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REPÓRTER
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**“CATTLE
EATING UP THE
WORLD’S
LARGEST
RAINFOREST”**

Monitor's twelfth issue, a bulletin that disseminates Repórter Brasil sector and supply chain studies, analyzes the connections between meat sold by large retailers in the United States, United Kingdom and European Union and the deforestation of Brazilian forests.

MONITOR #12

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“Cattle eating up the world's largest rainforest”

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INTRODUCTION

The meat industry is currently one of the strongest drivers of global deforestation of native forests. Brazil, home to the world's largest rainforest, is at the centre of the issue. In addition to the Amazon, the country is home to other important biomes – such as the Cerrado and Pantanal – where native vegetation is giving way to pastures at a fast pace. Such expansion aims to serve not only the domestic market but also a growing number of countries and consumers spread across all continents.

Brazilian meat goes through many hands and places before it lands on supermarket shelves. Prior to slaughter, cattle often pass through several

farms. The main Brazilian meatpacking companies are signatories of public commitments to block purchases from farms involved in recent deforestation. But they fail to deliver the promised results for a variety of reasons. The main one is certainly their inability to identify who its indirect suppliers are – that is, other farms the animals passed through before reaching the place of their final sale.

In this document, Repórter Brasil mapped concrete examples of the problem, connecting meat sold by important retail groups – in the United States, United Kingdom and the European Union – to meatpacking plants expo-

sed not only to environmental crimes, but also to encroaching on Indigenous Lands. This occurs despite the fact that, for certain export markets, Brazilian law already imposes individual animal traceability systems capable of mapping indirect suppliers. Such mapping, however, is used only for health control of exported meat – not to enforce compliance with social and environmental criteria.

Therefore, the Brazilian industry – and its customers in the international market – still do not have concrete results on the issue, despite promises made for more than ten years to guarantee full traceability of livestock.



CATTLE EATING UP THE WORLD'S LARGEST RAINFOREST

The impact of the livestock industry in the Amazon – umbilically linked to the alarming deforestation rates seen in recent years – is the result of a decades-long process that has been leading to pasture expansion in Brazil's Centre-West and Northern regions. Until the 1970s, that part of the country accounted for a low percentage of Brazilian livestock. However, in the last 40 years, the number of cattle heads has increased tenfold in the so-called Legal Amazon. Today, it accounts for 41% of the approximately 200 million animals grazing in Brazilian territory.¹

Therefore, it comes as no surprise that cattle raising has become the main reason for clearing the largest tropical forest on the planet. The latest data provided by the federal government indicate that pastures – many of them degraded and of low productivity – cover 65% of the Amazon areas where forest cover has been lost.² But the environmental impact of livestock is not limited to that part of the country: it also contributes to current loss of native forest in other equally threatened Brazilian biomes such as the Cerrado and Pantanal.

Livestock expansion over these agricultural frontiers was closely monitored and driven by the meat industry, which established slaughter and meatpacking plants in municipalities located in the heart of deforestation fronts. Furthermore, many of these slaughter plants belong to Brazil's three largest beef companies: JBS, Marfrig and Minerva. In the last 25 years, these companies have grown from small, local operations into major multinational meat processing enterprises – largely with state funding.

JBS received major stock investments and loans from the National Bank

for Economic and Social Development (BNDES), largely used to acquire competitors. Currently, the state-owned bank holds approximately 23 percent of the company's shares, whose sales jumped from BRL 3.5 billion in 2004 to BRL 270.2 billion in 2020.³ Marfrig has also received money from BNDES, who used to be its second largest shareholder until the end of 2019. To a lesser extent, Minerva was another company benefited from loans given by the bank and other state financial institutions such as Banco da Amazônia.

For more than 10 years, the three meat giants have been under pressure to take effective measures against environmental devastation in their supply chains. Back in 2009, they made an ambitious commitment: to exclude farms that had deforested the Amazon after October of that year from their list of suppliers. Sourcing from properties caught using slave-like labour or located in indigenous lands and conservation units should also be banned.

The criteria – the result of an agreement signed with Greenpeace⁴ – are not restricted to illegal deforestation. They include any case of deforestation of native forest, even if authorized by environmental agencies. In addition, the companies also signed agreements with the Federal Prosecution Service (MPF). In some cases – such as JBS⁵ –, their measures against deforestation are extended to other biomes in the states of the so-called Legal Amazon.⁶

Despite the commitments, meat from deforested areas still arrives at the country's large meatpacking companies. Audits, government inspections, studies and news reports have shown several flaws and limitations in the monitoring agreements and policies adop-

ted over the past few years. They focus on two main issues: indirect suppliers and cattle laundering.

Brazil's livestock industry is marked by intense trade in animals among farms before they are finally sold to meatpackers. But with the exception of some specific market niches, there are no systems in place to track animals from birth to slaughter. Slaughterhouses' supplier monitoring only accounts for the final link in this long business chain – that is, farms selling directly to meatpackers. Therefore, it will not identify environmental crimes associated with pasture areas that supply animals to their direct suppliers. It is important to emphasize that a large part of deforestation is concentrated precisely in this type of rural property, which does not do business directly with the meat industry.

A large part of the bovine cattle raised in recently deforested areas are transferred for final fattening on properties with "clean records," which, in turn, sell them to slaughterhouses. Some transfers are real but others are mere bureaucratic illusions. They only occur on paper, to enable the slaughter of animals linked to several socio-environmental problems, such as illegal deforestation, invasion of indigenous land and the use of labour analogous to slavery. This type of fraud is known as cattle laundering.

As a reaction to the latest criticisms – linked to increasing deforestation in the Amazon and other biomes – Brazil's largest meatpackers made a new round of promises in 2020. JBS and Marfrig disclosed plans to have their entire supply chains monitored from birth to slaughter by 2025 and 2030, respectively. Minerva also announced the adoption of Visipeç

– a system for tracking indirect suppliers to study alternatives to reach that target.

Such commitments are not exactly new. Back in 2009, during negotiations with Greenpeace, the three meat giants

had committed to prove – “in a monitorable, verifiable and reportable way” – that none of their indirect suppliers had deforested areas in the Amazon biome after October of that year. The deadline

for meeting the target was 2011, but no significant progress was achieved.⁷

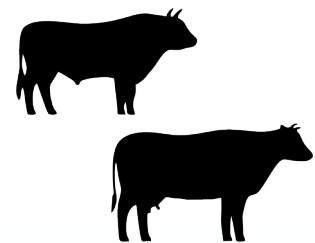


PRIME CUTS ENDING UP IN RICH COUNTRIES

Most of the beef produced in Brazil is consumed within the country itself, but the industry faces increasing internationalization. Exports have grown sharply in recent decades, and the country already plays a dominant role in this business: Brazil leads today the international trade of beef products, controlling a quarter of the global market⁸.

Brazilian meat is now consumed on all continents. Asia, the Middle East and Africa are the main importing hubs. The European Union⁹ bought 6.3% of the total volume exported in 2020, while the United States and the United Kingdom were the destination of 4.6% and 2.2% of the exports, respectively¹⁰.

While the US, the EU and the UK are secondary destinations regarding the total volume, they are considered strategic markets, largely because they absorb products with higher added value. For example, they play prominent roles in the markets of prime cuts and processed meat.



Beef exports to the EU (2020)¹¹

Product	US\$	KG
Frozen meat	222,970,408	35,559,234
Fresh or chilled meat	115,939,679	15,633,072
Food preparations and preserves	83,364,635	13,382,324
Viscera	21,501,782	5,856,420
Salted, dried or smoked meat	80,517	11,675
Total	443.857,021	70,442,725

Beef exports to the US (2020)¹²

Produto	US\$	KG
Food preparations and preserves	316,205,995	39,004,279
Frozen meat	96,115,737	20,113,254

Viscera	1,608,489	426,650
Fresh or chilled meat	1,974	320
Salted, dried or smoked meat	1,050	522
Total	413,933,245	59,545,025

Beef exports to the UK (2020)¹³

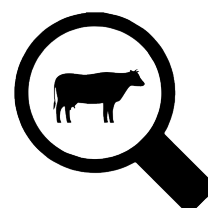
<i>Product</i>	<i>US\$</i>	<i>KG</i>
Food preparations and preserves	96,157,475	23,331,523
Frozen meat	5,130,029	990,639
Fresh or chilled meat	3,290,335	477,680
Viscera	174,961	24,592
Salted, dried or smoked meat	25,928	4,066
Total	104,778,728	24,828,500

Together, JBS, Marfrig and Minerva accounted for 71% of Brazilian beef exports between 2015 and 2017, according to data compiled by the Trase platform¹⁴. Concentration is even higher in sales to the EU and the US. The three companies and their subsidiaries shipped

more than 90% of Brazilian meat consumed in the EU and the US market.

