BEEF, BANKS AND THE BRAZILIAN AMAZON

How Brazilian beef companies and their international financiers greenwash their links to Amazon deforestation

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Tapajós river basin, next to Sawré Muybu indigenous land, is home to the Munduruku people, Pará state, Brazil. The Brazilian government plans to build 43 dams in the region. The largest planned dam, São Luiz do Tapajós, will impact the life of indigenous peoples and riverside communities. Dams like these threaten the fragile biome of the Amazon, where rivers are fundamental to regeneration and distribution of plant species and the survival of local flora. Renewable energy, such as solar and wind, holds the key to Brazil’s energy future. © Rogério Assis / Greenpeace
# BEEF, BANKS AND THE BRAZILIAN AMAZON

How Brazilian beef companies and their international financiers greenwash their links to Amazon deforestation

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In just one Amazon state over three years, beef giants JBS, Marfrig and Minerva bought cattle from a combined 379 ranches containing 20,000 football fields worth of illegal deforestation, a Global Witness investigation reveals.

The companies failed to monitor other ranches with an estimated total of 140,000 football fields worth of deforestation, to check if they complied with their no-deforestation pledges.

Flawed assessments by international auditors DNV-GL and Grant Thornton claimed compliance with the companies’ pledges, but Global Witness can disclose serious doubts about their findings.

World-famous financial institutions such as Deutsche Bank, Santander, Barclays, BNP Paribas, ING and HSBC continue bankrolling the firms despite many warnings of their failures.

Described as the most primitive mammal on Earth and unchanged in millions of years, the Amazon tapir is known as the ‘gardener of the forest’. It eats vegetation and deposits seeds miles away, enabling trees to spread. As the trees grow they connect to an underground network of roots, fungi and bacteria, a wood-wide-web developed over almost half a billion years to exchange nutrients and antibiotic protection and store carbon in the trees’ trunks and the soil. The trees branches provide homes to a myriad of species, while their leaves release vapour that forms huge rivers of water in the air, creating clouds that drop rainfall thousands of miles away. Some scientists estimate the geological history of the Amazon is 25 million years old. Yet now this immensely complex and ancient ecosystem is threatened by an animal vastly more populous than the tapir: the common cow.
Stopping the conversion of rainforests into pasture for beef production could reduce Brazil’s agricultural carbon emissions by 69%, help slow the sixth mass extinction of species and maintain a crucial carbon sink, vital for cooling our climate. But as a new Global Witness investigation now shows, a chain of actors from cattle ranchers through to multinational beef traders, their US and European auditors, international financiers and the governments that regulate them, are either destroying the Amazon, not doing enough, or looking the other way. Worse, some of this devastation also involved human rights abuses against indigenous and landless peoples. Unless these issues are confronted, the world’s biggest rainforest could face an irreversible tipping point that might destroy its ecology and the communities that live in and rely on it.

Brazil’s three largest beef companies are JBS, Marfrig and Minerva. In the 1990s they were relatively small businesses but emerged as global giants in the late 2000s with the support of extensive handouts from the Brazilian government. In 2017, executives of Marfrig and JBS became embroiled in the sprawling Car Wash affair, one of the biggest corruption scandals of all time. A JBS executive admitted to bribing 1,829 politicians to the tune of over $100 million. Meanwhile, Marfrig owner Marcos Molina paid $19 million in compensation after a staff member from his company was accused of bribery. A Minerva slaughterhouse was investigated in 2017 for allegedly bribing Ministry of Agriculture inspectors – the company says there was no complaint made against its staff and it collaborated fully with investigations. Yet seemingly, none of this dented their business.

Combined, in 2017 alone, they slaughtered more than 18 million cattle. They account for more than 40% of the slaughter capacity in the Amazon and 64% of total Brazilian beef exports, reaching markets in the EU, US and China. And this is a cash-cow business. The companies’ combined gross profit for 2018 amounted to over $8 billion. Rather than rearing their own cattle, they source cows from thousands of independent ranches. It can now be revealed some of this network is deeply implicated in tropical deforestation.

