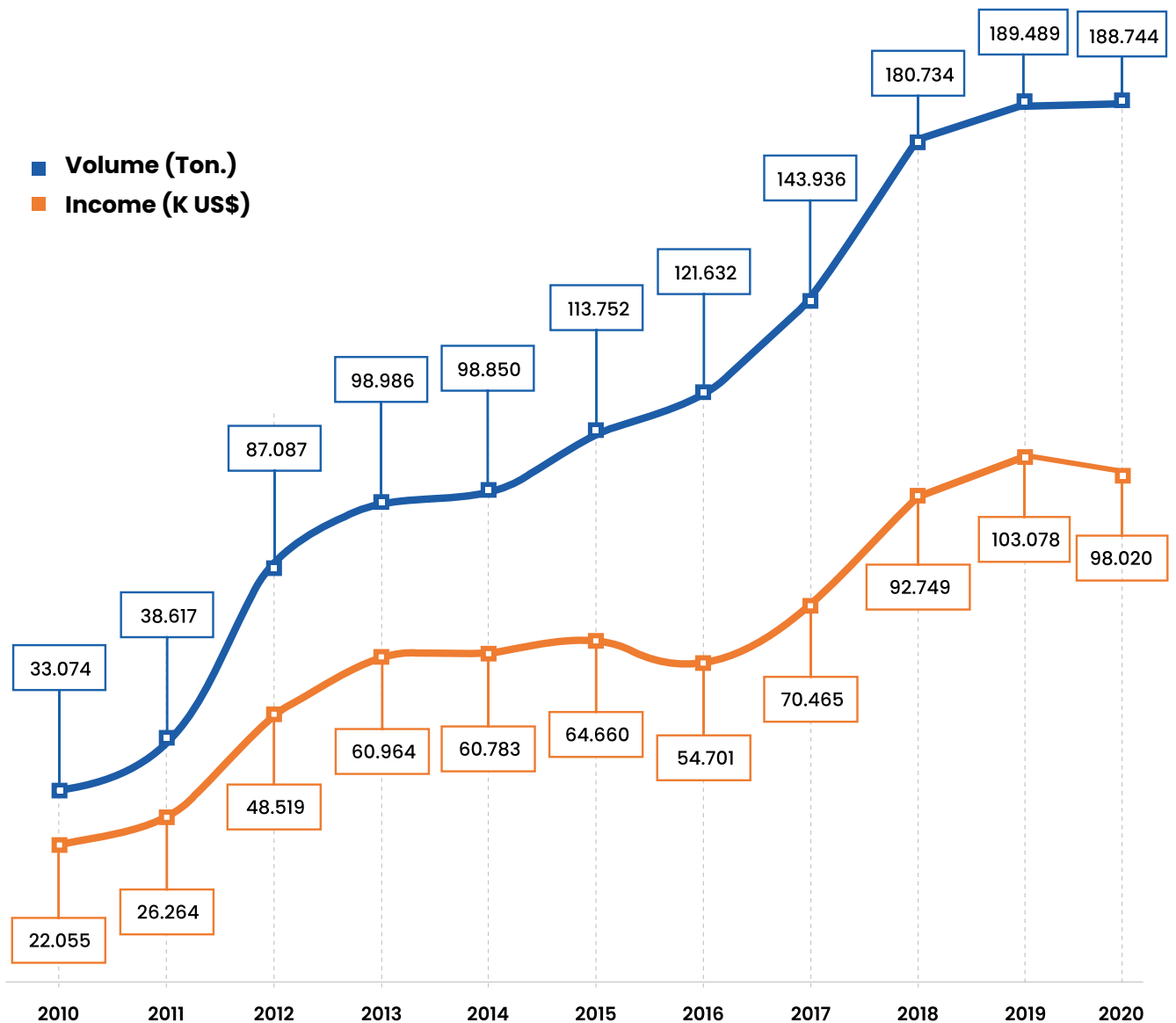
Trade balance in animal meal in 2020

Trade Balance	US\$
Exports	98.019.783
Imports	8.088.241
<b>Balance</b>	<b>89.931.542</b>

Source: Created by ABRA based on MDIC



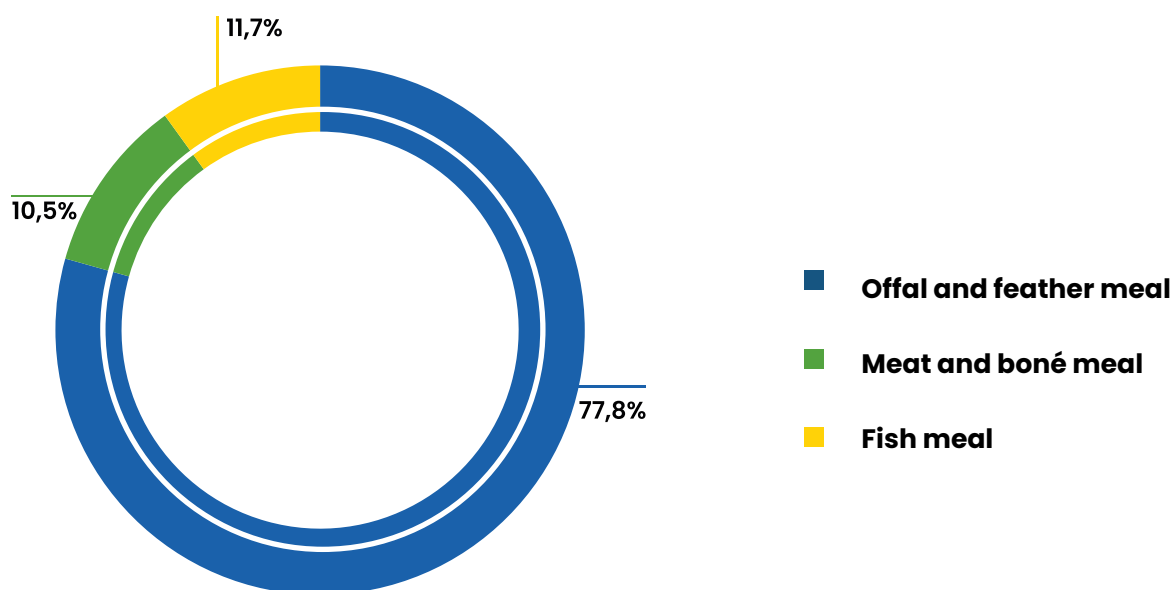
## Historical series of exports of meat-and-bone meal



Source: Created by ABRA based on MDIC

## Exports of animal meals by the predominant type of residues processed

Percentage of total exported in tonnes



Source: Created by ABRA based on MDIC



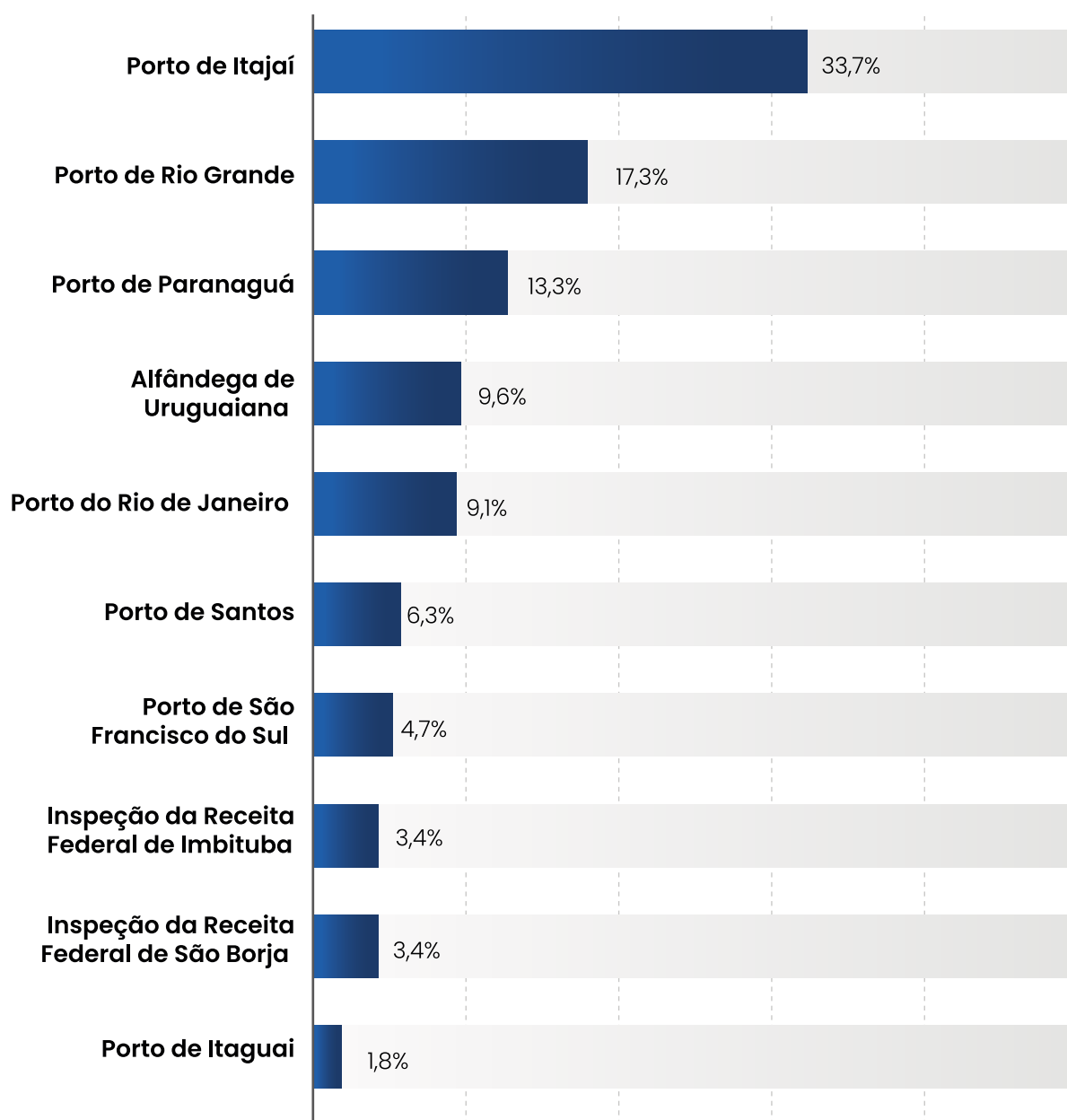
## Exports by type of animal meal in 2019 and 2020

Tonnes

	Meat and Bone Meal		Offal and Feather Meal		Fish Meal	
	2019	2020	2019	2020	2019	2020
<b>Jan</b>	2.049	1.278	10.881	13.353	1.563	776.666
<b>Feb</b>	1.698	882	10.194	13.131	1.562	1.044
<b>Mar</b>	1.412	832	14.507	12.331	1.236	2.062
<b>Apr</b>	1.036	1.181	15.795	13.208	1.554	1.100
<b>May</b>	2.715	1.001	13.441	14.613	1.915	3.297
<b>Jun</b>	1.927	1.473	12.103	12.480	1.812	1.670
<b>Jul</b>	1.365	2.037	12.952	14.701	1.446	2.40
<b>Aug</b>	2.466	1.975	13.810	11.714	2.169	2.049
<b>Sep</b>	1.072	2.838	15.650	10.498	927	1.886
<b>Oct</b>	2.084	2.073	11.051	9.557	1.550	2.171
<b>Nov</b>	905	2.384	10.539	9.993	871	2.27
<b>Dec</b>	1.501	1.850	9.427	11.170	2.303	1.456
<b>Total</b>	<b>20.230</b>	<b>19.804</b>	<b>150.350</b>	<b>146.749</b>	<b>18.909</b>	<b>793.401</b>