Meatpackers operating within the Amazon biome account for an extremely small share of exports to these two consumer hubs. Industrial plants installed in São Paulo – in Brazil's southeast region – lead exports to both

destinations. Other states outside the Amazon, such as Goiás and Mato Grosso do Sul, also play prominent roles, as well as slaughter plants in Cerrado areas in the state of Mato Grosso.



Origin (by state) of meat exported to the EU (2020)

<i>State</i>	<i>US\$</i>	<i>KG</i>	<i>% (KG)</i>
São Paulo	155,405,657	24,534,457	34.8%
Mato Grosso	128,771,144	20,114,781	28.6%
Goiás	81,038,970	11,981,486	17%
Mato Grosso do Sul	39,205,052	6,098,544	8.7%
Minas Gerais	20,982,563	3,449,757	4.9%

Rio Grande do Sul	15,030,032	3,519,970	5%
Others	3,423,603	743,730	1.1%
Total	443,857,021	70,442,725	100,0%

Origin (by state) of meat exported to the US (2020)

<i>State</i>	<i>US\$</i>	<i>KG</i>	<i>% (KG)</i>
São Paulo	282,974,984	36,588,549	61.5%
Mato Grosso do Sul	37,174,995	8,632,148	14.5%
Goiás	27,787,369	5,105,676	8.6%
Rio de Janeiro	27,352,047	1,620,150	2.7%
Minas Gerais	20,843,841	4,072,001	6.8%
Rio Grande do Sul	6,919,087	1,057,810	1.8%
Rondônia	5,901,969	1,394,967	2.3%
Mato Grosso	4,844,406	1,033,677	1.7%
Others	134,547	40,047	0.1%
Total	413,933,245	59,545,025	100%

Origin (by state) of meat exported to the US (2020)

<i>State</i>	<i>US\$</i>	<i>KG</i>	<i>% (KG)</i>
Rio Grande do Sul	55.585.589	13.535.486	54,52%
São Paulo	42.253.874	10.068.866	40,55%
Goiás	3.251.044	602.038	2,42%
Mato Grosso	3.002.055	517.015	2,08%
Others	686.166	105.095	0,42%
Total	104.778.728	24.828.500	100,00%

The locations of these exporting plants are commonly mentioned by importers of Brazilian meat as a way to dissociate their supply chains from deforestation. That is what retailer company Iceland claimed, for example, to British newspaper *The Independent* in response to investigations mentioning JBS products sold at its stores. The company claimed that its purchases were “geographically separated from

the Amazon biome area, ensuring that no beef from the Amazon is used in their products”.¹⁵

However, interstate animal trade is common in Brazil, covering distances that may reach thousands of kilometres. Therefore, even processed meat purchases from industrial plants located in São Paulo may be contaminated with Amazon deforestation.

This reality is addressed in some cases investigated by *Repórter Brasil* and presented below. In addition to Amazon deforestation, they also show how environmental crimes in other biomes – such as the Cerrado and Pantanal – are linked to meatpacking plants that export to Europe and the United States.



Frilori

CARNE CONFIÁVEL TEM NOME.

JBS

Brazil's largest meatpacking company is an important supplier of processed meat for international retailers. Corned beef and beef jerky produced by the company in Brazil can be easily found in the European Union and the United States, even on the shelves of some of the largest supermarket chains, like Albert Heijn, Auchan, Carrefour, Costco, Delhaize, Edeka, Lidl, METRO, Netto, Plus, REWE, Sainsbury's and Stop&Shop.

JBS produces processed meats mainly in the state of São Paulo, the country's largest industrial hub and far

from the main agricultural frontiers in the Amazon, Cerrado and Pantanal. Corned beef sold abroad is manufactured at the company's units in Andradina and Lins, in the western São Paulo. Beef jerky, in turn, is produced in Lins and Santo Antônio da Posse, a municipality located in the metropolitan area of Campinas (SP). There, JBS maintains a joint venture with US-based multinational Jack Links, one of the largest global brands for beef jerky.

The long distances separating these factories from the main agricultural frontiers do not guarantee that their supply

chains are free from deforestation and Indigenous Peoples' rights violations. Firstly, because meat processing units can use raw material from other JBS slaughter plants across the country. Secondly, because even when meat is slaughtered locally, the animals may have grazed on farms linked to environmental crimes at some point in their lives.



FROM THE AMAZON TO SÃO PAULO

Such risk of contamination exists, for example, in the case of the Santa Lúcia Farm, owned by Odair Afonso Rebelato. Located in Espírito Santo do Turvo (SP), near Lins, the farm supplied cattle to the JBS slaughter plant in that town on different occasions between 2019 and 2021.

Documents accessed by Repórter Brasil show that the Santa Lúcia Farm purchases animals for fattening from other farms. They include Estância Painera, a 392-hectare pasture area located more than 2,000 kilometres away, in Altamira (PA) – in the heart of one of the Amazon rainforest regions most affected by deforestation.

Deforestation of native forest has been recorded at Estância Painera after 2008, together with lack of Legal Re-

serve and Permanent Protection areas that should be maintained by the property, according to the the official government platform SeloVerde¹⁶, launched by the Pará state government in April 2021. The platform provides data on agricultural production and environmental compliance for rural properties in the state.

But the problems do not end there. Estância Painera belongs to Carlos Antônio Nunes, who also owns another much larger property in Altamira – the 2,200-hectare Bonanza Farm –, only 40 kilometres away from the former. Since 2013, 330 hectares are under Ibama¹⁷ interdiction for illegal deforestation of Amazon Forest areas in its perimeter. The owner was fined around BRL 1.6 million/ USD 750 thousand¹⁸ for the crime.

Repórter Brasil found that between 2019 and 2020 alone, the Bonanza Farm sent more than 500 animals to be fattened at Estância Painera. In other

words, the animals purchased from Estancia Painera may have come from the Bonanza Farm. This farm, in turn, has been fined by Ibama.

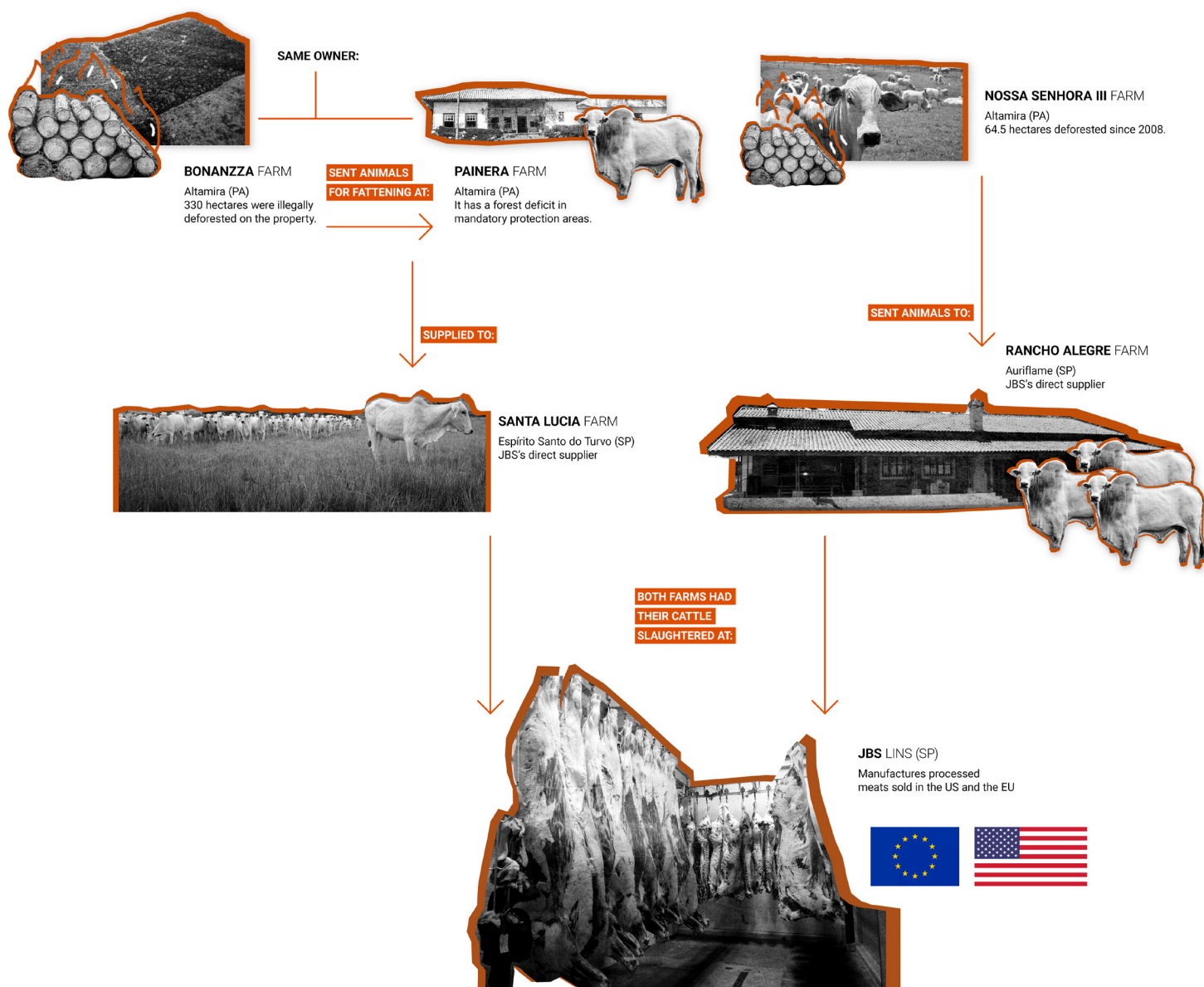
Considering the sustainability criteria disclosed by JBS, the environmental liabilities of both farms should have interdicted animal sourcing from those properties. But lack of traceability of indirect suppliers means that the risk of supply chain contamination remains, even for meatpacking plants like that in Lins, which is far away from the Amazon.