Swathes of deforestation

Global Witness investigated the three companies’ operations in Pará, the second-largest Amazon state - greater in size than France, Spain and Portugal combined. Between 2017 and 2019, JBS bought cattle from at least 327 ranches in which deforestation occurred, Marfrig from 89 and Minerva from 16. Brazilian government satellite data shows a forested area of over 20,000 football fields was cleared in these ranches, all of it illegal. This breached the companies’ legal obligations to not purchase from such ranches, where these did not have the relevant permits that authorised the deforestation.

Worse, the companies’ direct suppliers bought cattle from other ranches, so-called ‘indirect suppliers’. Of these, at least 4,000 contained almost 140,000 football fields worth of deforestation, satellite data shows. According to their legal obligations, the beef companies should have monitored them for deforestation and blocked them if their cattle ended up in their slaughterhouses, but failed to.

Top: The location of the combined 379 ranches in the state of Pará that JBS, Marfrig and Minerva purchased from between 2017 and 2019 and which contained illegal deforestation. Bottom: The location of the “indirect suppliers” linked to the beef companies’ supply chains between 2016 and 2019.
Six case studies in this report illustrate how JBS, Marfrig and Minerva bought cattle in multiple years from ranches with illegal deforestation. Some were accused by state agencies of environmental crime, land grabbing, illegal use of indigenous land and even violence. The beef companies denied all of the allegations.

Global Witness’s investigation also casts doubt on the veracity of audits done by mammoth Norwegian auditor DNV-GL and its American rival Grant Thornton, which variously claimed JBS, Marfrig and Minerva were compliant with their commitments. Yet they failed to spot a vast number of cases of sourcing from deforested areas. The auditors deflected blame by claiming they are bound by methodologies given to them to carry out the audits.

Meanwhile, iconic banks with no-deforestation commitments continue backing these beef companies - despite multiple warnings of their failures. JBS, Marfrig and Minerva received over $9 billion in investments and loans between 2017 and 2019, which was either facilitated or provided by 250 financial institutions, Global Witness research has previously found – 41% of this from banks and investors with headquarters in the US and the EU. Household names like Deutsche Bank, Barclays, Santander, HSBC and Morgan Stanley all rode the wave of the beef companies’ global rise. And in March 2020 alone, 30 importers from China and Hong Kong, 11 from the EU and one from the US bought beef products from the companies. Walmart, Carrefour and Burger King are recent customers. The continued connection of these companies to deforestation highlights their failure to do adequate due diligence and is especially egregious given the record of the beef giants and the well-known deforestation risks linked to Brazilian beef exports. Far away consumers and bank account holders are thus exposed to these Amazon tragedies.

Worse, an absence of laws in Europe and the US means banks, investors, credit rating agencies, importers and supermarkets are not legally required to carry out any due diligence on deforestation before servicing or doing business with the beef companies.

The exposé you are about to read shows how relying on an unregulated private sector with voluntary no-deforestation policies has failed to tackle forest destruction and could contribute to the permanent loss of the Amazon rainforest. There is an alternative. The UK and EU member states are currently considering new laws
to end their complicity in deforestation by requiring their companies, including financiers, to remove deforestation from their supply chains and portfolios. This is also sending a clear market signal to beef companies, and their financiers, that expectations are changing, developments which governments like China and the US will also be watching with interest. The Amazon, and the people and species that rely on it, deserve this alternative.

Destroying the Amazon

It is estimated 70% of cleared lands in the Brazilian Amazon are now populated by cattle, leading Brazil to have the second largest herd in the world. There are more cows in Brazil than people, 40% of them in the Amazon, all bred, bought and sold by some 390,000 ranches. Beef production in Brazil alone is reported to be the leading driver of deforestation emissions across Latin America. Between 2002 and 2018, the World Resources Institute calculates more than 20 million hectares of primary tropical forest were lost in the Brazilian Amazon. This destruction is equivalent to a forest almost the size of the UK, millions of years old, being cleared in just 16 years. Last year, marked by Amazon fires that disturbed global audiences, saw Brazil’s largest area of deforestation since 2008 - with 2020 shaping up to be worse. The Bolsonaro government has cut funding for forest conservation and environmental law enforcement and is rolling back the recognition of indigenous lands, undermining efforts to preserve the forests.