## Exports of meat-and-bone meal by Customs Unit

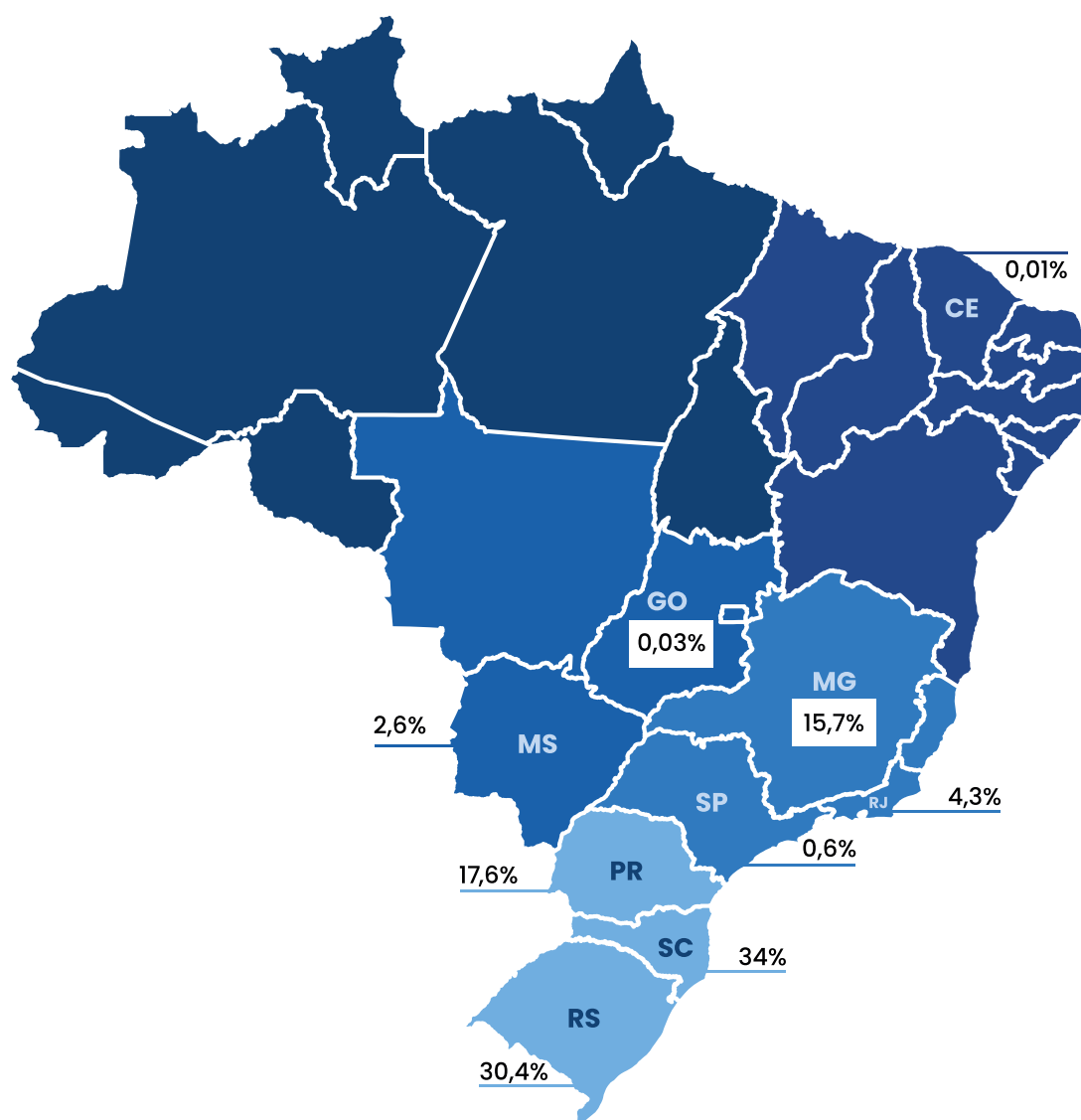
Percentage of total exported in tonnes in 2020



Source: Created by ABRA based on MDIC

## Exports of animal meal by Federative Unit

Percentage of total exported in tonnes in 2020



Source: Created by ABRA based on MDIC

## Countries buying animal meal from Brazil

By percentage of total in tonnes

AFRICA		AMERICA		ASIA AND OCEANIA	
South Africa	4,70%	Chile	13,1%	Vietnam	15,59%
Liberia	<0,01%	United States	7,3%	Bangladesh	1,02%
Mauritius	0,05%	Colombia	3,1%	Taiwan	0,72%
Mozambique	0,45%	Argentina	1,6%	Malaysia	0,41%
Nigeria	0,93%	Venezuela	0,9%	China	0,30%
Zimbabwe	0,03%	Costa Rica	0,2%	Philippines	<0,01%
		Peru	0,1%	Hong Kong	<0,01%
		Uruguay	0,1%	Marshall, Falkland	<0,01%
		Paraguay	0,04%	Singapore	<0,01%
		Bolivia	0,02%	Sri Lanka	0,05%
		Guatemala	0,01%		
		Trinidad and Tobago	0,01%		
		Antigua and Barbuda	0,00%		
		Panama	<0,01%		
		Bahamas	<0,01%		

Other countries:

Source: Created by ABRA based on MDIC



## Continents buying animal meals from Brazil

Tonnes

	Meat and bone meal		Offal and Feather meal		Fish Meal	
	2019	2020	2019	2020	2019	2020
<b>AFRICA</b>	15.436,8	10.748,8	12.453,1	9.637,3	1.753,6	2.746,6
<b>AMERICA</b>	3.652,5	7.504,3	88.553,3	80.360,3	7.994,1	10.377,8
<b>ASIA AND OCEANIA</b>	1.138,5	1.551,3	49.345,5	56.751,7	3.744,4	8.965,6

Source: Created by ABRA based on MDIC

## African countries buying meal of Brazilian origin

Tonnes

	Meat and bone meal		Offal and Feather meal		Fish Meal	
	2019	2020	2019	2020	2019	2020
<b>AFRICA</b>	15.436,8	10.748,8	12.453,1	9.637,3	1.753,6	2.746,6
<b>South Africa</b>	12.778,2	8.994,0	10.721,3	8.521,9	-	-
<b>Liberia</b>	-	-	0,0	0,1	-	-
<b>Mauritius</b>	122,1	175,9	-	-	-	-
<b>Mozambique</b>	2.536,5	1.478,5	212,2	216,9	-	-
<b>Nigeria</b>	-	-	1.519,6	872,9	1.438,3	2.577,6
<b>Zimbabwe</b>	-	100,5	-	-	-	-

Source: Created by ABRA based on MDIC

## American countries buyers of animal meal from Brazil

Tonnes

	Meat and bone meal		Offal and Feather meal		Fish Meal	
	2019	2020	2019	2020	2019	2020
<b>AMERICA</b>	3.652,5	7.504,3	88.553,3	80.360,3	7.994,1	10.377,8
<b>Antigua and Barbuda</b>	-	-	-	0,0	-	-
<b>Argentina</b>	65,7	145,6	4.108,0	5.731,6	49,3	-
<b>Bahamas</b>	-	-	0,0	0,0	-	-
<b>Bolivia</b>	27,5	12,5	21,0	67,3	-	-
<b>Chile</b>	3.066,8	6.402,0	59.436,6	39.666,8	1.602,3	2.638,6
<b>Colombia</b>	438,4	797,8	8.487,4	10.841,1	-	-
<b>Costa Rica</b>	-	-	-	-	1.049,3	598,6
<b>United States</b>	54,0	97,2	15.398,1	23.376,0	4.944,9	3.612,0
<b>Guatemala</b>	-	-	-	27,0	-	-
<b>Panama</b>	-	-	0,0	0,1	-	-
<b>Paraguay</b>	-	-	286,3	150,2	-	-
<b>Peru</b>	-	-	-	-	26,5	400,2
<b>Trinidad and Tobago</b>	-	25,2	-	-	-	-
<b>Uruguay</b>	-	-	-	-	72,3	324,2
<b>Venezuela</b>	-	24,0	815,8	500,2	249,5	2.804,3

Source: Created by ABRA based on MDIC

## Asian countries buying animal meal from Brazil

Tonnes

	Meat and bone meal		Offal and Feather meal		Fish Meal	
	2019	2020	2019	2020	2019	2020
<b>Asia and Oceania</b>	1.138,5	1.551,3	49.345,5	56.751,7	3.744,4	8.965,6
<b>Bangladesh</b>	-	-	-	-	1.445,8	3.800,5
<b>China</b>	-	-	-	-	-	1.121,2
<b>Philippines</b>	96,0	-	-	0,0	-	-
<b>Hong Kong</b>	47,1	-	0,0	0,0	-	-
<b>Malaysia</b>	-	1.144,0	-	288,0	-	100,0
<b>Marshall Islands</b>	-	-	0,0	0,1	-	-
<b>Singapore</b>	-	-	0,0	0,0	2.298,6	-
<b>Sri Lanka</b>	-	-	-	25,5	315,2	169,0
<b>Taiwan</b>	-	-	-	-	-	2.691,2
<b>Vietnam</b>	995,3	407,3	49.345,4	56.463,5	-	1.252,8

Source: Created by ABRA based on MDIC

# CHAPTER 4



CHAPTER 4

# ANIMAL FATS

## National Production

**Bovine tallow**

**1.3**  
million  
tonnes

**Swine grease**

**152**  
THOUSAND TONNES

**Poultry oils**

**496.7**  
THOUSAND TONNES

**Caprine and  
ovine tallow**

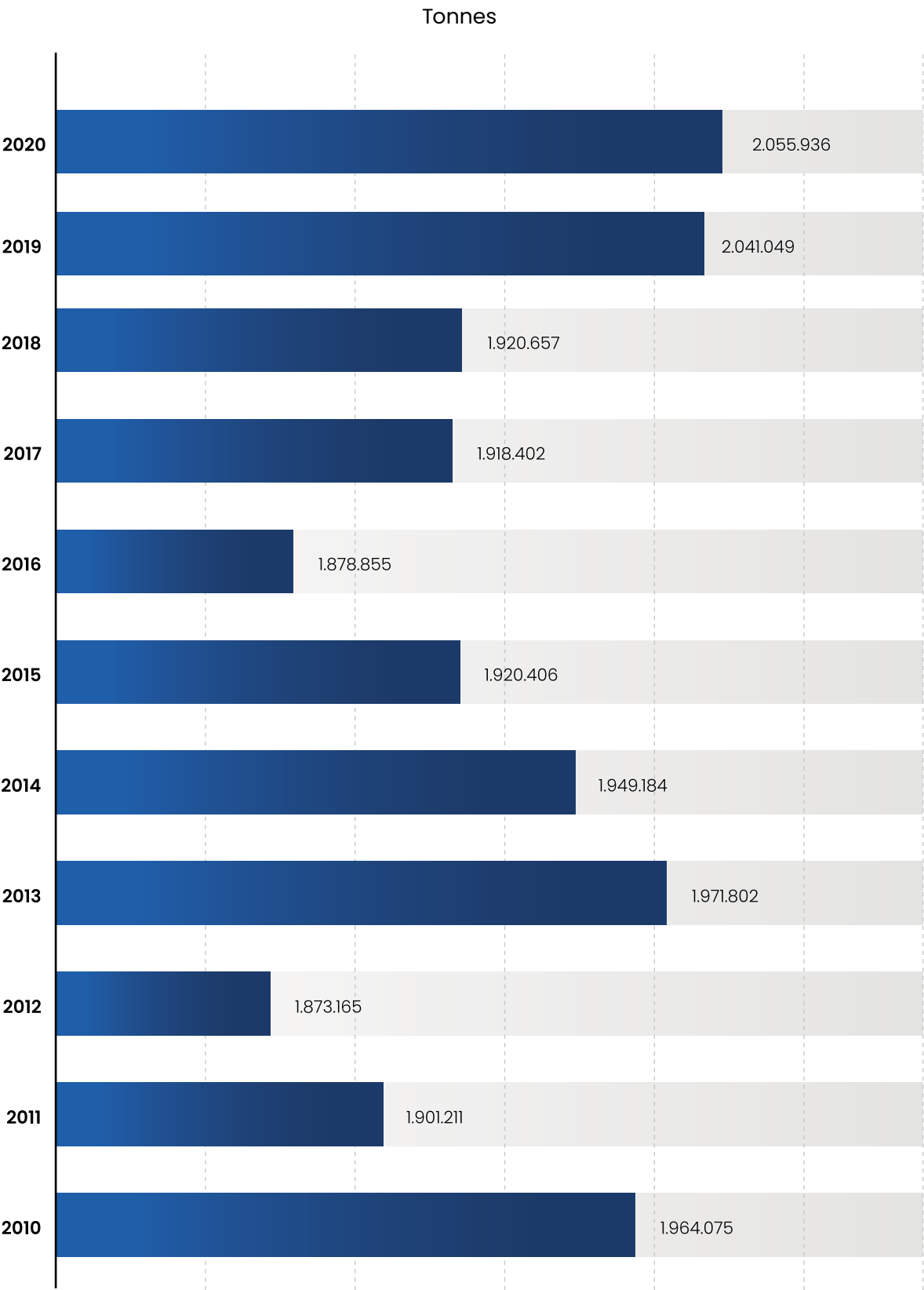
**4**  
THOUSAND TONNES

**Fish oils**

**14.8**  
THOUSAND TONNES



# Historical Series of National Production



Source: Created by ABRA based on MDIC

## Production by type of animal fats

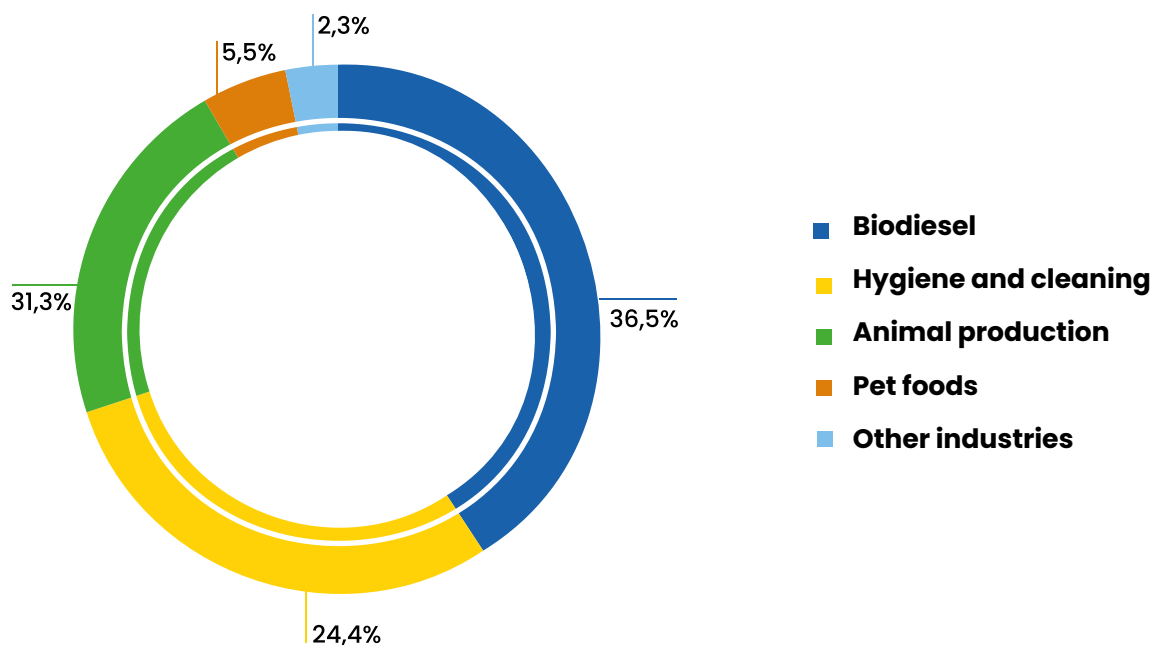
Tonnes

	Swine tallow and fats	Poultry oil	Fish oil	TOTAL
<b>2010</b>	1.516.840	438.588	8.647	<b>1.964.075</b>
<b>2011</b>	1.426.094	466.303	8.814	<b>1.901.211</b>
<b>2012</b>	1.412.291	451.881	8.993	<b>1.873.165</b>
<b>2013</b>	1.519.200	442.438	10.164	<b>1.971.802</b>
<b>2014</b>	1.483.473	455.039	10.672	<b>1.949.184</b>
<b>2015</b>	1.441.788	467.732	10.886	<b>1.920.406</b>
<b>2016</b>	1.405.556	461.934	11.365	<b>1.878.855</b>
<b>2017</b>	1.438.320	467.808	12.274	<b>1.918.402</b>
<b>2018</b>	1.432.496	474.660	13.501	<b>1.920.657</b>
<b>2019</b>	1.551.675	475.400	13.974	<b>2.041.049</b>
<b>2020</b>	1.540.315	496.790	14.802	<b>2.051.907</b>