The Santa Lúcia Farm cannot be considered an isolated case. It actually shows a recurrent dynamic in Brazilian livestock. Another similar example involves the Rancho Alegre Farm, owned by Rayner Barbieri. The property, located in Auriflama (SP), also supplied the Lins slaughter plant in 2021.

In the previous year, they purchased animals for fattening from another property in Altamira – the Nossa Senhora Aparecida III Farm, owned by

Edilson Souto Rodrigues. This is another pasture area where, according to the SeloVerde platform, 65.4 hectares

were deforested after 2008, in addition to lacking mandatory Legal Reserve and Permanent Protection areas.



FROM THE PANTANAL TO EUROPE

The risk of contamination in livestock purchases via indirect suppliers is not restricted to the Amazon; it also affects other biomes impacted by environmental devastation. This is the case of the Pantanal, which in 2020 experienced its strongest fires in decades

– with pasture clearing as one of the main drivers of the outbreaks.

Some of the animals slaughtered by the JBS in its Campo Grande (MS) unit – one of the company's plants authorized to export unprocessed meat to the EU – come from Pantanal. One of its suppliers is rancher Osvaldo Firmino de Souza, owner of the Pica Pau Farm¹⁹ in Rio Negro (MS). The property has been a regular livestock supplier to JBS over the past two years.

In addition to Pica Pau, Firmino de Souza also owns another pasture area

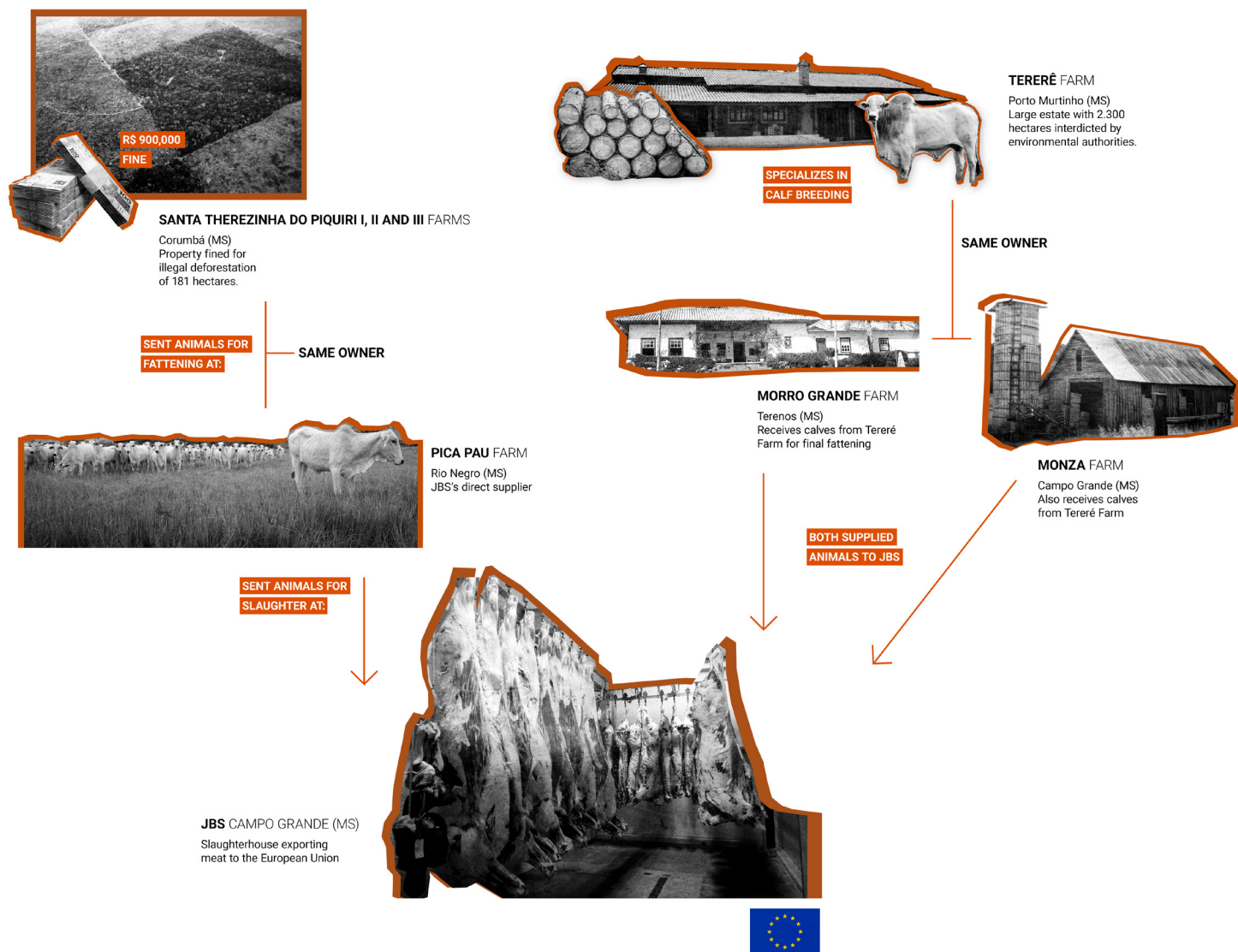
in Corumbá (MS): the Santa Therezinha do Piquiri Farm I, II and III, where Iba-ma found illegal deforestation of 181 hectares of Pantanal land in December 2018. Its owner was fined BRL 900,000/ USD 230,000²⁰ for the crime, which also placed the farm on the list of areas interdicted by the environmental agency.

Repórter Brasil found that, even after the crime and the interdiction, animals from the property continued to be sent for fattening at Pica Pau – JBS' direct supplier farm.

A similar situation involves another supplier of the same meatpacking plant in Campo Grande. Hélio de Lima is the owner of the Tereré Farm, a 40,000-hectare estate in Porto Murтинho (MS) where Ibama interdicted 2,300 hectares in 2014, which had been illegally deforested. The same crime had already been found there four years earlier.

The Tereré Farm specializes in breeding calves, which are later sent for rearing and fattening on other properties belonging to Hélio de Lima, from where the animals are sent for slaughter. They include the Monza Farm in Campo Grande (MS) and the Morro Grande Farm in Terenos (MS) – both JBS suppliers.

Companies selling unprocessed meat from JBS operations in Campo Grande, responsible for slaughtering cattle from the Monza, Morro Grande and Pica Pau farms, include retail corporation Lidl, one of the largest supermarket chains in Europe.