In 2009, Greenpeace Brasil revealed how Brazilian beef companies frequently bought cattle from ranches linked to deforestation. As a result, JBS, Marfrig and Minerva pledged not to purchase cattle from ranches that contained any deforestation that occurred after October 2009, that were embargoed by Brazil’s environmental inspection agency Ibama, or that overlapped with protected or indigenous community lands. They also promised not to buy from ranchers accused by prosecutors of land-grabbing operations. The agreements aimed to force the trio to use their commercial muscle to stop any suppliers from clearing forests.

The same year, beef companies began signing parallel agreements with Federal prosecutors in the Amazon state of Pará, expanding to other states like Mato Grosso and Acre, in exchange for escaping prosecution over their lawbreaking. These agreements required JBS, Marfrig and Minerva not to buy cattle from ranches that contained any illegal deforestation after July 22nd 2008. Thus for more than a decade, these three beef traders have two similar sets of deforestation commitments in place, one voluntary and the other legally binding. This arrangement provided JBS, Marfrig and Minerva with a perfect riposte to importers or financiers.

But how to verify if the companies comply with their commitments? Step forward the auditors, typically international accountancy or compliance firms. These corporate giants would provide a Western stamp of approval that the three were not buying tainted cattle.

Global Witness now lifts the lid on the reality of the giant companies’ supply chains – and the flawed auditing giving it a clean bill of health, none of which the beef companies’ financiers sufficiently scrutinised or questioned.
JBS: BREACHING ITS COMMITMENTS

JBS is thought to be the biggest beef company in the world, accounting for 30% of all the cattle slaughtered in Brazil in 2017 and sourcing its herd from thousands of Amazon ranches each year. Its reported gross profits for 2019 amounted to over $5.6 billion, and it has over 200,000 employees worldwide. It plays an important role in ensuring ranchers conserve their forests. At first, the company’s commitments seemed to be working, with Amazon deforestation reaching an eight-year low in 2012, which coincided with various government initiatives to tackle the problem. When the agreements were signed, 36% of JBS’s suppliers had recent deforestation - but this fell to 4% by 2013. By 2014, JBS reported it had blocked 2,259 ranches from its list of suppliers. Audits by the UK accountants BDO found that between 2011 and 2015, an average of just 0.27% of its cattle purchases violated the Greenpeace agreement. When Norwegian auditor DNV-GL took over the auditing contract, it found only four of 26,306 analysed cattle purchases were non-compliant between 2016 and 2018. In its 2018 Annual Sustainability Report, JBS proclaimed: “The company obtained the best result since auditing began in 2014, with 99.99% of purchases in compliance.” Even better, in its 2019 Sustainability Report it claimed it was “100% compliant” with its Greenpeace commitment.

What we did

Global Witness obtained all JBS’s cattle transport permits from Pará for 2017, 2018 and 2019. The Federal Government requires these documents for sanitary control as cattle are transported around the country. They show the movement of cattle from birth to slaughter. Global Witness used these publicly accessible documents to determine the ranches of origin of all JBS cattle, then obtained boundaries for those ranches using state databases. These were overlaid with government satellite data to check for deforestation.

Working with Brazilian NGO Imazon, Global Witness investigators analysed whether the deforestation took place after the July 2008 and October 2009 cut-off point agreed with the Pará prosecutor and Greenpeace respectively. Landsat and Sentinel satellite imagery were then used for further checks that deforestation occurred, and to remove any false positives. Finally, Pará state and Federal databases that publish deforestation permits were verified by Global Witness and with help from Imazon, to see whether the deforestation in the ranches was legal or illegal. This permit (called Autorização de Supressão de Vegetação) is required for rural producers that want to deforest in their property under Brazil’s Forest Code - its main forest law. Under Chapter 5 of the law, article 26 states: “The suppression of native vegetation for the alternative use of land, both on public and private land, depends … on prior authorisation from the competent state organ.” The competent state organ in Pará is the Environmental Secretariat (SEMAS). The term native vegetation is defined in article 1, para A1 of the law as “forests and other forms of native vegetation.” Additionally, Brazil has a Federal Decree on infractions related to the environment, Article 43 of which makes it an administrative infraction to: “Destroy, damage forests, or other forms of vegetation without authorisation from the competent authority.” Thus, if no authorisation for deforestation is granted, it is considered an infraction under this law (see methodology for more details).