Source: Created by ABRA based on MDIC

## Consumer market for animal fats

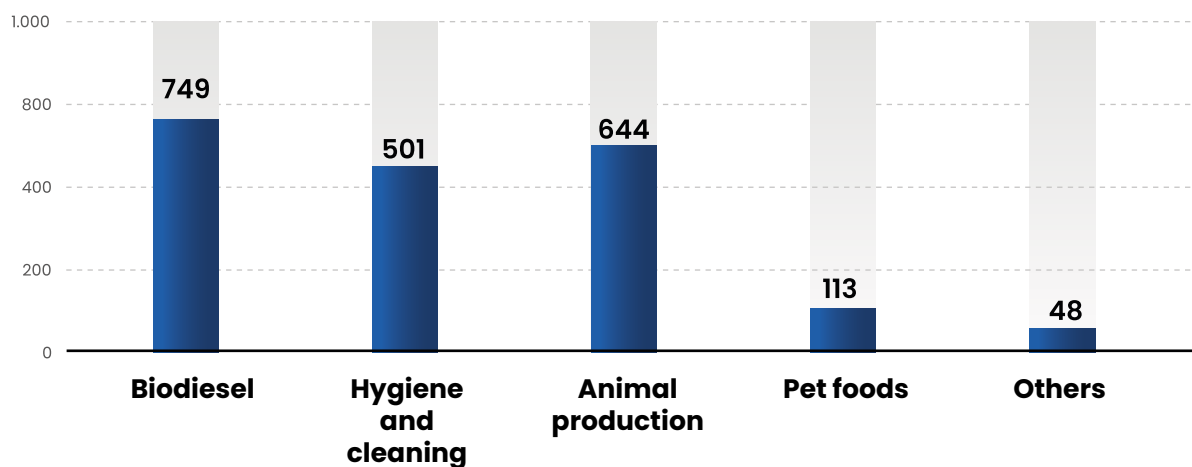
Percentage of production destined to



Source: ABRA estimate

## Volume of animal fats per Consumer market

Thousand tonnes in 2020



Source: ABRA estimate

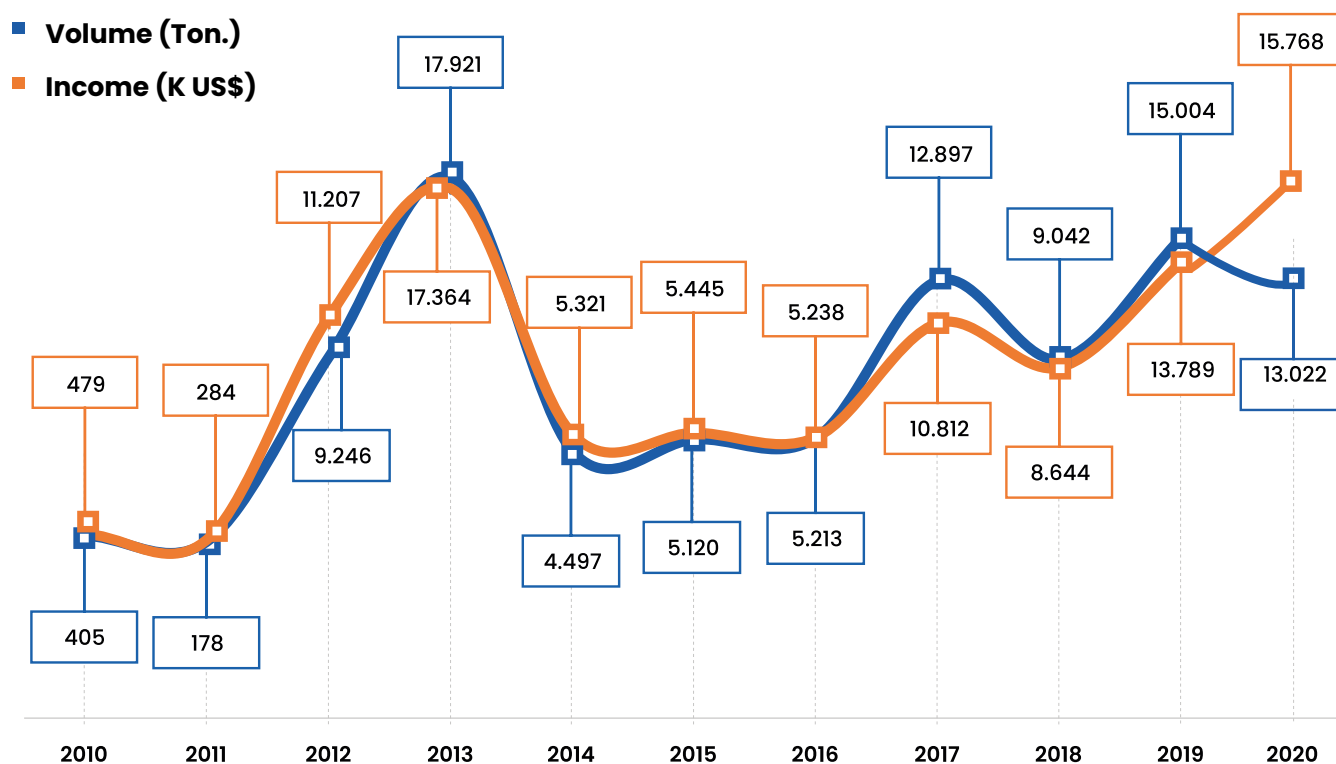
# Brazilian exports of animal fat

## Trade balance for animal fats

Trade balance	
Exports	US\$
Imports	15.768.233
Balance	77.331.127
	-61.562.894

Source: ABRA estimate

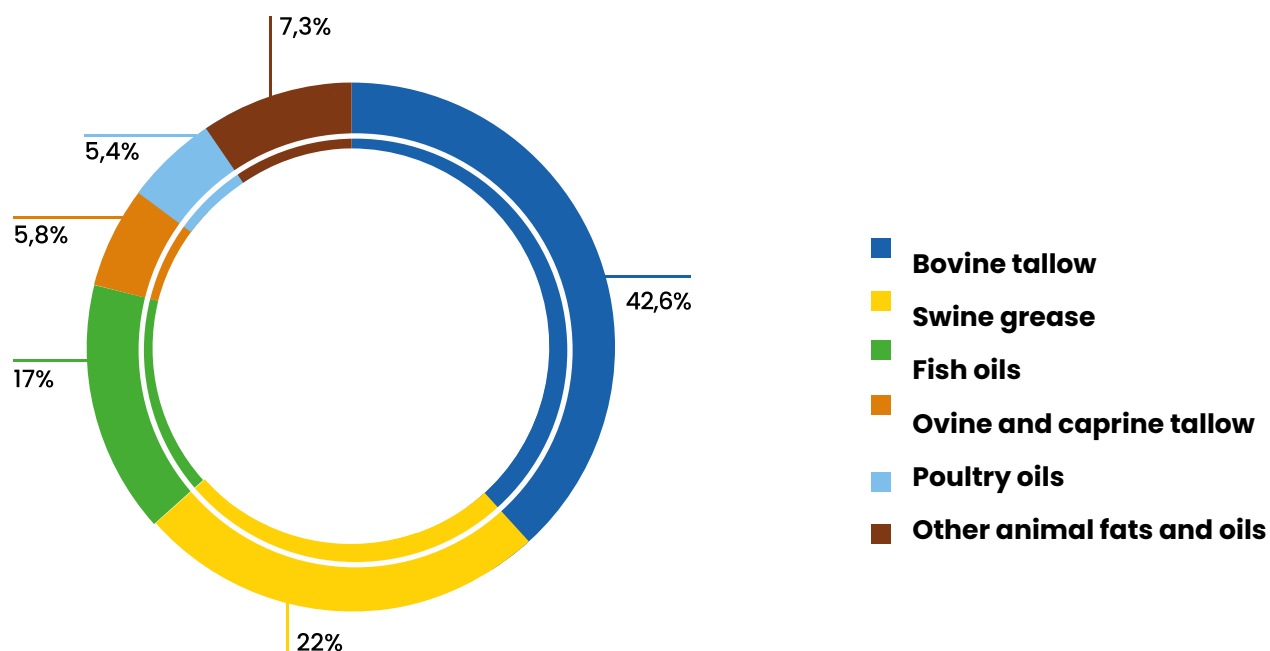
## Historical series of exports of animal fats