SISBOV: TRACEABILITY WITHOUT SOCIAL AND ENVIRONMENTAL CRITERIA

The Monza, Morro Grande and Pica Pau Farms are all qualified to export unprocessed meat to the European Union. They are part of the Brazilian System for Individual Identification of Bovine Cattle and Buffaloes (SISBOV) – a mandatory certification for ranchers who want to sell fresh beef²¹ to the EU.

Its origin dates back to the “mad cow” epidemic that affected Europe in the 1990s, causing hundreds of people to be ill, in addition to great damage to local cattle ranchers. To respond to the problem, the European Union decided to implement stricter traceability rules for its own livestock. They included individual identification of each ox, cow or calf born in its territory through ear tags, as well as the creation of a “passport” to identify all the places where the animals had been, from birth to death. The main objective is to quickly track outbreaks of diseases that could affect human health.

With the adoption of these new criteria, European countries started to

demand similar practices for beef imports. And it was precisely in this context that Sisbov was created in 2002. The objective was to match Brazilian norms for exports to internal EU rules previously implemented.

Sisbov currently covers a very select group of rural properties. There are approximately 1,500 farms approved in a universe of hundreds of thousands of pasture areas in Brazil. Traceability and health control rules are much less strict for the other cattle properties. There is no individual monitoring of livestock or any control of their complete life cycle.

As its name implies, Sisbov aims to guarantee individual traceability of all cattle whose fresh meat is sent to the EU. For this purpose, it employs several protocols for controlling and labelling animals. They include the use of ear-rings identifying each animal born on export-qualified properties – or even transferred to them from other farms.

According to the Normative Instruction that regulates Sisbov, rural establishments need to register animals coming from other properties on the System’s database and identify their original farms. This must take place within 30 days after the animals arrive.

This means that Sisbov can also be used, in theory, to monitor indirect suppliers, albeit partially – by extending traceability, if not to animals’ birth, at least to the farms that transfer cattle directly to properties authorized to export. In other words, one more link in the chain could be incorporated into the social and environmental criteria already announced by the main exporting companies regarding their direct suppliers.

But this does not happen in practice, as will be demonstrated throughout this report.

RIGHT OF REPLY

JBS told Repórter Brasil that “it does not condone or tolerate any type of disrespect for the environment, indigenous communities or Brazilian legislation.” And that, at the time of purchase, all of the aforementioned direct supplier properties complied with the company’s responsible sourcing protocols.

JBS also stated that it adopted an innovative strategy to face the challenge posed by indirect suppliers: the Transparent Livestock Platform.²² According to the company, it will advance in supply chain traceability by “identifying previous links and enabling its direct suppliers to assess their own

animal suppliers under the same socio-environmental criteria as the JBS Responsible Sourcing Policy.”

Repórter Brasil asked JBS if the company accesses information about certified farms’ indirect suppliers – since, as explained above, Sisbov keeps records on those indirect suppliers. JBS did not answer positively. It only said that Sisbov is exclusively aimed at sanitary control and that “JBS checks the executive report provided by the system for each of the batches coming from registered farms.” Also, according to the company, “a technological solution is in progress to integrate (Sisbov) with our supplier due diligence platform.”

Regarding the aforementioned cattle ranchers, Odair Afonso Rebelato and Rayner Barbieri did not respond to phone calls or emails. Carlos Antônio Nunes, Edilson Souto Rodrigues and Osvaldo Firmino de Souza could not be reached.

Hélio de Lima’s lawyer, in turn, stated that Ibama’s fine “is a result of a huge mistake,” since there no native forest has been deforested at the site, only degraded pasture was cleaned in an area that had been abandoned by previous owners.

See JBS’s and Hélio de Lima’s full statements at <https://reporterbrasil.org.br/2021/07/ranchers-and-beef-companies/>.



ENCROACHING ON INDIGENOUS LAND

Brazil's second largest meatpacking company also has units authorized to export unprocessed meat to the European Union. One of them is the slaughter plant in Tangará da Serra (MT), in a transitional zone between the Cerrado and the Amazon rainforest.

The Gera farm, in Campo Novo dos Parecis (MT), is an important supplier to this unit. It has regularly sent animals for slaughter over the past few years. This feedlot is authorized to export meat to Europe and belongs to MFG Agropecuária, owned by Marcos Molina – who is also Marfrig's founder,

controller and current chairman of the Board. Until it was sold to its current owner in 2016, MFG Agropecuária used to belong formally to the Marfrig group.

In 2016, the Onça Parda Farm, one of MFG Agropecuária's supplier properties, was fined by Ibama for encroaching on the Manoki Indigenous Land in Brasnorte (MT) and destroying 230 hectares of forest within its territory. The illegally deforested area, used for pasture formation, was interdicted by the federal agency. But even after that, Repórter Brasil identified supply of animals from the property to the Gera Farm – MFG Agropecuária's feedlot that supplies Marfrig in Tangará da Serra (MT).

The Pedra Farm is another property authorized to export to the European Union and a supplier to this unit. It supplied animals to the slaughterhouse in April 2021. The property had already been mentioned in another investigation conducted by Repórter Brasil and published last year²³. At the time, it emerged that the property had received animals for fattening from another pasture area – the Bianchin Farm – leased by the same owner. In all, it was fined BRL 29 million by Ibama for several environmental violations on that original farm. Problems include unauthorized deforestation and noncompliance with environmental interdictions.





FINED FOR
ENCROACHING ON
MANOKI INDEGENOUS
LAND



ONÇA PARDA FARM

Destroyed 230 hectares
of forest within an
indigenous area

SUPPLIED ANIMALS
FOR FATTENING AT:



GERA FARM

Campo Novo do Parecis (MT)
Enclosed area belonging
to MFG Agropecuária

SUPPLIED ANIMALS
FOR SLAUGHTER AT:

MARFRIG TANGARÁ DA SERRA (MT)

Export meat to the EU



DEFORESTATION IN THE CERRADO

Marfrig controls a slaughter plant in Mineiros, in the neighbouring state of Goiás. It is the same municipality where MFG Agropecuária has another feedlot authorized to export meat to the European Union.

The pastures with a history of supplying this specific feedlot include

the Matrinchã Farm, owned by Flávio Marchiό, and also located in Mineiros. In December 2020, Marchiό was fined BRL 240,000 by the state environmental department. The agency found that 233 hectares of native vegetation had been illegally deforested within the property from 2009 to 2017 – including 3.4 hectares in permanent preservation areas. As a result of that violation, the Cerrado area that was the target of illegal deforestation was interdicted by inspectors.

In addition to supplying MFG Agropecuária's feedlot, the farm also sells cattle directly to Marfrig's plant in Mineiros. Sales took place as late as in April 2021, that is, after the state interdicted a large part of the property. Meat slaughtered there can be found, for example, at German retail chain METRO'S stores.



SÃO SEBASTIÃO FARM
Jussara (GO)
Illegally deforested 560
hectares of Cerrado

SENT
ANIMALS TO:



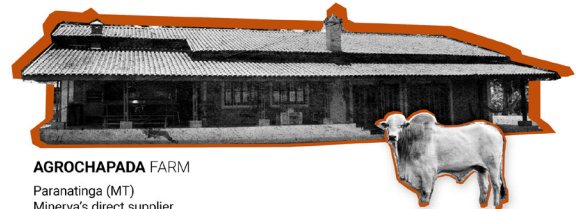
SANTA LUZIA FARM
Gaúcha do Norte (MT)
Has 111 hectares interdicted due
to illegal deforestation in
the Amazon forest

SENT
ANIMALS TO:



DONA ESTER FARM
Jussara (GO)
Received animals for rearing
from São Sebastião Farm

SENT
ANIMALS TO:



AGROCHAPADA FARM
Paranatinga (MT)
Minerva's direct supplier

SUPPLIED
ANIMALS TO:

MINERVA PALMEIRAS DE GOIÁS (GO)
Exports meat to the EU



RIGHT OF REPLY

Marfrig did not comment specifically on its direct purchases from the Matrinchã Farm. As for the Pedra Farm, the company claims to check its compliance with all its socio-environmental criteria, and that its supplier of cattle for fattening, the Bianchin Farm, “is not on Marfrig’s supplier list.”

As for MFG Agropecuária’s cattle purchases, Marfrig said it has no information about the original farms of the animals sent to its feedlots. It informed that “it has data on direct suppliers that subscribe to the company’s socio-environmental criteria and, in the case of MFG Agropecuária, they do not include its supply chain (indirect suppliers)”.