This investigation revealed that in 2017 alone, JBS purchased from at least 177 ranches that contained deforestation, all of which Imazon and Global Witness found to be illegal. Yet not one of these cases appeared in DNV-GL’s audits as non-compliant under the prosecutor’s or the Greenpeace agreement. In 2018, JBS purchased from 231 ranches with deforestation,
all of it illegal according to Imazon and Global Witness. Again, DNV-GL’s auditing had found the purchases were 100% compliant with the Greenpeace agreement. 77 (The prosecutor’s audits have not yet been published for that year.) Audits for 2019 for either agreement have not been published yet. But Global Witness can reveal that in 2019 JBS purchased cattle from at least 204 ranches containing deforestation, all of it illegal. 78 An estimated 17,000 hectares of rainforest was lost in these ranches. 79 For evidence of the deforestation found in each ranch please access this link.

When these allegations were put to JBS, it replied stating that in all of the cases the company was justified in purchasing from these ranches. In 40% of the 327 cases, JBS alleged the ranches were on the way to becoming compliant with Brazil’s Forest Code, therefore able to be purchased from according to their agreements. In 22% of the cases, the company claims the deforestation identified by Global Witness was lower than 6.25 hectares and therefore suitable for purchasing from according to protocols set up in 2020 to implement the prosecutor’s agreement. In 21% of the cases, JBS alleged that land boundary modifications of the ranches in question made them compliant with its agreements, while for a further 6% of the cases the company claims its internal systems did not register purchases from those ranches. JBS also alleges that in 6% of the cases, its cattle purchases preceded the deforestation identified by Global Witness. In the remaining cases, it seeks to justify its cattle purchases by claiming these refer to a protocol set up in 2020 for monitoring the ranches compliance with its agreements that were not in place over the period contemplated (2017 to 2019). Only in one case did the company acknowledge they purchased from a ranch that was not compliant but blamed this on errors in Brazil’s forest inspection agency Ibama’s website.

Global Witness, in turn, evaluated every one of these explanations and found JBS’s claims were not justified for any of them, and stands by the initial allegations. Many of the justifications provided by JBS lacked coherence and were contradictory. For a more detailed analysis of JBS’s justifications and Global Witness’s counterclaims to each of these, please access this link.

One handshake away

But these are merely the ranches JBS bought from directly. There are other farms it is supposed to be monitoring that breed and raise cattle, before selling them to JBS’s direct suppliers, who fatten the cows and then sell them to the company. Within two years of signing the 2009 Greenpeace agreement, JBS was obliged to demonstrate no such ‘indirect suppliers’ that contained deforestation were in its supply chain. The prosecutor’s agreement also requires JBS to not purchase cattle from breeding, rearing and fattening ranches with illegal deforestation. 81 But as DNV-GL’s Greenpeace audits note, JBS failed to monitor these suppliers, and were unable to show they were deforestation-free. 82 Global Witness has done their job for them.

Of all the indirect suppliers selling cattle to JBS’s direct suppliers between 2016 and 2019, some 3,270 contained an estimated 98,000 hectares of deforestation after January 2009 (see methodology for details). They should have been monitored by JBS and removed from its supply chain if found to not comply with its prosecutor’s
agreement. JBS should also have monitored 2,940 of their indirect suppliers to check if they complied with its Greenpeace agreement, as these ranches contained over 80,000 hectares of deforestation after October 2009. But as stated by DNV-GL, this did not happen. These findings make JBS’s claims of 99% and 100% compliance with its Greenpeace and prosecutor’s agreements seem risible.

When these allegations were put to the company, it stated that on the 23rd of September 2020 it announced its Green Platform initiative which it claims is groundbreaking in the use of “blockchain technology that will allow socioenvironmental monitoring to be extended to the other links in the production chain”, including indirect suppliers. Yet upon reviewing the initiative, the company claims this monitoring will be complete only by 2025. Given JBS should have been monitoring all its indirect suppliers since 2011 this is essentially an admission of 14 years of failure. Worse, the initiative was short on detail and lacked clarity on whether the company will block or not indirect suppliers it finds do not comply with its commitments. The initiative also lacks transparency, since civil society was not invited to access the system JBS will use to monitor indirect suppliers to see if it is complying with its agreements or not. Finally, the company wants others to contribute to the financing it pledged to spend on the initiative, expecting them to pay for something it could and should have acted on a decade ago.