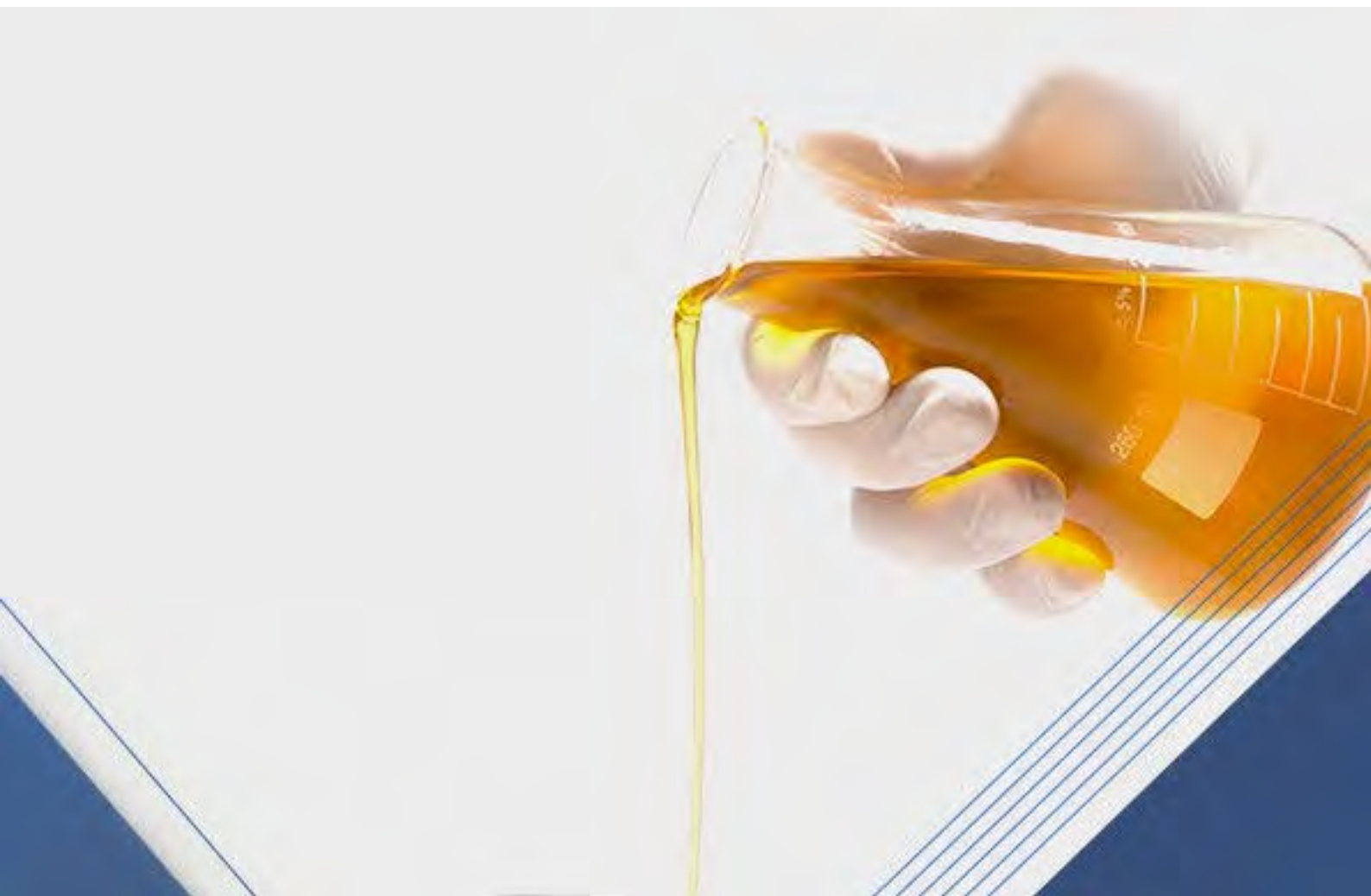
Source: Created by ABRA based on MDIC

## Exports of animal fats by animal residues

Percentage of total exported



Source: Created by ABRA based on MDIC



## Exports of animal fats by the predominant animal residues processed in 2019 and 2020

Tonnes

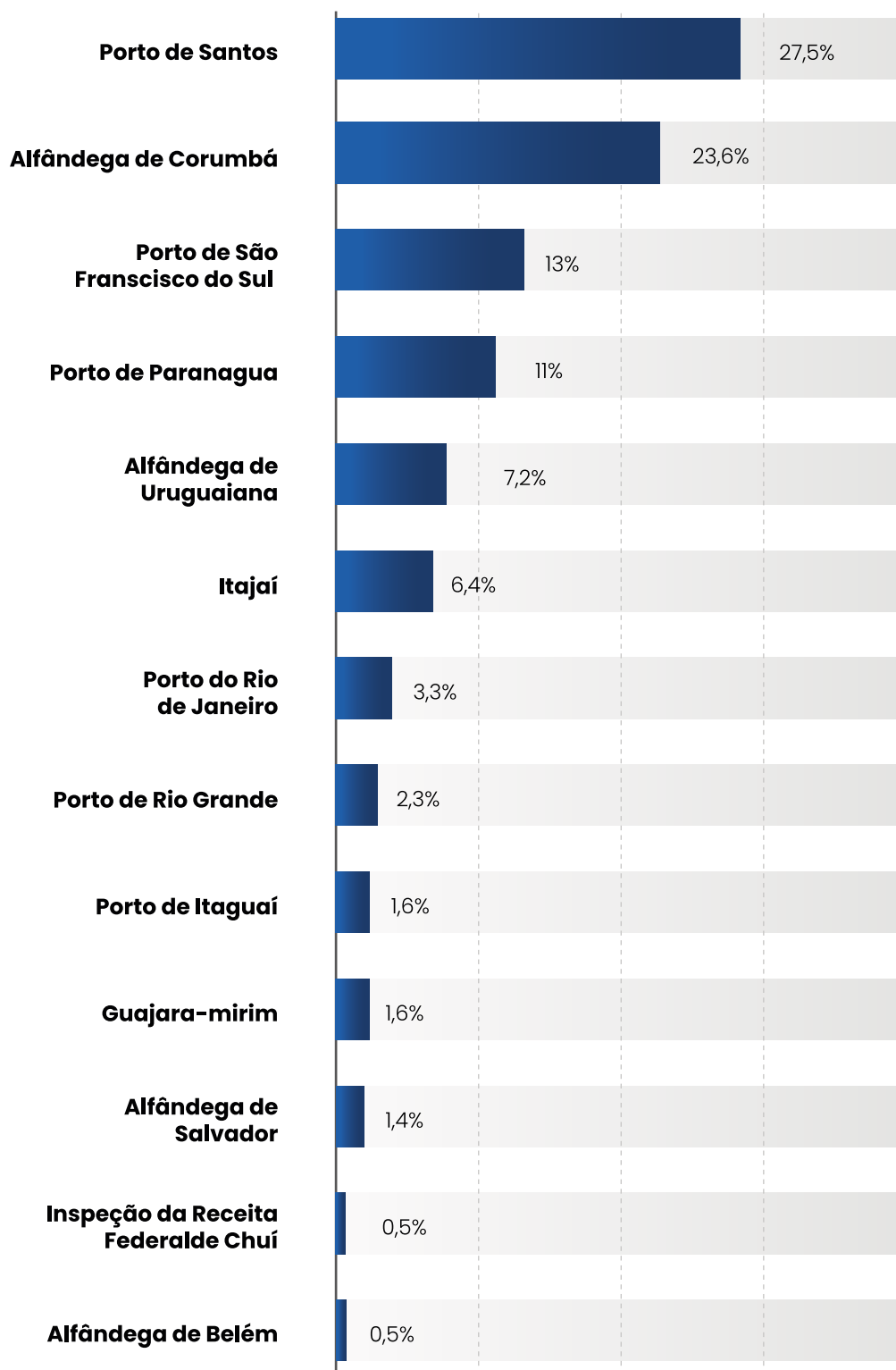
	Swine grease		Fish oil		Bovine tallow		Poultry oil		Caprine tallow		FATS and oils from other animals	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Jan	52	263	43	79	350	272	0	41	66	47	5	1
Feb	145	182	136	51	316	293	42	21	27	41	0	23
Mar	201	212	208	222	516	395	85	0	74	89	0	1
Apr	216	285	123	190	592	652	0	0	59	66	0	0
May	191	471	22	356	430	464	43	0	29	42	16	90
Jun	221	200	43	110	248	424	22	217	70	42	0	254
Jul	222	241	115	124	5,727	267	0	129	54	45	9	139
Aug	270	212	67	251	374	293	30	67	36	4	0	31
Sep	160	262	84	320	407	365	43	67	9	82	7	47
Oct	184	166	148	167	548	721	0	44	38	28	6	136
Nov	187	182	183	196	563	798	29	45	6	208	0	86
Dec	275	188	76	147	358	608	0	67	84	55	9	142
Total	2,323	2,863	1,247	2,212	10,429	5,552	293	697	551	749	52	949

Source: Created by ABRA based on MDIC



## Exports of animal fats by Customs Unit

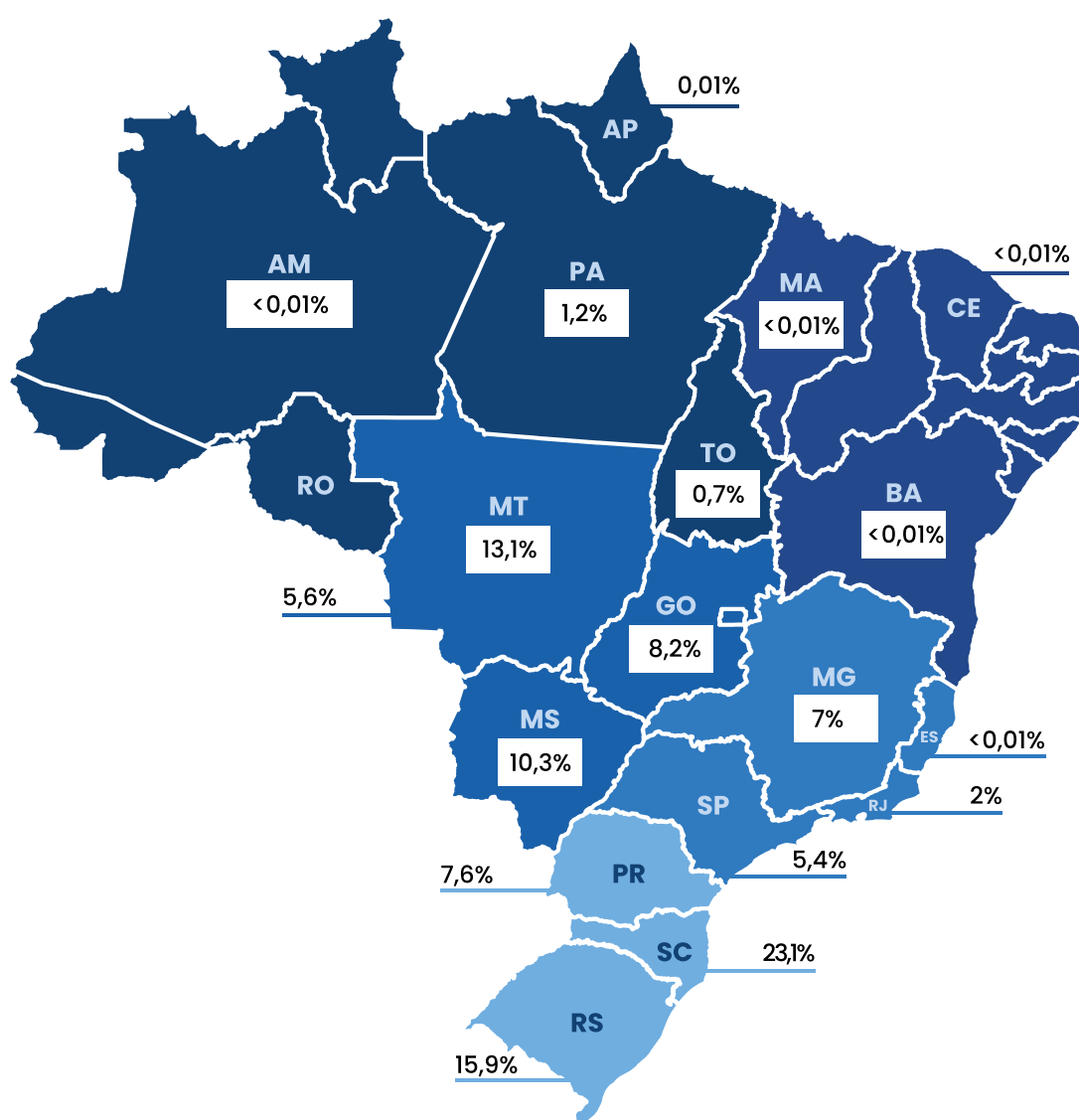
Percentage of total exported in tonnes in 2020



Source: Created by ABRA based on MDIC

## Exports of animal fat by Federative Unit

Percentage of total exported in tonnes in 2020



Source: Created by ABRA based on MDIC

## Purchasing countries of animal fats from Brazil

By percentage of total in tonnes

AFRICA		AMERICA		ASIA		EUROPE AND OCEANIA	
South Africa	8,7%	Bolívia	25,3%	China	8,9%	Albânia	1,0%
Egypt	7,7%	Chile	18,5%	Hong Kong	4,2%	Antígua e Barbuda	<0,01%
Tunisia	0,5%	Peru	1,8%	Israel	3,8%	Sérvia	0,2%
Liberia	<0,01%	Argentina	1,5%	Emirados Árabes Unidos	3,0%	Equador	<0,01%
Congo	<0,01%	Venezuela	1,2%	Arábia Saudita	2,8%	Portugal	0,2%
Angola	<0,01%	Uruguai	0,6%	Malásia	2,4%	Bahamas	<0,01%
		Paraguai	0,4%	Líbano	1,6%	Itália	0,1%
		Estados Unidos	0,3%	Bangladesh	1,2%	Noruega	<0,01%
		México	0,1%	Jordânia	1,1%	Grécia	<0,01%
		Panamá	<0,01%	Catar	0,4%	Marshall, Ilhas	<0,01%
		Antígua e Barbuda	<0,01%	Mianmar	0,4%	Dinamarca	<0,01%
		Equador	<0,01%	Taiwan (Formosa)	0,4%	Alemanha	<0,01%
		Bahamas	<0,01%	Azerbaijão	0,1%	Reino Unido	<0,01%
				Palestina	0,04%	Malta	<0,01%
				Barein	<0,01%	Chipre	<0,01%
				Singapura	<0,01%		
				Filipinas	<0,01%		
				Japão	<0,01%		

Source: Created by ABRA based on MDIC

## Continents that buy animal fats in Brazil

Tonnes

	Swine Grease		Fish Oils		Bovine Tallow		Poultry Oils		Caprine Tallow		Fats and oils from other animals	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
AFRICA	<1	<1	286	63	1.143	1.740	170	-	203	-	<1	<1
AMERICA	2.322	2.863	819	1.820	564	307	123	697		3	149	941
ASIA	<1	<1	142	285	2.739	3.336	<1	-	348	747	<1	-
EUROPE	<1	<1	5.703	<1	10	168	<1	-	5.703	-	10	8

Source: Created by ABRA based on MDIC

## African countries buying animal fats from Brazil

Tonnes

	Swine Grease		Fish Oils		Bovine Tallow		Poultry Oils		Caprine Tallow		Fats and oils from other animals	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
AFRICA	<1	<1	286	63	1.143	1.740	170		203		<1	<1
South Africa					611	1.137	170					
Angola	<1		<1	<1								
Congo											<1	<1
Egypt					532	603			203	397		
Liberia	<1	<1										
Niger			243									
Nigeria												
Senegal					<1							
Tunisia			43	63								

Source: Created by ABRA based on MDIC

## American countries buying animal fats from Brazil

Tonnes

	Swine Grease		Fish Oils		Bovine Tallow		Poultry Oils		Caprine Tallow		Fats and oils from other animals	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
<b>AMERICA</b>	2.322	2.863	819	1.820	564	307	123				149	942
<b>Argentina</b>	<1	<1	130	95								104
<b>Bahamas</b>	<1	<1										
<b>Bolivia</b>	2.294	2.807			564	306	65	177				
<b>Chile</b>			600	1.562				109				741
<b>Colombia</b>					<1	1		198				5
<b>Recipient</b>												
<b>Ecuador</b>					<1	<1						
<b>United States</b>			22									
<b>Mexico</b>			2	14								
<b>Panama</b>	<1	<1									<1	<1
<b>Paraguay</b>	28	56					59					
<b>Peru</b>								214			8	21
<b>Rep. Republic</b>					<1							
<b>Uruguay</b>		<1	65							3	137	71
<b>Venezuela</b>				149	<1	<1						