According to Marfrig, indirect suppliers are covered by the Marfrig Verde+ Plan, currently under development by the company. The plan will have the entire supply chain mapped from origin to slaughter by 2030. “Within the program, as we obtain this

identification of origin from indirect suppliers, the policy applied to Marfrig’s direct suppliers will be expanded to the whole chain as a precondition for being a supplier. This rule is now applied to MFG Agropecuária.”

MFG Agropecuária, in turn, stated that it has been monitoring its suppliers since 2019 by consulting public data on areas interdicted by Ibama, and through slave labour inspections carried out by the federal government.

“The last animals from Luiz Carlos Flores Medina’s Onça Parda Farm arrived in April 2018. In March 2019 we still negotiated with the producer, but the deal was not closed because there were environmental liabilities, which shows that our protocol is effective,” the company says. MFG Agropecuária also claims that its last purchase from the Matrinchã Farm took place in August 2019. “At the time, the property used to comply with our protocol,” they said.

About Sisbov, Marfrig claimed to have access only to information

related to its direct suppliers on the certifier’s database. “However, information regarding suppliers of these farms that supply directly to Marfrig is not accessible for full traceability,” the company adds.

See the Marfrig’s and the MFG Agropecuária’s full statements at <https://reporterbrasil.org.br/2021/07/ranchers-and-beef-companies/>.

On a phone interview in June 2021, Luiz Medina said that he no longer sells cattle from the Onça Parda Farm and that there are no activities in the place. He claimed to own four other cattle areas in Brasnorte. He said that the Onça Parda area has been idle since the fine, which is being challenged in court.

Gustavo Vigano Piccoli did not respond to our email questions. Flavio Marchió could not be reached.



MINERVA

AMAZON AND CERRADO

Brazil's third largest beef processing group also operates in Goiás state, where it has a slaughter plant in Palmeiras de Goiás. Properties approved by Sisbov that supply this specific unit include the Dona Esther Farm, in Jussara (GO). It supplied hundreds of animals to Minerva throughout the first half of 2021.

Also in 2021, the Dona Esther Farm received animals for rearing from another pasture area in this same municipality in Goiás's Cerrado:

the São Sebastião Farm. An inspection carried out by the state environmental department in 2015 found 560 hectares of native vegetation illegally deforested on the property. Its owner, Rui Jacinto da Silva, was fined BRL 560,000 for the practice.

Minerva's suppliers authorized to export to the European Union also included properties in Mato Grosso. An example is the Agrochapada Farm, a huge 90,000-hectare estate in Paranatinga (MT). In addition to livestock, it is also dedicated to planting grain. The farm supplied Minerva's meatpacking plant in Goiás in January 2021, months after a court cancelled an interdiction over part of it. The property, which

belongs to Agropecuária Chapada dos Guimarães S/A, had 693 hectares interdicted by Ibama in 2010 after the environmental agency found illegal fires at the site.

Repórter Brasil found that the Agrochapada Farm purchased animals for fattening from another farm with an environmental interdiction in effect at the time. It is the Santa Luzia Farm, whose owner is Marco Aurélio Machado. Since 2011, the property, located in Gaúcha do Norte (MT), has 111 hectares interdicted for illegal deforestation of Amazon Forest. It has supplied cattle to Agrochapada in 2019.



SÃO SEBASTIÃO FARM
Jussara (GO)
Illegally deforested 560
hectares of Cerrado

SENT
ANIMALS TO:



DONA ESTER FARM
Jussara (GO)
Received animals for rearing
from São Sebastião Farm

SENT
ANIMALS TO:



SANTA LUZIA FARM
Gaúcha do Norte (MT)
Has 111 hectares interdicted due
to illegal deforestation in
the Amazon forest

SENT
ANIMALS TO:



AGROCHAPADA FARM
Paranatinga (MT)
Minerva's direct supplier

SUPPLIED
ANIMALS TO:

MINERVA PALMEIRAS DE GOIÁS (GO)
Exports meat to the EU



RIGHT OF REPLY

About the Dona Esther Farm, Minerva states that it is qualified to trade according to the company's criteria. It is the case with the Agrochapada Farm, which, according to Minerva, has been recently cleared for trading, after a court decision cancelled the interdiction in its area. "The property remained blocked on the company's system until February 2020", Minerva said.

Regarding the farms that supply cattle to these direct suppliers, Miner-

va only informed that they are not on its supplier list.

"It is also important to stress that right now there are no accessible and reliable data and statistics on the complete cattle traceability chain to determine the number of indirect suppliers in Brazil," the company adds. Minerva informs that it has started tests with the Visipecc tool, which assesses risks related to a link in the chain, and which was developed by the University of Wisconsin in partnership with the National Wildlife Federation (NWF). According to the company, preliminary results indicated more than 99% of

compliance in level-1 indirect supplier farms with the criteria set by the Good Practices of the Working Group of Indirect Suppliers (GTFI).

See the company's full statement at <https://reporterbrasil.org.br/2021/07/ranchers-and-beef-companies/>.

Agropecuária Chapada dos Guimarães and rancher Marco Aurélio Machado did not respond to our email questions. José Nivaldo Guarnieri and Rui Jacinto de Souza could not be reached.



INTERNATIONAL RETAILERS

The slaughter and meat processing plants mentioned in this report are all important exporters. Through their operations, Brazilian meat reaches the shelves of international retail giants.

Repórter Brasil found examples of this reality during on-site surveys carried out in supermarkets in the United States and the European Union. Between March and May 2021, the organization mapped Brazilian meat from the slaughterhouses mentioned in this report being sold by 13 major global retailers. The survey, conducted in Belgium, the Netherlands, Germany, the UK, France and the US, included visits to 26 stores of these networks, in addition to complementary online surveys.

The results of the investigation show several examples of illegal deforestation linked to the aforementioned units of JBS, Marfrig and Minerva. In addition, they also address situations related to meat suppliers' encroaching on indigenous lands. These are problems that, in this context, are connected to the business network of retailers found sourcing products from these plants. They are: Albert Heijn, Auchan, Carrefour, Costco, Delhaize, Edeka, Lidl, METRO, Netto, Plus, REWE, Sainsbury's and Stop&Shop

PRIME CUTS

Among the retailers visited, Lidl and METRO stood out in the fresh meat segment. During the research, Brazilian prime cuts were found in European stores of both chains.

In the case of Lidl, they were sold as "premium meat" products (Premium Vlees). In the Netherlands, Lidl offers its customers its private label rib fillet and entrecôte from the following slaughter plants:

- JBS in Campo Grande (MS)
- Minerva in Palmeiras de Goiás (GO).
- Marfrig in Tangará da Serra (MT).

Lidl operates in 31 European nations, in addition to the United States. It has more than 11,000 stores all over these countries. The Schwarz group, owner of the chain and other supermarket brands, is appointed in several rankings as the largest retail corporation in the European Union. Its annual turnover in 2020 was 113 billion euros.

The Schwartz group told Repórter Brasil that more than 90% of the beef sold by Lidl comes from Europe. They also said that the chain is committed to keeping supply chains free from deforestation: "We understand the importance of healthy forests and natural ecosystems, for people, the planet, and business. In this context we commit to achieve zero deforestation and no conversion [of native forests] by 2025"

At METRO, filet mignon from the following slaughterhouses were found in Germany:

- Marfrig in Tangará da Serra (MT)
- Marfrig in Mineiros (GO)

The retailer, also based in Germany, operates in 26 countries through its supermarket brands METRO and MAKRO. In addition to being present in most European countries, the group also controls supermarkets in Asia. In 2020, its turnover was 26 billion euros.

Like Lidl, METRO says that most of its beef products come from regional sources, especially in Europe. Even so, it claims to integrate several initiatives – like the Consumer Goods Forum (CGF) Forest Positive Coalition – to combat deforestation associated with the industry.

The company also emphasizes that it is part of the Cerrado Manifesto signatory group, which calls on the Brazilian government for better measures to protect forests and indigenous peoples. "We are setting up a road map and are in discussions with big meat packers and traders to work towards supply chains that are free of deforestation and human rights violations," says the company.

Lidl is also among the signatories of the Cerrado Manifesto – its subsidiaries Lidl UK GmbH and Lidl Nederland sign the initiative.