JBS also uses claims of a lack of transparency in the supply chain to defend its failure to monitor indirect suppliers. In 2018, DNV-GL reproduced JBS’s claims that it was unable to monitor indirect suppliers because this “is only possible with full access to all [cattle transport permits]”. The company also claimed these are “not public documents and are for the sole use of the Ministry of Agriculture”. Yet a legal analysis commissioned by Global Witness found that cattle transport permits are publicly accessible (see methodology for details). A leaked HSBC document, detailing the bank’s concerns with JBS’s failure to monitor indirect suppliers, also cites similar legal opinions commissioned by an American conservation group called the National Wildlife Federation. It states cattle transport permits “are public information systems and there are no restrictions on using these information systems to help improve supply chain traceability and deforestation monitoring in the cattle sector in Brazil.”

Thus, according to various legal opinions, JBS could access and use cattle transport permits to monitor its indirect suppliers for deforestation if it chose to, and could have required its direct suppliers to provide these permits to it as a condition of purchasing from them. Brazilian NGOs like Imazon have also called for
BREAKING THE AMAZON’S HEART

The Amazon rainforest is a biological wonderland harbouring mind-bendingly bizarre and wonderful creatures, as noted by the renowned ethnobotanist Mark J Plotkin. It is home to tree-eating cat fish, vampire bats and vampire fish, pink dolphins, four-foot-long earthworms, monkeys the size of mice, monkey eating fish, lizards that run on water, sloths that swim, giant legless amphibians, insects that resemble half-eaten leaves and frogs flat as a pancake.90

Yet this unparalleled biodiversity is now threatened by a manmade monoculture of pasture. The Pará municipality of São Félix do Xingu is one such place. The area is bigger than Austria and contains Terra do Meio, a densely forested region known as “the heart of the Amazon”91 Its medley of protected areas and rivers is home to many indigenous peoples, and little is known about the ecology of this area by outsiders.9293 Yet the area is also notorious for deforestation,94 containing one of the biggest cattle herds in Brazil,95 with ranches littered along the borders of its protected areas.96

Between 2017 and 2019, JBS purchased cattle from at least 109 ranches with deforestation present in Sào Félix do Xingu, all of it illegal under Imazon’s and Global Witness’s analysis.97 Among them is the 4,355 hectare cattle ranch Fazenda El Shadai (also spelt as El Shaday), near the southern border.

A JBS slaughterhouse purchased 398 cattle from this ranch throughout 2017. Yet satellite data from Brazil’s National Institute for Space Research (INPE) indicated two hotspots of deforestation carried out in 2015 and 2016 approximating 44 hectares – or 52 football fields. This was illegal, according to Imazon and Global Witness. Worse, midway through 2017 in May, Fazenda El Shadai was placed on Ibama’s map of embargoed areas for having 112 hectares of illegally cleared forests reserved for conservation. These are areas where Brazil’s environmental agency Ibama has inspected and found illegal activity, which they place on a blacklist that JBS

Fazenda El Shadai before deforestation
Data 1 - 04/09/2007

Fazenda El Shadai after deforestation
Data 2 - 07/05/2018

Sao Felix do Xingu in the Amazon state of Pará
is supposed to check before buying from there - the rancher even appealed against Ibama’s findings, but a judge found it had no merit. Yet the beef company failed to spot this and bought from the ranch in December that year, contrary to its agreements.

In 2018, JBS bought another 366 cattle from the ranch and then another 762 cows in 2019, repeatedly breaching its agreements over multiple years, none of which was picked up on by DNV-GL’s audits. JBS even awarded a prize to the ranch in 2019 for the quality of cattle it produced – no matter that it was at the expense of the Amazon.

Not only that, but over the period Fazenda El Shadai was selling cattle to JBS, the ranch received cattle from three indirect suppliers that had a combined total of 285 hectares of deforestation. These cattle could have ended up in JBS’s supply chain, and it should have monitored these ranches for compliance with its agreements, but failed to. As of June 2018, one of these indirect suppliers was on Ibama’s embargo list.