Source: Created by ABRA based on MDIC

## Asian countries buying animal fats from Brazil

Tonnes

	Swine Grease		Fish Oils		Bovine Tallow		Poultry Oils		Caprine Tallow		Fats and oils from other animals	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
<b>Asia and Oceania</b>	<1	<1	142	285	2.739	3.337	<1		348	350	<1	
<b>Saudi Arabia</b>					411	370			108			
<b>Azerbaijan</b>						15						
<b>Bangladesh</b>			115	156								
<b>Bahrain</b>						1						
<b>Qatar</b>					15	55						
<b>China</b>				25	399	846			107	294		
<b>Singapore</b>	<1	<1										
<b>Philippines</b>		<1										
<b>United Arab Emirates</b>					546	388					<1	
<b>Hong Kong</b>	<1	<1			294	523			26	27	<1	
<b>Japan</b>		<1										
<b>India</b>												
<b>Israel</b>					371	480			34	18		
<b>Jordan</b>					196	142			21			
<b>Lebanon</b>					263	204			27	6		
<b>Malaysia</b>				1		313						
<b>Marshall, islands</b>	<1						<1					
<b>Myanmar</b>				52								
<b>Palestine</b>										5		
<b>Russia</b>									25			
<b>Sri Lanka</b>			27									
<b>Taiwan</b>				51								
<b>Thailand</b>	<1											

Source: Created by ABRA based on MDIC



## European countries buying animal fats from Brazil

Tonnes

	Swine Grease		Fish Oils		Bovine Tallow		Fats and oils from other animals	
EUROPE AND OCEANIA	2019	2020	2019	2020	2019	2020	2019	2020
Albania	<1	<1			5.703	168	10	
Germany					327	124		
Belgium		<1						
Cyprus	<1							
Denmark	<1	<1						
Spain		<1						
France					<1			
Greece								
The Netherlands		<1					<1	<1
Marshall Falkland		<1						<1
Italy		<1					8	8
Norway	<1	<1					<1	<1
Malta	<1	<1						
Portugal	<1	<1		<1		21	<1	<1
United Kingdom	<1	<1					<1	
Serbia					74	23		
Switzerland	<1							
Turkey	<1							

Source: Created by ABRA based on MDIC

# CHAPTER 5





## CHAPTER 5

# GELATINES AND BLOOD PRODUCTS

From the production process of the meat chain, the bovine skin is extracted and destined for the leather industry. Before being processed, this material undergoes a scraping, removing the collagen. In addition to the collagen itself, it is possible to extract peptides, which are used for the manufacture of animal gelatin. The market for this product varies from the food sector, in gum candies, to the drug sector itself, in medicine capsules and with collagen itself.

Similarly, blood products are also used by the pharmaceutical industry. Animal plasmas and hemoglobin arise from these products. Both can be used in the manufacture of balanced diets for animal feed and pet foods, in particular medication-related, which serve to enable the balance of the animal's diet with some disease, such as the case of diabetic dogs and cats, which should consume specific rations.

Due to the technology applied to the manufacture of gelatin and blood products, these products are the result of a set of industries in which there is also the participation of the animal rendering sector. The industrial complexity in the production process of gelatin and blood products adds value, which makes these products more profitable for the industry, that is, with greater added value. Therefore, the values collected by Brazil in the international trade of these products are proportionally higher than those of meals and fats combined.

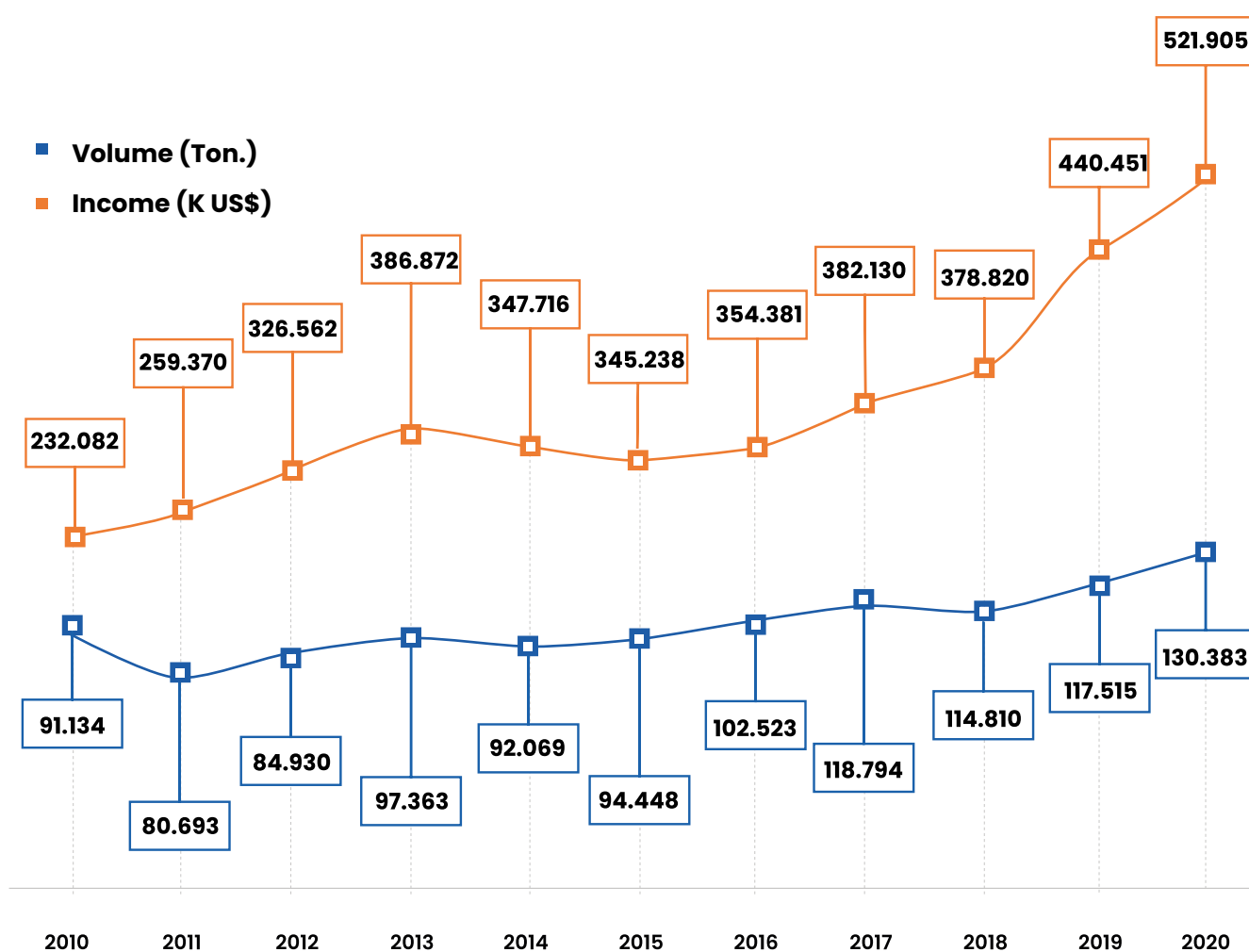
## Brazilian exports of animal gelatin and blood products

Trade balance for animal gelatin and blood products

Trade balance	US\$
Exports	521.904.614
Imports	120.677.057
Balance	401.227.557

Source: Created by ABRA based on MDIC

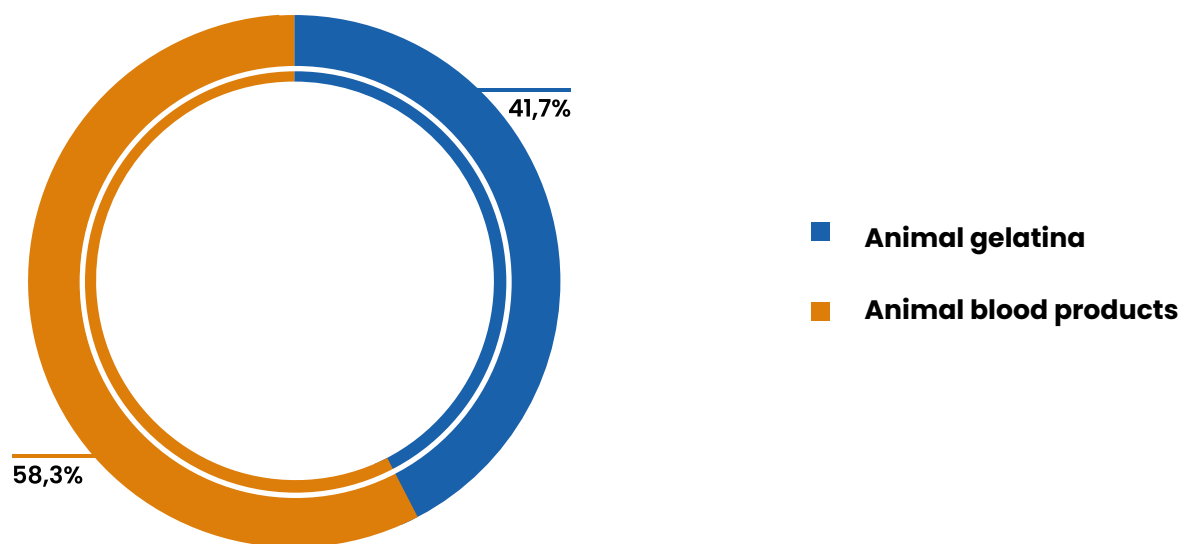
## Historical series of animal gelatin exports and blood products



Source: Created by ABRA based on MDIC

## Exports of animal gelatin and blood products

Percentage of total exported



Source: Created by ABRA based on MDIC





## Exports of animal gelatin and blood products in 2019 and 2020

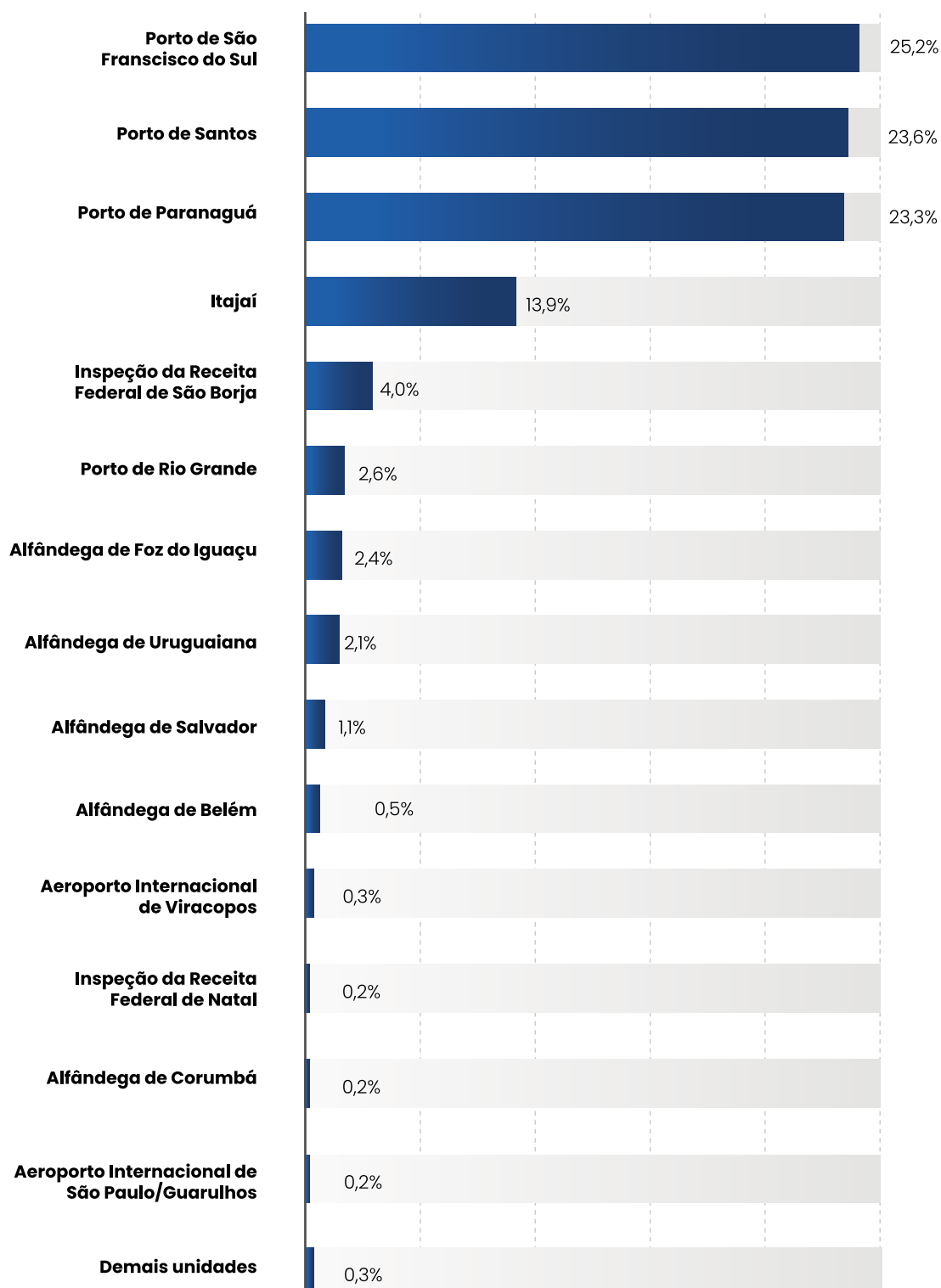
Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
Jan	4.345	4.401	4.317	5.289
Feb	4.647	4.071	6.009	6.212
Mar	4.205	4.148	6.549	6.353
Apr	4.507	3.803	5.763	6.685
May	4.481	5.405	6.598	6.708
Jun	3.739	4.016	5.984	6.716
Jul	4.165	5.341	5.417	7.771
Aug	4.626	5.020	4.851	6.103
Sep	4.190	4.802	5.346	6.400
Oct	3.907	4.465	5.104	6.098
Nov	4.082	4.753	5.079	5.929
Dec	4.098	4.132	5.505	5.762
Total	50.992	54.356	66.523	7.6027