JBS
CAMPO GRANDE (MS)

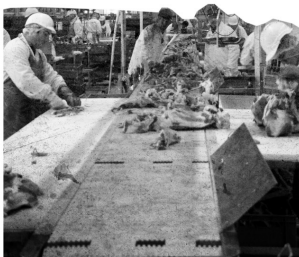


MARFRIG
TANGARÁ DA
SERRA (MT)

MINERVA
PALMEIRAS
DE GOIÁS (GO)



MARFRIG
TANGARÁ DA SERRA (MT)



MARFRIG
MINEIROS (GO)



CORNE BEEF

In the survey carried out during the first half of 2021, Repórter Brasil also found Brazilian corned beef sold at large global supermarkets. The products offered to consumers in those countries include items manufactured by JBS in Lins (SP) – another slaughter plant mentioned in the case studies in this report.

The product was found in the following retailers and countries:

- Albert Heijn (Netherlands)
- Plus (Netherlands)
- Stop&Shop (United States)
- Sainsbury's (United Kingdom)

All these companies received emails detailing the problems found by Repórter Brasil in the cattle supply chain of this specific JBS unit. Only Plus did not comment – it is a Netherlands-based supermarket cooperative that operates 270 stores in that country.

Albert Heijn and Stop&Shop are retail chains belonging to Belgian-Dutch group Ahold Delhaize, which has op-

rations in eight European countries, in addition to the United States and Indonesia. Both responded separately.

“Albert Heijn takes responsibility for private label²⁴ products. However, the product you are referring to, corned beef, is not a private label product,” the company says. They emphasize, however, that they also expect independent brand suppliers to adopt good practices.

Albert Heijn is the largest supermarket chain in the Netherlands. It is also present in Belgium, and it con-

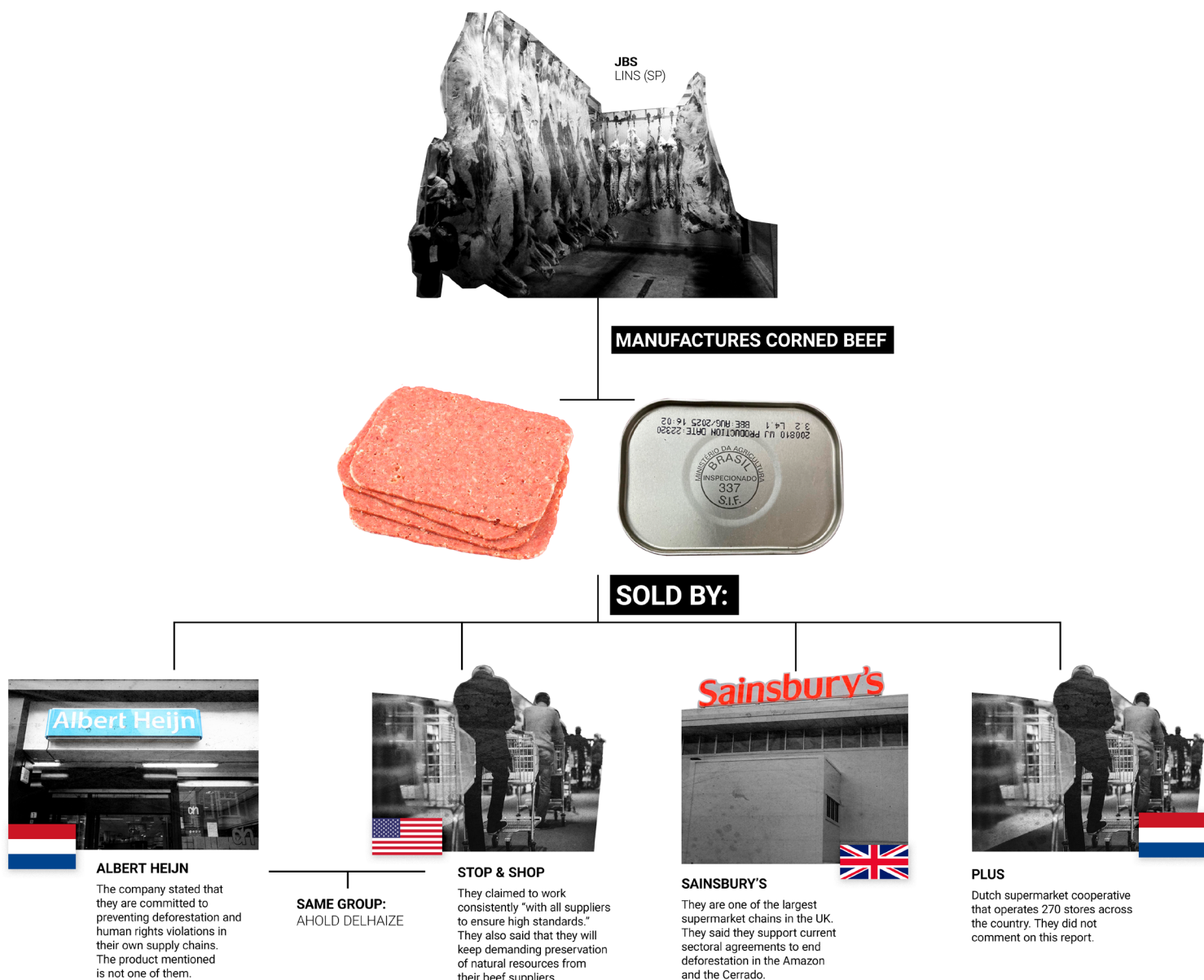
trols more than a thousand stores in both countries.

Stop&Shop, in turn, operates approximately 400 supermarket stores on the west coast of the United States. The company claimed to “consistently work with all of our suppliers to ensu-

re high standards.” They also said that they would continue to demand conservation and protection of natural resources from their beef suppliers.

Sainsbury’s, one of the UK’s major supermarket chains, said it supports today’s sectoral agreements to end

deforestation in the Amazon and Cerrado: “If we identify suppliers which are either unwilling to recognize issues with their production or work together to remedy them, we will review our commercial relationship with them and sever ties if necessary.”





BEEF JERKY

Beef jerky manufactured by JBS in Lins (SP) and Santo Antônio da Posse (SP) can be found on the shelves of several European retailers. In addition, it is also sold at US supermarkets.

The product is made by processing meat from the group's several slaughter plants in Brazil. "The (...) Santo Antônio de Posse (SP) plant is able to receive meat for processing from any JBS unit, always complying with the Company's Responsible Procurement Policy for Raw Materials and market qualifications of each plant, as well as specific customer demands regarding the product," JBS confirmed in a note to Repórter Brasil.

During the first half of 2021, Repórter Brasil found beef jerky produced by the JBS group being sold at the retailers/countries listed below. In most cases, they were Jack Links products

manufactured in Santo Antônio da Posse. The exception was US-based chain Costco, found selling items under the brand Sampco – a JBS company – produced in Lins.

- Carrefour (Belgium)
- Delhaize (Belgium)
- Edeka (Germany)
- REWE (Germany)
- METRO (Germany)
- Netto (Germany)
- Lidl (Netherlands)
- Auchan (France)
- Costco (United States)

Repórter Brasil asked all companies for clarification about their Brazilian beef origination policies, given the problems found in JBS's slaughterhouse supply chain. Delhaize, Edeka, Netto and Auchan did not respond. Costco said it would not comment. METRO's and Lidl's stances, in turn, have already been detailed.

French group Carrefour claims to use a geo-monitoring tool that checks if its purchases do not come from farms in deforested areas, environmental conservation units, indigenous lands, areas interdicted for environmental crimes or in which slave labour has been found. "Regular meetings are taking place to engage suppliers in efforts to have Zero Deforestation and an internal governance has been set in place to follow the implementation of this policy," the company says. According to the group, such policies, originally developed by Carrefour's subsidiary company in Brazil, should also be applied in other regions where they operate.

German group REWE, on the other hand, claimed that it has been committed for years to protecting the rainforest and defending human rights in the Amazon. They also said that they have signed letters and manifestos in defence of the region and also of the Cerra-

do – another Brazilian biome affected by high deforestation rates. “The REWE Group does not carry private label fresh

meat from Brazil in its product ranges,” the group also pointed out.

See the full statements of all retailers that responded to Repórter Brasil

throughout the production of this report at <https://reporterbrasil.org.br/2021/07/international-retailers/>



JBS
LINS (SP) / SANTO ANTÔNIO DA POSSE (SP)

FABRICA BEEF JERKY



VENDIDO POR:



CARREFOUR



 DELHAIZE



 EDEKA



 REWE



 METRO



 NETTO



LIDL



 AUCHAN



 COSTCO

DEVASTATION ON PEOPLES' PLATES

The cases listed in this publication confirm, once again, that meat exporters continue to source from suppliers associated with illegal deforestation. The problem affects cattle not only from the Amazon but also from other Brazilian biomes – such as Cerrado and Pantanal – that are under intense pressure from pasture expansion. The United States and European countries are not immune to this supply chain. Like other importing regions, they are part of the trade route for products linked to environmental devastation.