Another of these indirect suppliers, Fazenda Nova Alianca, had been a direct supplier to JBS from 2014 to 2018, containing 121 hectares of illegal deforestation, breaching the company’s agreements. As of 2018 JBS appeared to stop buying from there. Yet in 2019 this ranch sent cattle to Fazenda El Shadai, which JBS failed to monitor to ensure cows from Nova Alianca did not enter into its supply chain. Thus what was once a non-compliant supplier that sold cattle directly to JBS, then became an indirect supplier whose cattle may have again ended up in JBS’s slaughterhouse.

In response to this case, the company admitted the ranch El Shadai was on Ibama’s website for embargoed areas but said it was not included in an excel sheet available on the webpage, which the company uses to block such ranches. Yet this ignores the fact that illegal deforestation occurred in the ranch prior to Ibama inspecting it and which the company could and should have detected using satellite data from Brazil’s National Institute for Space Research (INPE), but failed to. Additionally, the ranch was in fact on a list in a PDF document on Ibama’s website that JBS should and could have consulted, but again failed to.

This is a litany of failures in the heart of the Amazon.

**DNV-GL - A question of conduct**

In 2016 and 2017, DNV-GL was carrying out audits on JBS on behalf of Greenpeace and the Pará prosecutor (both paid for, ultimately, by JBS itself). DNV-GL’s Code of Conduct states it must avoid “any combination of roles and services that could be perceived as representing a threat to the impartiality and independence [of its] services. In particular, we do not classify, certify or verify our own work.”

DNV-GL has questions to answer about whether it complied with its code of conduct in relation to these audits.

DNV-GL’s audits for the Greenpeace agreement claimed JBS’s cattle purchases were 99.97% compliant for 2016 - yet its audits for the Pará prosecutor’s agreement the same year showed almost 20% of JBS’s purchases were not compliant. There was thus a large discrepancy in two audits carried out by the firm on JBS’s supply chain in the same year. At the time, JBS was widely criticised in the media for failing to comply with its prosecutor’s agreement. It claimed DNV-GL had adopted a “conservative” view of what constituted non-compliance.

In 2017, DNV-GL again audited JBS, finding it was now 100% adherent to the prosecutor’s settlement too. In the space of one year, JBS had appeared to dramatically improve its compliance. Yet Global Witness found this not to be the case for 2017.

When this was put to DNV-GL, it responded suggesting the audit methodology given to it may account for these discrepancies. This methodology, according to the auditors, required that for 2017, DNV-GL only analyse 50% of JBS’s biggest cattle suppliers, whereas in the previous year 100% of the cattle purchases were audited.

Auditors play a crucial role in verifying that cattle bought by the beef companies does not originate from a ranch with deforestation. © Marizilda Cruppe / EVE / Greenpeace
audited. Yet Global Witness’s investigation shows at least 17 of the ranches analysed for illegal deforestation were in the top 50% of JBS’s biggest suppliers in 2017, accounting for almost 20% of the beef company’s total audited purchases that year. These were not registered as non-compliant by DNV-GL’s audits.116 This percentage amounts to the entire audited purchases of some other beef companies analysed in the initiative.117 Furthermore, following the previous year’s audits for 2016, DNV-GL was the party that recommended reducing the audit sample size from 100% of a beef company’s cattle purchases to a lower amount.118 This recommendation had the consequence of benefitting JBS, since many non-compliant cases were thus never audited for 2017. When these allegations were put back to DNV-GL it failed to respond. The firm may also have breached its code of conduct when carrying out this combination of roles and services while auditing the same company for compliance with two different agreements.

The auditor is also a member of the Consumer Goods Forum (CGF),119 a global initiative adopted by big retailers, manufacturers and service providers that aimed to achieve zero net deforestation by 2020 through the “responsible sourcing” of commodities, so they do not “deplete tropical rainforests”.120 By any measure, DNV-GL’s audits of JBS’s compliance cannot be said to have supported this commitment.