Source: Created by ABRA based on MDIC

## Exports of animal gelatin and blood products by Customs Unit

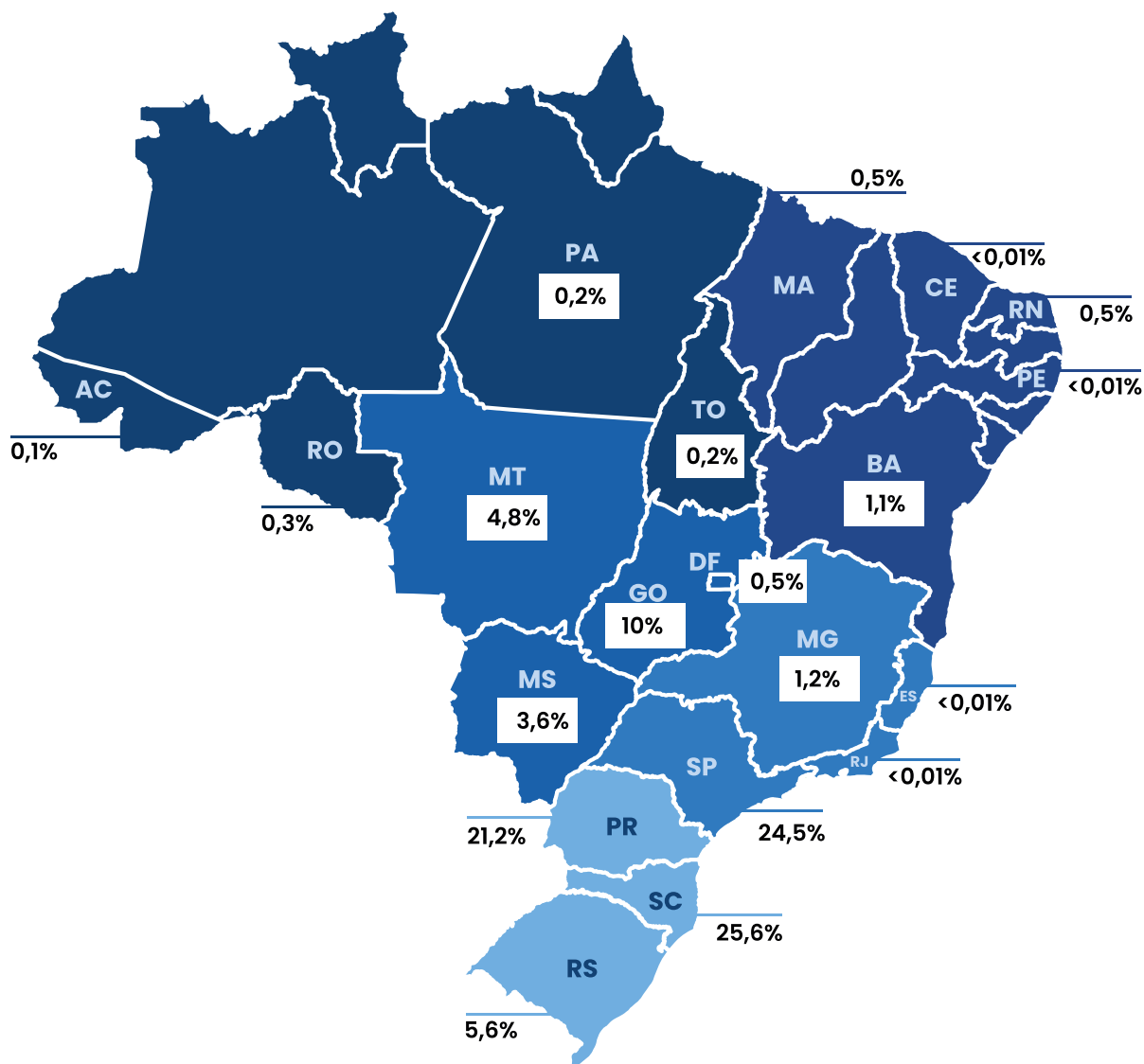
Percentage of total exported in tonnes in 2020



Source: Created by ABRA based on MDIC

## Exports of animal gelatin and blood products by Federative Unit

Percentage of total exported in tonnes in 2020



Source: Created by ABRA based on MDIC

## Countries importing animal gelatin and blood products from Brazil

By percentage of exported volume

AFRICA		AMERICA		ASIA		EUROPA AND OCEANIA	
South Africa	0,6%	United States	24,5%	Russia	4,1%	Germany	20,6%
Egypt	0,4%	Chile	4,9%	Hong Kong	3,1%	The Netherlands	11,5%
Morocco	0,1%	Argentina	3,2%	India	0,9%	Lithuania	3,5%
Tunisia	<0,01%	Paraguay	2,3%	Vietnam	0,8%	France	3,1%
Liberia	<0,01%	Mexico	1,6%	Indonesia	0,6%	Ireland	1,1%
Angola	<0,01%	Colombia	1,1%	Turkey	0,6%	United Kingdom	1,1%
		Peru	1,0%	Singapura	0,5%	Denmark	0,8%
		Canada	0,6%	United Arab Emirates States	0,5%	Italy	1,0%
		Bolivia	0,2%	Philippines	0,5%	Belgium	0,7%
		Uruguay	0,1%	Japan	0,4%	Denmark	0,6%
		Guatemala	0,1%	Malasya	0,3%	Spain	0,3%
		Ecuador	0,1%	Sri Lanka	0,3%	Malta	0,1%
		Venezuela	0,1%	Jordan	0,1%	Switzerland	0,04%
		Dominican Republic	0,04%	Lebanon	0,1%	Isle of Man	0,02%
		Costa Rica	0,02%	Myanmar	0,1%	Albania	0,02%
		Panama	0,02%	Israel	0,1%	Greece	0,02%
		Bahamas	<0,01%	China	0,05%	Romania	0,02%
		Honduras	<0,01%	Saudi Arabia	0,04%	Cyprus	0,01%
		Antigua and Barbuda	<0,01%	Taiwan	0,03%	Ukraine	<0,01%
				Iraq	0,02%	Portugal	<0,01%
				Bangladesh	0,02%	Bosnia-Herzegovina	<0,01%
				Oman	0,02%		
				Uzbekistan	0,01%		
				Afghanistan	0,01%		
				Pakistan	0,01%		
OCEANIA							
Australia	2,2%						
New Zealand	0,1%						
Marshall Falkland	<0,01%						

Fonte: Elaboração ABRA baseada em MDIC

## Continents buying animal gelatin and blood products from Brazil

Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
<b>AFRICA</b>	1.244	1.375	236	<1
<b>AMERICA</b>	25.823	28.190	20380	23.845
<b>ASIA</b>	8.356	8.499	6995	8.433
<b>EUROPE</b>	12.650	13.372	38812	43.504
<b>OCEANIA</b>	2.919	2.915	99	180

Source: Created by ABRA based on MDIC

## African countries importing animal gelatin and blood products from Brazil

Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
<b>SOUTH AFRICA</b>	1.244	1.375	236	<1
<b>Angola</b>	678	739		
<b>Cyprus</b>				
<b>Ivory Coast</b>			16	
<b>Egypt</b>	340	485		
<b>Ghana</b>			220	
<b>Liberia Morocco</b>	<1	<1	<1	<1
<b>Mozambique</b>	226	151		
<b>Nigeria</b>				
<b>Tunisia</b>			<1	

&lt;1

Source: Created by ABRA based on MDIC

## American countries importing animal gelatin and blood products from Brazil

Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
<b>AMERICA</b>	25.823	28190	20380	23845
<b>Antigua and Barbuda</b>		<1		
<b>Argentina</b>	3900	4132	25	<1
<b>Bahamas</b>		<1	<1	<1
<b>Bolivia</b>	318	256	2	<1
<b>Canada</b>	637		203	403
<b>Chile</b>	1136	1173	4550	5228
<b>Colombia</b>	823	1453	300	25
<b>Costa Rica</b>	100	30	<1	<1
<b>Ecuador</b>			<1	
<b>United States</b>	14266	16686	12510	15262
<b>Guatemala</b>	157	133		
<b>Panama</b>	20	20	7	3
<b>Paraguay</b>	118	126	2783	2849
<b>Peru</b>	1955	1335	<1	<1
<b>Uruguay</b>				
<b>Suriname</b>	22			
<b>Canada</b>		409		
<b>Ecuador</b>	154	116		
<b>Honduras</b>	20			<1
<b>Mexico</b>	1998	2083	<1	<1
<b>Dominican Republic</b>				
<b>Nicaragua</b>	16	53	<1	<1
<b>Venezuela</b>	22	10	<1	75
<b>Bahamas</b>	<1			
<b>Barbados</b>	<1			
<b>Costa Rica</b>				
<b>Uruguay</b>	161	176	<1	<1

Source: Created by ABRA based on MDIC

## Asian countries importing animal gelatin and blood products from Brazil

Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
<b>ASIA</b>	8356	8499	6995	8433
<b>Afghanistan</b>		10		
<b>Saudi Arabia</b>	134	50		
<b>Bangladesh</b>		20		
<b>China</b>			82	
<b>Singapore</b>				
<b>South Korea</b>	59		<1	
<b>United Arab</b>	337	603		
<b>Emirates States</b>	581	593		
<b>Philippines</b>	<11	1	1851	3987
<b>Hong Kong</b>	713	1155		
<b>India</b>	1236	839		
<b>Indonesia</b>	50			
<b>Irā</b>		20		
<b>Iraq</b>	60	68		
<b>Israel</b>	319	221		
<b>Japan</b>	142	192		
<b>Jordan</b>	1			
<b>Kuwait</b>	150	110	<1	
<b>Lebanon</b>				
<b>Liberia</b>	2	241	75	175
<b>Malaysia</b>				
<b>Malta</b>				81
<b>Myanmar</b>				
<b>Norway</b>	20	20		
<b>Oman</b>	10			
<b>Palestine</b>	7	10		
<b>Pakistan</b>	1677	2050	2434	3298
<b>Russia</b>	808	661	300	
<b>Singapore</b>	474	360		
<b>Sri Lanka</b>	56	44		
<b>Taiwan (Formosa)</b>	12	15		
<b>Uzbekistan Vietnam</b>	282	393	1931	652

Source: Created by ABRA based on MDIC



## European countries importing animal gelatin and blood products from Brazil

Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
<b>EUROPE</b>	12650	13372	38812	43504
<b>Albania</b>				26
<b>Germany</b>	3730	3495	20874	23307
<b>Belgium</b>	549	243	486	723
<b>Bosnia And Herzegowina</b>	<1			
<b>Cyprus</b>	<1	12		
<b>Denmark</b>	440	407	150	325
<b>Spain</b>	379	288	265	66
<b>Finland</b>			<1	
<b>France</b>	365	52	2685	3969
<b>Gibraltar</b>	<1			
<b>Greece</b>	75	25		
<b>Islas de Man</b>	<1			28
<b>Ireland</b>			25	1478
<b>Italy</b>	458	174	417	118
<b>Lithuania</b>	20		5265	4570
<b>Malta</b>	63	66	<1	
<b>Montenegro</b>			135	
<b>Moldavia</b>			108	
<b>Norway</b>	<1			
<b>The Netherlands</b>	5001	7235	8352	7781
<b>Portugal</b>	<1			
<b>United Kingdom</b>	1426	1300	52	112
<b>Romania</b>	24	24		
<b>Russia</b>				
<b>Sweden</b>	60			
<b>Switzerland</b>	60	50	<1	
<b>Turkey</b>	1226	825		

Source: Created by ABRA based on MDIC

## Countries of Oceania importing animal gelatin and blood products from Brazil

Tonnes

	Animal gelatin		Animal blood products	
	2019	2020	2019	2020
<b>OCEANIA</b>				
<b>Australia</b>	2919	2915	99	180
<b>Marshall Islands</b>	2812	2753	99	180
<b>New Zealand</b>	<1		<1	
<b>Bosnia And Herzegowina</b>	107	162	<1	

Source: Created by ABRA based on MDIC



# CHAPTER 6



## CHAPTER 6

# **BRAZILIAN ANIMAL RENDERING INDUSTRY**

## Better use for sustainability and innovation

Although the term “Animal Rendering” brings ignorance to some people, this activity is not recent. Since the earliest days of humanity, the activities re-performed by this industry were already practiced, even if in a more primitive way. The first record of this activity that has been reported occurred in Egypt, in 1550 BC, when the ancient Egyptians used animal fat together with vegetable oils, combined with alkaline salts, to form a type of soap. In a rudimentary way, bathe with this composition for the formation of this product. The other main use that rendering had was in energy need. Animal fats, for example, were used in candles, since 400 BC in Europe, and such use lasted until the present day.

Evolving from rudimentary use to something essentially handmade, fat became a de facto product during the middle ages. When farmers and alchemists extract the fats from the slaughter residues of animals. The destination in this period was the own consumption, manufacture of soaps, unguents and candles. Despite this, the commercial viability of the products was only achieved in the 17th century.

What was previously carried out using the cooking process, through pans and fire, took on proportions that during the nineteenth century represented a pan the size of a living room, with large oars mixing the fats and people struggling to maintain the temperament of this immense cauldron. This situation has changed with industrial revolutions, which as well as other industries, rendering began to benefit from steam and electrical energy, it was the birth of the rendering industry, called in Brazil as a rendering plant.

In the twentieth century, the transformation observed within the animal rendering sector occurred in relation to the processes. At the beginning of this evolution, the processing occurred by injecting steam directly into the raw material, separating the liquid material from the solid. The fat was intended for the manufacture of margarines, lubricants, candles and soaps and the solid matter, intended as fertilizer.