For consumers in these countries, contamination of their meals cannot be ruled out. Not even when the meat purchased comes from industrial plants hundreds or even thousands of kilometres away from the main areas affected by deforestation of native forests – as is the case with many Brazilian meat exports to the European Union and North America.

There are two major bottlenecks here. The first one concerns purchases of processed products such as corned

beef and beef jerky. They are usually produced in industries close to Brazil's largest urban centres. However, such establishments use raw material from different slaughter plants throughout the country. Therefore, they can connect cattle slaughtered in distant biomes with meat shipped abroad.

Another bottleneck is that of indirect suppliers. Even ranchers located in consolidated agricultural frontiers, which usually send animals for slaughter in nearby plants, may – and often do – source cattle from very distant farms. In other words, slaughtering animals from properties in the South, Southeast and Centre-West regions does not rule out the possibility that they were born – or grazed at some point in their lives – in areas of illegal deforestation in the Amazon, Cerrado or Pantanal.

Brazilian livestock do not have effective traceability systems to enable comprehensive mapping of all the establishments through which they transit. The three largest Brazilian meatpacking companies – JBS, Marfrig and

Minerva –, which are also the main beef suppliers to the US and the EU, suffer from that problem.

Last year, under pressure from investors and civil society in the face of increasing deforestation in Brazil, they all announced their intention to develop studies, tools and methodologies to improve traceability. However, targets are set for the very long term. JBS and Marfrig pledged to have full supplier traceability by 2025 and 2030, respectively. Minerva, in turn, did not present a deadline to meet the same target.

Furthermore, there are no details on how this new round of commitments will be implemented – including, for example, relevant aspects of tracking methods adopted, mechanisms to curb document fraud, and how the supposed results may be monitored by third parties. Finally, similar promises have been made in the past with no actual improvement in traceability.



SISBOV: TRACEABILITY WITHOUT SOCIO-ENVIRONMENTAL USE

It is important to stress that Brazil already has a market segment that guarantees indirect supplier traceability: fresh meat exported to the European Union. For this specific sector, Sisbov rules are mandatory and provide for individual identification of animals through earrings and other technologies.

Farms willing to export to the European bloc must be on Sisbov. Therefore, the origin of the animals sourced from other properties must be registered on a database managed by the federal government.

Sisbov has existed for almost 20 years. It was created to carry out sanitary monitoring of livestock. Basically, it aims to guarantee food free from diseases that may affect human health. However, it also collects and manages information that, in theory, would enable applying to their indirect suppliers the socio-environmental commitments already assumed by the three large meatpackers regarding their direct supplier farms.

But this does not happen in practice, as described in the case studies in this report. Meatpacking companies claim that they do not have access to information about indirect suppliers registered on the Sisbov database, which is maintained and managed by the Ministry of Agriculture, Livestock and Supply (Mapa). There is also no evidence of mobilization in the sector to change this situation and ensure enforcement of social and environmental sourcing criteria for all links in the supply chain registered in that traceability system.

SAME OWNER, DIFFERENT CRITERIA

In addition to Sisbov, there are other possibilities for tracking indirect suppliers, which are not properly explored for socio-environmental purposes. One example involves Marfrig itself and feedlot company MFG Agropecuária. Both companies belong to the same owner. Even so, as confirmed by Marfrig to Repórter Brasil, not even in this case does Marfrig can access information about its indirect suppliers – that is, the farms that send cattle for final fattening in the feedlots of its sister company.

Worse still, MFG Agropecuária's umbilical relationship with Marfrig did not prevent the former from adopting socio-environmental practices that are different from those announced by the latter. An example revealed in this report was the purchase, in 2018, of animals from a farm fined for encroaching on Indigenous Land. MFG Agropecuária claims that this situation would have changed in 2019, when it incorporated responsible sourcing protocols similar to Marfrig's.

Finally, the case of the Matrinchã Farm is worth mentioning. In 2021, Marfrig purchased animals from a farm with an area interdicted for illegal deforestation. It is therefore a problem related to a direct supplier. The case shows that monitoring policies for these suppliers still have gaps when it comes to certain biomes, such as the Cerrado, or even for incorporating state interdictions when blocking suppliers – in addition to the federal interdictions already commonly incorporated.

GTAS: LACK OF TRANSPARENCY

One of the main bottlenecks in tracking cattle is the lack of transparency in the Animal Transit Guides (GTAs). Issued by state agricultural defence agencies to carry out sanitary control, these documents basically inform the origin and destination of any batch of cattle – between rural properties or between farms and meatpacking plants. They are mandatory for all cattle transit in the country. Thus, it is the database with the largest coverage – and, therefore, the highest potential – for properly tracking indirect suppliers.

However, information from GTAs is not available for consultation in an aggregated form by the various supply chain actors. That situation occurs despite recommendations already made by the Federal Prosecution Service (MPF) to several state governments, demanding that these documents be disclosed on easily accessible channels. The opening of these data, however, faces strong opposition by agricultural lobbies.

Cattle rancher associations claim that the use of GTAs for social and environmental purposes can expose confidential property data and tends to generate document fraud – false declarations of origin – in a supposedly reliable system, thus compromising health monitoring of livestock²⁵. But the truth is that fraudulent GTAs are often used to cover up irregular cattle transport even today. The problem is linked not only to the responsible sourcing criteria adopted by meatpackers but also to clandestine transportation to evade taxes²⁶ or even to cover up the transit of stolen animals.²⁷

Even with all their potential for improving livestock traceability, transparency of GTAs alone would not solve all the bottlenecks in the sector,

since tampering with the information entered in these forms is very easy. A common example is the farms that issue many GTAs related to the entry and exit of animals without having enough pastures areas for the number of cattle informed. Cases associated with cattle laundering are typical.

RETAIL RESPONSIBILITIES

Given this scenario, large international retailers need to strengthen their engagement with the sector if they are to ensure compliance with sustainability and zero deforestation promises in their businesses. There are still no clear solutions in sight for the environmental crisis in Brazilian livestock.

More effective action by the industry is also supported by international legislation that demand measures to prevent and mitigate environmental and human rights violations among suppliers. A practical consequence of this situation occurred in March 2021, when a coalition of civil society organizations based in Brazil and France filed a criminal lawsuit against retail group Casino, accused of selling meat linked to illegal deforestation and encroaching on indigenous areas in the Amazon. Casino controls supermarkets in Europe, Latin America, Africa and the Middle East. It is also one of the largest retail groups operating in Brazil.

The plaintiffs demand that Casino guarantee meat traceability from its origin. The organizations also emphasize that this must be done through a

monitoring tool independently that can be verified by third parties, and where the origin of the meat can be publicly traced. This tool should also include adequate means to combat “cattle laundering” practices.²⁸

International retailers are also required to demand transparency from Brazilian authorities, so that they guarantee that society has unrestricted access to data already available to track the life cycle of livestock. And that their purchase contracts with all meatpackers operating in the Legal Amazon be suspended – at least until there are minimum conditions to carry out basic due diligence in their operations.²⁹



RECOMMENDATIONS

Cattle ranching is the single largest driver of deforestation globally but has an especially outsized role in deforestation and conversion in the Brazilian Amazon and Cerrado biomes. To date, sustainability efforts by the largest meatpackers in Brazil has been limited, with slow progress, insufficient monitoring, and a resistance to expanding efforts to their full supply chains.

Meanwhile, Brazil has seen alarming rates of deforestation in recent years: Amazon rainforest loss between August 2020 and July 2021 was the highest in a decade³⁰. Forest destruction in the Cerrado in the first eight months of 2021 is 25% higher than in 2020.³¹ Today, deforestation is the main source of greenhouse gas emissions in Brazil³². The traceability challenges of the cattle sector have contributed to the lack of progress in halting deforestation and land conversion, and precluded assurances to end-users of cattle products

that their supply chains are clean from environmental and social harms.

However, meatpackers have faced insufficient market pressure to invest in traceability, and more broadly to commit to sustainability action, especially outside of the Amazon.