It was also in the first decades that part of what resulted from the processing was destined for feeding pigs to improve weight gain, was the beginning of the destination of animal rendering for animal feed. This destination became more important after the two great wars, when, due to the absence of food due to the war, Europeans began to feed their animals with animal ingredients.

From the middle of the twentieth century, the process began to result in dry products in the form of meal, a result of the technological advance achieved at that time, and once again found advantages in animal feed, as it allowed for greater growth of animals. Soon the practice of feeding animals with animal receipt products spread, it was the 60 and 70.

Over the years that followed, the Animal Rendering industry was concerned with finding the best locations for the installation of the plants. Strategic points were needed to carry out the management of the raw material, because the technology of epoch demanded immediate processing, in an inverse correlation of time since slaughter with the protein level achieved. In addition, the obstacles of the technology of the time did not allow a clean industry, bringing some constraints when a plant was very close to some city.

It is worth mentioning that until that moment, the sector used discontinuous digesters as the heart of its factories, which used the batch process for production. In this process, the raw material is placed inside the digester, heated to the expected temperature and the resulting removed, repeating the cycle with a new quantity of raw material. A new technology begins to take part in the industry in general, through the so-called continuous digesters, which present greater agility and efficiency in the raw material, mainly because it does not need to operate in cycles.

The evolution of technology was also accompanied by the innovation of manufacturing methods and procedures. At the end of the 1980s, the sector was also impacted by the concept of “sustainable development”, which had emerged in the world at that time. Business management went from a strategy focused on profit to the observation of issues such as environmental preservation, social involvement, the work environment, among others.

The sector begins to gather all the necessary requirements to become a true rendering industry, even coining the term in Brazil of Animal Rendering to replace the old rendering plant.

## Technological Evolution of the Sector



GRAXARIA  
(Passado)



INDÚSTRIA DE RECICLAGEM ANIMAL  
(Presente)



Currently, the Animal Rendering Industry in Brazil presents a complex of technological use in the manufacture of its products, guaranteeing quality and responsibility within the production process. Contributing increasingly to the development of Brazil, this industry is recognized today as the link that closes the Brazilian livestock chain.

However, his innovations did not stop there. Currently there is a search for product innovation, both with regard to new products that may result from the animal rendering process, as well as use for what already exists:

Type	Innovations	Transaction
Innovations of Products	Queratina	Use in burn treatment
	Antioxidante natural	Extracted from blood, can be used ANIMAL NUTRITION
	Peptídeos	Intended for animal nutrition
	Adubo Foliar	Produced through the carcass of dead animals on rural properties. Not allowed in Brazil
Usage Innovations	Borracha Reciclável	Factory through animal blood, may return to the original state for new manufacture and destination for animal nutrition.
	Descontaminante de solo	Use of meals as an electron donor for decontamination of soils with heavy metals or agricultural pesticides.

## Sanitation in animal rendering

All industries in the Brazilian animal rendering sector and the establishments of origin of animal waste are supervised by the official health authorities. The MAPA, through the Federal Inspection Service (SIF), ensures that the animal rendering industries in Brazil, under their supervision, have all good manufacturing practices executed regularly, with traceability of the origin of the waste to the finished products.

The Brazilian animal rendering industries have specialized and qualified labor, with continuous training, equipped and modern laboratories, investment in high technology and commitment to the environment and, mainly, to its customers. Factories in the sector, by law, adopt an efficient self-control system, resulting in the manufacture of products safe for use in animal nutrition. This whole structure makes the products of the sector reliable and excellent quality.



## Safe Products



### **GMP SELF-CONTROL**

aiming at excellence and  
sanitary safety



### **BPF**

Good Practices of  
Manufacture



### **HACCP**

Operational Critical  
Control Points



### **PSO**

Sanitary Procedures  
Operational



### **SSOP**

Standard Procedures from  
Operational Hygiene



### **TRACEABILITY**

the origin of the waste to  
the finished product

The products of the animal rendering sector under the SIF are manufactured in establishments that implement Good Manufacturing Practices Programs (GMP), Standardized Procedures for Operational Hygiene (SSOP) and Hazard Analysis and Critical Control Points Program (HACCP), following the recommendations of the Codex Alimentarius, with systematic verification by federal agricultural tax auditors (AFFAs).

The meal packaging is of first use and meets the hygienic-sanitary and labeling requirements established by MAPA. Finished products are stored and transported under conditions that prevent contamination and/or proliferation of microorganisms and have free transit and trade in Brazil.

Animal health in Brazil is recognized worldwide. We are a member country of the World Organisation for Animal Health (OIE).

Brazil is recognized by the OIE as a country at negligible risk for bovine spongiform encephalopathy (BSE), as a country free of foot-and-mouth disease, avian influenza and contagious bovine pleuropneumonia. The slaughtered animals that originate the waste that the animal rendering sector processes are reared and kept in free areas avian cholera, newcastle disease, classical swine fever, African swine fever and African horse sickness.

The animals that generated the waste passed through establishments that perform ante-mortem and post-mortem inspection duly registered with the competent inspection body of Brazil. Thus, meals and fats of Brazilian animal origin have total traceability and internationally recognized quality.

## Sustainability in animal rendering

Brazil's agricultural sector is perceived in the world as one of the most qualified, being very competitive, both in production and technology. According to the Ministry of Agriculture, Livestock and Supply, in the early 1990s, more than 50% of the meat consumed in the domestic market came from slaughterhouses without inspection by the official health service. This resulted in a scenario of inadvertent disposal and incorrect waste disposal, causing serious environmental problems:

- **Reduction of landfill capacity, due to the high demand for these spaces.**
- **Contamination of the groundwater, water bodies and soil due to the natural decomposition of the waste.**
- **Health risks to employees and persons exposed to waste.**
- **Environmental pollution, both soil and air, in the case of the incineration of these materials.**

Currently, the scenario of Brazilian agriculture has evolved into a responsible environment with increasing supervision. Together with the legislation, this reality contributed to the correct disposal of animal waste, collaborating with the preservation of the environment and the generation of income, through animal rendering. Considered a solution to this problem, the animal rendering sector is recognized by the World Health Organization (WHO) as an essential public service, including receiving government incentives in some countries of the world, as in the cases of Canada and the United States.

Animal rendering contributes to the tri-foot of the country's sustainability, reaching the social issue, by generating jobs and a healthier working environment for those involved in the meat industry. In the environmental area, the animal rendering sector has a vocation for its protection, generating a very low impact, not to say null, due to the business model with reverse policy and focus on the use of waste from the meat industry as a raw material for the production of new products. Likewise, it is an industry created around profitability, generating billions of dollars worldwide, including in Brazil.

### SOCIAL ISSUE

WELLBEING  
PEOPLE INVOLVED

### ENVIRONMENTAL ISSUE

HUGE WINNINGS FOR THE  
ENVIRONMENT

### ECONOMIC ISSUE

BUSINESS OF BILLIONS OF  
DOLLARS IN THE WORLD

With the use of animal meal in the production of animal feed, the animal rendering sector contributed to Brazil's failure to:

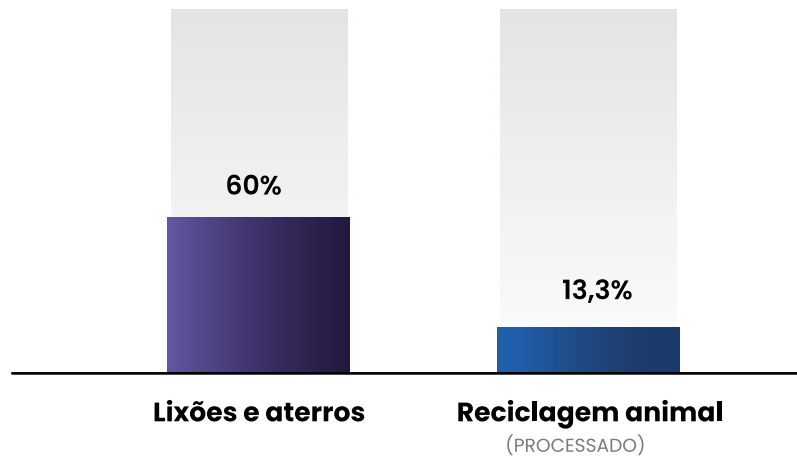
- **Plant 2.1 million hectares (corn + soybean)**
- **Consuming 1 million tonnes of fuel**
- **Spend R\$800 million on pesticides**
- **Use 12 billion cubic meters of water**

In animal rendering, the production process generates water that is reused in the industry or treated and returned to the environment. In Brazil, dumps and landfills are a worrying theme for the environment, even generating a policy to achieve the reduction of these environments to zero. Animal rendering contributes to prevent this growth and reduces the amount of landfills, because without this activity there would be an increase of 22.2%, the equivalent to 266 new dumps and landfills, and about 13.3 million tonnes would be discarded in these environments.



## Environmental Impact

(Million tonnes)

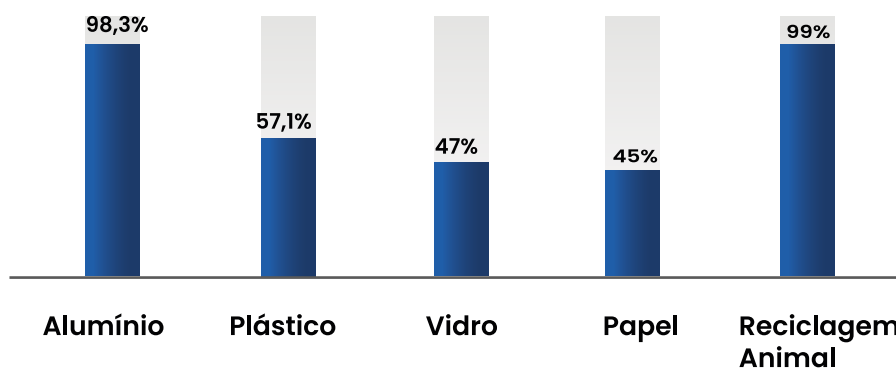


In addition, the animal rendering sector has the greatest potential for the use of industrial waste. While the plastic sector recycles 57.1%, the animal rendering sector collects 99% of the waste

produced by the meat chain and is the only one that processes 100% of all that I have left to it. Thus, animal rendering is the sector of the Brazilian livestock chain that contributes most to its sustainability.

## Rendering potential by industrial sector

(% collected in Brazil for rendering)





## Animal rendering as a strategy for biodiesel

Brazil is a model country in the environmental issue, with a large natural reserve and two very rich sources of resources: the Amazon and its territorial sea, also located in the Blue Amazon. In addition, the country always invests in innovations and technologies for sustainable use of the environment. One of these initiatives is the production of biodiesel, a fuel with a lower pollution factor than petroleum products, whose raw material is not of mineral origin, but of animal and vegetable origin.

It is noteworthy that biodiesel is a renewable fuel. The aggregation of the raw materials that make up this fuel makes it an energy compound capable of moving engines and vehicles without harming the environment, as fossil fuels do, which makes it a strategic resource for Brazil and important for the world. Due to the benefits pointed out and for applied technology, biodiesel is considered the fuel of the future, presenting both energy benefits and the environment, due to the reduction of emissions of novice gases to the earth's atmosphere.

Currently, Brazil is one of the largest producers of biodiesel in the world and its fuel has more quality than the others, due to its technological and logical superiority in the energy sector. In addition, this fuel reduces the dependence of Brazil on the international oil market, ensuring greater stability of fuel prices, benefiting all other economic sectors. The fats produced by the animal rendering sector can be used in the petrochemical sector, in the production of biodiesel and biokerosene. In 2020, 11.3% of Brazilian biodiesel was produced using animal fats as a raw material.

RAW MATERIAL	Production (M³)	million of Liters	Participation
<b>Soybean oil (glycine Max )</b>	4.644.045	4.644	71,4%
<b>Other materials</b>	735.441	735	11,3%
<b>beef fat</b>	566.208	566	8,7%
<b>palm oil (elaeis guineensis or elaeis o</b>	166.428	166	2,6%
<b>Pork fat</b>	130.557	131	2,0%
<b>Cotton-seed oil (gos- sypium hirsut)</b>	109.387	109	1,7%
<b>Used frying oil</b>	77.727	78	1,2%
<b>Chicken fat</b>	40.782	41	0,6%
<b>Corn oil</b>	14.866	15	0,2%
<b>Fatty acid from oil of soy</b>	12.429	12	0,2%
<b>Rapeseed/canola oil (bressica campestris)</b>	3.767	4	0,1%
<b>Sunflower oil (Hellanthus annus)</b>	1.412	1	0,02%
<b>Fatty acid from oil of palm</b>	529	1	0,01%
<b>Palm nut and kernel oil</b>	338	0,3	0,01%
<b>Total</b>	<b>100%</b>	<b>6.503.916</b>	<b>6.504</b>





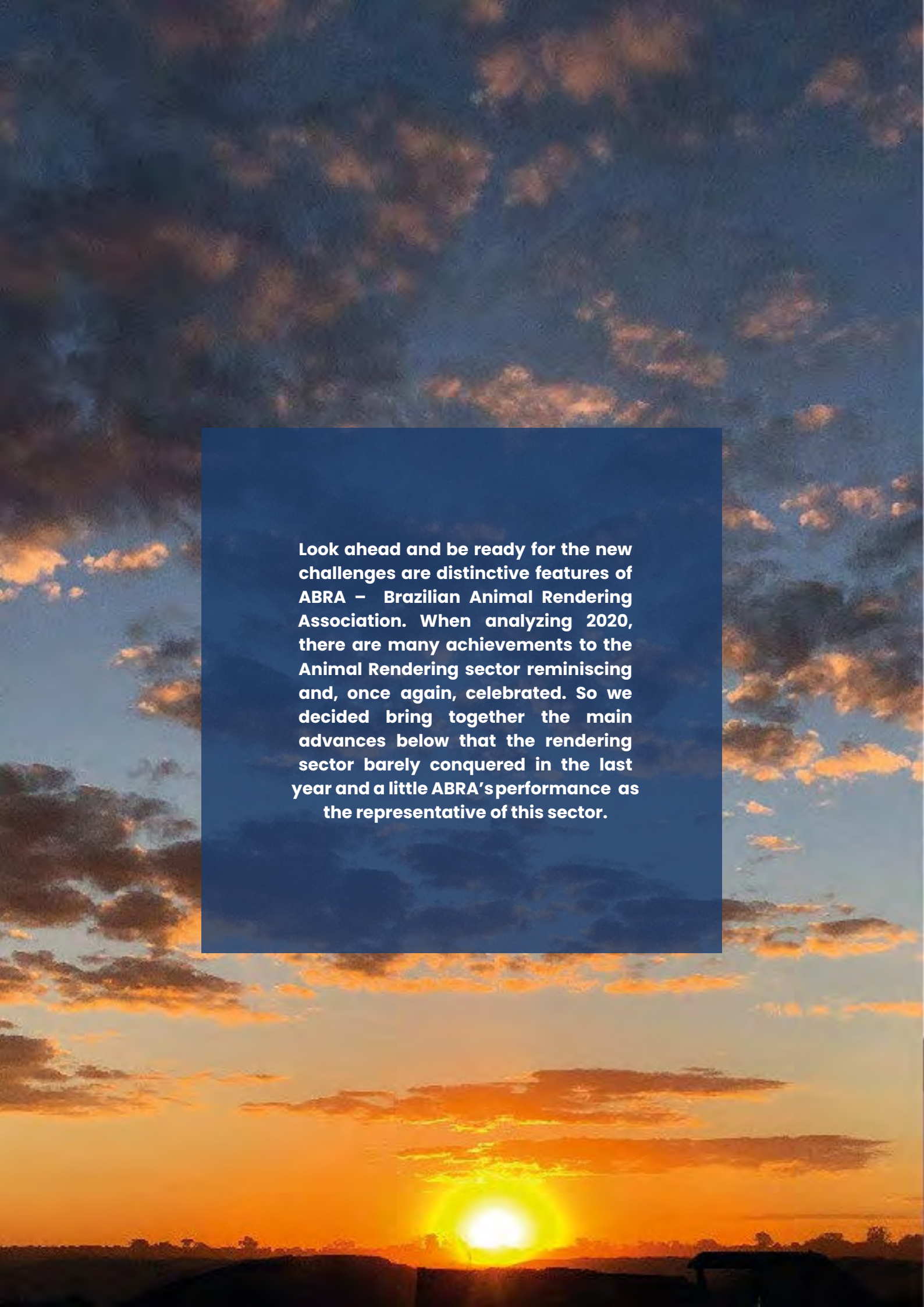


# CHAPTER 7



CHAPTER 7

# **ABRA RETROSPECTIVE 2020**



**Look ahead and be ready for the new challenges are distinctive features of ABRA – Brazilian Animal Rendering Association. When analyzing 2020, there are many achievements to the Animal Rendering sector reminiscing and, once again, celebrated. So we decided bring together the main advances below that the rendering sector barely conquered in the last year and a little ABRA's performance as the representative of this sector.**

## Animal Rendering and Covid

Animal rendering industries remained ABRA in Brazil during the de-stabilizations caused by Covid-19 because they provided an essential service. Recognition of essentiality was the first major achievement of 2020 that allowed the animal rendering sector to continue in full operation during the Covid-19 Pandemic.

Despite this, with the crisis caused by the Pandemic, the rendering industry has faced challenges, mainly due to changes in consumption habits and reductions in the demands and prices of animal waste. Still, process innovation and the business maturity of the animal rendering industries ensured that these challenges were overcome still in 2020, with responsible decisions and thinking about the well-being of workers and the population served by their services.

Following its vocation as a sectoral entity and acting together with nine other entities representing the animal product chains and animal production, in March, I presented a proposal to ensure the proper functioning of the animal food chain and avoid a possible and tragic framework of "Food Insecurity". Thus, it kept associates informed about the recommendations issued by the World Health Organization (WHO), as well as the norms and legislation of the Ministry of health with an intense work of guidance and prevention of COVID-19 with the members of the association.

The team compiled and made available all the regulations issued by the Ministries of Economy (Special Secretariat for Social

Security and Labor), Ministry of Health and Ministry of Agriculture, Livestock and Food that dealt with the subject and is related to our sector, complete information, from guidelines on the adequacy of work environments to the operation of Brazilian and international ports and airports of interest to the associates. An intense work with the concern to preserve the continuity of the sector.

## Creation of a Technical Chamber – CAMTEC/ABRA

In 2020, the Working Group was created by the Technical Chamber – CAMTEC/ABRA to formulate a proposal to amend IN 34/2008 with MAPA, after protocol of the proposal by ABRA in the ministry held on October 18, 2019.

In January of the same year, a working group was created by the MAPA of which ABRA is part to review the National Program for the Prevention and Surveillance of Bovine Spongiform Encephalopathy – PNEEB.

## SIGSIF Launch Manual

After the associates are triggered by the DIPOA inspectors due to the establishment, by the release manual, of the need for daily entry of the production, storage, sale and condemnation data, the ABRA, in February 2020, met with Dr. Ana Lucia Viana, director of DIPOA. ABRA explained that Decree 9,013/2017 provided for launch by the 10th business day of the following month, and that this period was not being observed.



With the acceptance of the argument, on February 22, 2020, DIPOA made available Version 3 of the Manual releases in the Management Information System of the Federal Inspection Service – SIGSIF – making it clear that the releases of production data can take place up to the 10th business day of the following month.

## Meeting with Minister of Agriculture: ABRA

On September 30, ABRA participated in a face-to-face meeting at the Ministry of Agriculture, Livestock and Supply with the participation of Minister Tereza Cristina, the Chairman of the Board of Directors of ABRA, Pedro Bittar, Executive President Decio Coutinho and Internal Market Manager Marcell Porto e Castro.

Seeking the legal guarantee that the change of the legal environment of the animal receiving sector would not bring losses, the ABRA team presented the main points of the changes made to the Regulation of Industrial and Sanitary Inspection of Animal Products (RIISPOA) that deserve attention not to harm the activities of the sector. ABRA's main claims were the maintenance of the animal rendering sector in RIISPOA and that any changes would count on the real and effective participation of the productive sector.

## ABRA and Brazilian Renderers

In 2020, a new ABRA website was launched, as well as a new site of the seto-rial project – Brazilian Renderers that, after undergoing a complete remodeling, will serve as a showcase for the sector, with updated data, product information, as well as information from project members.

## New Brazilian Renderers Branding

In 2020, Brazilian Renderers won a new brand. After the movement of the entire ABRA team, associates, CAMEX-ABRA and Apex-Brasil, in addition to Inspirer's Strategic consultant, Cristina Prota, designer Fabio Okamoto and business strategist, Marketing and Innovation Flavio Paiva, who coordinated all three major phases of the work, the new brand communicates all former excellence, innovation, transformation and Brazilian spirit in the Animal Rendering sector. In addition to the new logo, with The Pure Origin You Trust, rebranding has consolidated and expanded the strategy, tone of voice and visual identity of Brazilian Rende-rers, aspects that ensure that the dialogue between the brand and people is much more proprietary and assertive. The new position now guides all communication of the project, presenting the competitive advantages of Brazilian products in the market, for several audiences.

## Weekly Newsletter

Through the Newsletter, twice a year agribusiness news relevant to the animal rendering sector and news produced by Press Advisory on ABRA's actions were sent to ABRA's mailing.

## Videos Organizations publicizing the sector

In order to promote the animal receipt sector in the international market, two promotional videos were made, one in English and one in Spanish, addressing ABRA and the Brazilian Ren-derers project, the size of the sector market and business opportunities.

## ABRA on the Web

ABRA on the WebWith the arrival of the pandemic caused by Covid-19, much needed to be changed and new habits were adopted by people. With this in mind, we started in May/2020 to hold the "ABRA on the Web" event that aims

to bring an important fight to our sector, on the most varied topics. The online event was held in five editions during 2020, bringing important themes and guests to the sector.

The first had as its theme "Animal Rendering: from the refrigerator to the current cloth-gram feed factory and post-Covid-19 perspectives". The second approached the international market and brought a panorama to the animal receiving-cloning sector.

The third dealt with the regulatory system with the Regulatory Quality Improvement Program (PMQR) of the Secretariat of Agricultural Defense (SDA), and how the sector could contribute. The fourth was on biofuels and Renovabio, where the role of animal rendering in the production of biodiesel was addressed. In the fifth event, the 2019 yearbook was launched, which presented the Brazilian situation of the animal rendering sector in 2019.

## ABRA Export Course

ABRA held, in virtual format, the period from November 16 to 27, 2020, with a total duration of 30 hours, the ABRA Export course. The content of the training involved topics such as the role of the Animal Products Inspection Division (DI-POA) in International Trade, Prospecting for Animal Rendering Destinations through the Desk Research tool and others. During the course, representatives of the Ministry of Agriculture (MAPA), the Ministry of Foreign Affairs (MRE), the Ministry of Economy (ME), the National Confederation of Industry (CNI), APEX Brazil and ABRA participated in the lecture.

## Reports and studies

In 2020, intelligence carried out encomended studies of interest to companies and entities on various aspects of the Animal Rendering sector in Brazil and the international scenario, serving governmental and associated partners, as well as consultations carried out for the development of projects by ABRA itself.

Among the reports produced are 1 annual, 30 interactive reports, 65 published reports, 2 contracted market studies, 12 market opening/closing reports due to the Covid-10 crisis in Brazil and worldwide, international logistics monitoring during the Covid-19 crisis. Such actions were important to keep the business community aware of the world situation in order to minimize the negative impacts of the pandemic.

## Other products


Among other products are 3 documents sent to government partners (MAPA, APEX and CNI), 7 occasional consultations of associates on international markets, 8 occasional consultations of associates on the national market, 6 market studies contracted for delivery in 2021, 21 consultations carried out for the development of projects by the Association itself, among them, fundamental reports such as referring to the impacts on the sector promoted by the amendment of RIISPOA.

## New associates in 2020

ABRA received 13 new associates in 2020: Industria BRAIDO Ltda; Chicarelli & Seba Ltda; Agroforte ind. com. e transporte Ltda; Nova Era Industria de Farinhas de Carnes Ltda; BJ Reciclagem Animal Ltda; São Salva-dor Alimentos s/a; Bon-Mart Frigorífico Ltda; Hemoprot Industria e Comércio de Produtos de Frigoríficos Ltda; Bahia Industria de Subprodutos Animais Ltda; Semix Comércio de Insumos Agropecuários Ltda; Frigorífico Better Beef Ltda; LPX Agroindustrial Ltda e; K-PRO GMBH.

## There's room for you to grow

Finally, we want to invite you to be an ABRA associate. Have active participation in all the actions of the entity, obtaining exclusive access to the materials developed, discounts of 50% in the trainin and technical visits, space to receive clients in the main national and international events, in addition to several other associative benefits.



Space for  
YOU TO GROW UP.  
**JOIN ABRA.**

- Access exclusive information.
- Enhance the competitiveness of your company.
- Get 50% off on training courses and visits technical
- Organization, prior technical support and execution of international qualification missions.
- Use the ABRA booth to welcome customers to major national and international industry events.



# CAMEX – ABRA

Every entrepreneur's dream is to build a strong, reliable and recognized name, it starts with their own company. Through it, this dream is sprayed on each co-worker, after all it is also pleasurable to know that the company where he works is valued in the market. Satisfaction is a common and social feeling.

If it is already good to reach this level in the country, who will say that it is a company recognized also in other countries. Being an exporter-dor is to link the name of Brazil to its production, it is a mutual relationship of benefits, in which the country brings a differential for its merchandise and this, in turn, projects the image of what Brazil represents.

This is without commenting on the economic benefits of becoming an Exporter. Imagine a scenario in which your company can keep selling in the face of crises, or when the exchange rate fluctuation ends up benefiting you, or even reduce the risks of unpredictability. These are only some advantages of becoming an exporting company. In addition, you will be able to:

- **Sales increase**
- **Growth of productivity;**
- **Tax incentives**
- **Improvement of Product Quality**
- **Company Improvement**
- **Increase in the number of customers**
- **Decreased dependence on the internal market**
- **Access to new technologies**

But reaching the maturity to expose requires preparation and work, and CAMEX ABRA can help. This is the objective of our-Chamber of Exporters ABRA, to project the image of your company in international markets. In addition to being aware of all the information regarding exports, buying markets and customers, you will have the opportunity to participate and exhibit your brand in:

- **International fairs**
- **Business Roundtables**
- **Recognition in the sector as an exporter of pain**
- **Active voice in the future of the sector's exports**
- **Image projection**
- **Access to market intelligence materials**
- **Consultancy in the resolution of procedures**
- **Advisory to the government**
- **Acquire Know How**

And if you are still a small company, but still want to export, CAMEX ABRA is also a good opportunity, as you will have contact with experienced companies, with professionals who can provide you with information and tips on how to start in this large universe of buyers that is the international market.

Patrocinadores



Organized by



Promoted by



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