In response to the critical need for private sector action on sustainable cattle, an opportunity exists to clarify the priority asks from civil society for the meatpackers and the downstream buyers of cattle products. Meatpackers serve as a concentration point by which to influence production of cattle and decouple ranching from land conversion and human rights violations.

Additionally, retailers and consumer goods manufacturers have a critical role to play in exerting market pressure on the meatpackers, as consumers increasingly demand sustainable and ethical meat. Recent research from YouGov and Mighty Earth shows that in the UK, 87% of customers sur-

veyed indicated that they would not like their supermarket to do business with companies that are driving destruction of the Amazon – and 56% of UK shoppers would buy deforestation-free products, if offered³³. These trends are replicated in other European countries, including France³⁴, Germany³⁵ and the Netherlands³⁶.

ASKS FOR DEFORESTATION AND CONVERSION FREE (DCF) SUPPLY CHAINS

The investigation presented in this report was produced by Repórter Brasil in partnership with the global advocacy organization Mighty Earth.

Bellow we present Mighty Earth's asks for the sector.

Asks of Brazilian Meatpackers

(Mighty Earth)

In summary:

1. Establish a public commitment to deforestation and conversion free production. This commitment should go beyond legal compliance to cover all conversion in all sourcing areas.
2. Include a cut-off date in sourcing guidelines: for the Amazon of 2009 for direct suppliers, 2019 for indirect suppliers, and 2020 for all other sourcing areas (consistent with European Commission proposed guidelines of a 31st December 2020 cut-off date).
3. Establish a supply chain management system to actively screen all potential transactions with direct supplying ranches (prior to purchase) to ensure compliance with criteria on Prodes deforestation, IBAMA embargoes, slave labor list, encroachments on indigenous lands and conversation units

4. Improve traceability: Achieve effective traceability in the supply chains by adopting credible tools to link direct and indirect supplying ranches (for example, Visipec)
5. Commit to regular reporting on the outcomes of monitoring and verification, at least bi-annually. Reporting should cover incidents of non-compliance in the supply chain and measures taken, alongside progress in tackling deforestation. Any reporting verifies results via independent audits following harmonized auditing protocol outlined in Boi na Linha.
6. Empreender advocacy, apoiar a entrega e monitoramento eficazes dos compromissos de desmatamento, incluindo o apoio à rastreabilidade e acessibilidade dos dados do GTA e do CAR, a interoperabilidade dos sistemas de informação existentes e a inclusão de fornecedores indiretos no TAC.
7. Shift investment towards a business model aligned with the Paris Agreement goal to limit global temperatures to 1.5 degrees Celsius. This includes measuring the impact of livestock in emissions production, and increasing investment in regenerative agriculture and farming, and in the production of alternative proteins.

NOTES

- 1** IBGE, Municipal Livestock Survey: <https://sidra.ibge.gov.br/tabela/3939>
- 2** IBGE, Municipal Livestock Survey: http://www.inpe.br/cra/projetos_pesquisas/terraclass2014.php
- 3** JBS, 2020 Sustainability Report: : <https://ri.jbs.com.br/informacoes-financeiras/relatorios-anuais/>
- 4** Greenpeace, Annual Report 2009: https://www.greenpeace.org/static/planet4-brasil-stateles-s/2018/10/86a491a4-relatorio_anual_greenpeace_2009.pdf
- 5** Conduct Adjustment Agreement (TAC): : https://www.beefontrack.org/public/media/arquivos/1597413358-tac_mt_-_jbs.pdf
- 6** Geopolitical classification adopted by the Brazilian State that encompasses the nine states covered by the Amazon basin.
- 7** Mighty Earth, Fact Check: JBS Exaggerates Deforestation Commitment: <https://www.mightyearth.org/2020/10/05/fact-check-jbs-exaggerates-deforestation-commitment/>
- 8** USDA, “Livestock and Poultry: World Markets and Trade”: <https://www.fas.usda.gov/data/livestock-and-poultry-world-markets-and-trade>
- 9** Excluding the United Kingdom (UK)
- 10** ABIEC, “Beef Report 2021”: <http://abiec.com.br/publicacoes/beef-report-2021/>
- 11** Comex Stat: <http://comexstat.mdic.gov.br/pt/home>
- 12** Ibid.
- 13** Ibid.
- 14** Trase: <https://trase.earth/>
- 15** Independent, “Major UK supermarkets ‘buy corned beef from meat firm linked to illegal razing of Amazon rainforests’”: <https://www.independent.co.uk/climate-change/news/asda-lidl-waitrose-amazon-rainforest-destruction-beef-brazil-environment-a8918981.html+&cd=2&hl=pt-BR&ct=clnk&gl=br>
- 16** Semas, Selo Verde Pará: <https://www.semas.pa.gov.br/seloverde/>
- 17** The Brazilian Institute of Environment and Renewable Natural Resources (Ibama) is the main federal agency responsible for environmental inspection
- 18** Conversion rate at the time of the fine

- 19** <https://www.youtube.com/watch?v=c2xXmtUo1PY>
- 20** Conversion rate at the time of the fine
- 21** Sisbov certification is not required to sell processed meat
- 22** <https://www.pecuariatransparente.org.br>
- 23** Repórter Brasil, “Amazônia: como criadores de gado driblam acordo com MPF e incentivam desmatamento”: <https://reporterbrasil.org.br/2020/06/amazonia-como-criadores-de-gado-driblam-acordo-com-mpf-e-incentivam-desmatamento/>
- 24** i.e. own-brand products
- 25** Broadcast Agro, “Criadores Questionam Ferramenta Proposta Por Frigoríficos Para Rastrear Fornecedor Indireto De Gado”: <http://broadcast.com.br/cadernos/agro/?id=WHk2bFJ3OHBxQjQvdkNMcFlhN2hMZz09>
- 26** Governo Estadual do Acre, “Polícia Civil deflagra Operação Fake Bois e desmantela esquema de emissão de guias de transporte animal”: <https://agencia.ac.gov.br/policia-civil-deflagra-operacao-fake-bois-e-desmantela-esquema-de-emissao-de-guias-de-transporte-animal/>
- 27** G1, “Polícia prende sete suspeitos de envolvimento em roubo de gado e uso de documentos falsos no Acre”: <https://g1.globo.com/ac/acre/noticia/2021/04/06/policia-prende-sete-suspeitos-de-envolvimento-em-roubo-de-gado-e-uso-de-documentos-falsos-no-acre.ghml>
- 28** Formal notice - Article L. 225-102-4.-I and II of the Commercial Code: https://www.mightyearth.org/wp-content/uploads/Formal-notification_Casino-Seattle.pdf
- 29** Global Witness, “Beef, Banks and the Brazilian Amazon”: https://www.globalwitness.org/documents/20061/Beef_Banks_and_the_Brazilian_Amazon_EN_-_December_2020_medium_res.pdf
- 30** The Guardian, “Deforestation in Brazilian Amazon hits highest annual level in a decade”: <https://www.theguardian.com/environment/2021/aug/20/brazil-amazon-deforestation-report-bolsonaro-climate>
- 31** WWF, “Dia do Cerrado: Desmatamento acumulado em 2021 aumentou 25% em relação a 2020”: <https://www.wwf.org.br/?79829/Dia-do-Cerrado-Desmatamento-acumulado-em-2021-aumentou-25-em-relacao-a-2020>
- 32** Reuters, “Brazil's greenhouse gas emissions rose 9.5% in 2020 with Amazon deforestation -study”: <https://www.reuters.com/world/americas/brazils-greenhouse-gas-emissions-rose-95-2020-with-amazon-deforestation-study-2021-10-28/>
- 33** Mighty Earth, “Poll: 88% of Tesco Customers Believe Supermarkets Shouldn't Do Business with Deforesters”: <https://www.mightyearth.org/uk-poll>
- 34** Mighty Earth, “Sondage : Neuf clients de Carrefour sur dix conviennent que les supermarchés ne devraient pas faire affaire avec les déforesteurs”: <https://www.mightyearth.org/sondage-francais>

35 Mighty Earth, “Umfrage: 89% der EDEKA-Kunden sind der Meinung, dass Supermärkte keine Geschäfte mit Abholzern machen sollten”: <https://www.mightyearth.org/deutsche-umfrage>

36 Mighty Earth, “Peiling: 85% Albert Heijn-klanten Vindt dat Supermarkten Geen Zaken Moeten Doen met Aanjagers Ontbossing”: <https://www.mightyearth.org/nederlandse-peiling>