In a letter to JBS this July, DNV-GL distanced itself from the beef company after its contract was terminated. It said: “It has been brought to our attention that JBS is using the [audit] report as proof its total cattle sourcing practices are deforestation free [for the Greenpeace agreement]. DNV GL therefore sees it necessary to issue a disclaimer.”

The auditor explained that JBS failed to monitor its indirect suppliers, audits of the company’s direct suppliers were limited to 10% of its Amazon cattle purchases, it did not include checks on cattle laundering, and DNV-GL relied on information provided by JBS to carry out the audits.

The assessments “cannot under any circumstances be used as evidence of JBS being completely deforestation free,”121 it concluded.

This would appear to contradict a December 2017 statement that DNV-GL reproduced on its website about JBS’s compliance with the Greenpeace agreement: “Report by DNV-GL attests the company [JBS] follows its responsible purchase of raw materials in compliance with the Greenpeace agreement.”122

As revealed in Global Witness’s September 2019 report Money to Burn,123 iconic banks and investors such as Deutsche Bank, Santander and Blackrock were involved in financing JBS, and failed to carry out adequate due diligence on the beef giant’s exposure to deforestation.

A Deutsche Bank tweet in response to the publication insisted it would “not finance activities where there is clear and known evidence on clearing of primary forests, areas of High Conservation Value or peatlands, illegal logging or uncontrolled and/or illegal use of fire”.124

In January125 this year, Blackrock announced it would make sustainability central to its management of $7 trillion126 worth of assets, also publishing an investment strategy for engaging with agribusinesses, wherein it asks these to disclose any commitments made on “deforestation-free supply chains […] and to report on outcomes, ideally with some level of independent review”.127

Yet as of February, March and April 2020, Blackrock, Deutsche Bank and Santander still held shares in JBS,128 collectively worth over $270 million.129 When asked if Deutsche Bank still felt its financial involvement with JBS was justified given Global Witness’s new allegations, it replied that its financing of JBS is on behalf of others and that it would not choose to invest in the company, stating
it “can confirm that JBS is not eligible for investment in DWS’ actively managed retail mutual funds which maintain a minimum ESG investment standard”.

However, Deutsche Bank, along with others, actively financed JBS through two loans provided to one of the company’s American subsidiaries in 2017 and 2018, amounting to a combined $2.8 billion, both of which mature in 2022 and 2023 respectively. When asked if its choice to not actively invest in JBS covered its contribution to these loans, the Bank failed to reply.

Santander stated that it had engaged with JBS on these issues, and was monitoring the company’s plan to deal with indirect suppliers. It also added that in “the event that any illegality is verified, Santander Brasil has the contractual power to declare the early maturity of the debt and demand its payment”.

Earlier in 2020, a spokeswoman for Blackrock said the company had engaged “with JBS and others to discuss their policies and practices on issues specific to operating in the Amazon Basin”.130 Asked if in response to Global Witness’s allegations the fund had engaged with JBS again, a spokeswoman replied: “We have engaged with JBS three times in the first six months of the year, and each of these engagements covered Operational Sustainability.” Blackrock also stated that if JBS did not progress on environmental issues, it would express its dissatisfaction “by voting against the re-election of those directors with oversight responsibility for the issue of concern”.

Meanwhile, Barclays provides financial services to JBS,131 yet along with Deutsche Bank and Santander is also a member of the Banking Environment Initiative (BEI) that aims to “Mobilise the banking industry to direct capital to business models … achieving zero net deforestation by 2020”.132 Barclays’ membership did not stop it underwriting four overseas bond deals for JBS since 2017 totalling $2.75 billion.133

Barclays and Santander also acted as book-runners for a September 2019 JBS bond issuance worth over $120 million dollars.134 The preliminary prospectus for the deal states JBS must “comply with all laws, rules, regulations and orders issued by competent authorities and judicial sentences in force in the Brazilian territory, including environmental legislation”.135 The findings presented in this report question whether JBS complied with its legal obligations. Barclays and Santander should have undertaken rigorous due diligence on deforestation risks before determining if it was appropriate to take part in this deal.

When this was put to Barclays, the bank said it was unable to share the detail of its due diligence procedures and engagement with JBS “for confidentiality reasons”, adding that it was “committed to understanding the environmental and social risks associated” with its financing activities and that it applies “stringent environmental and social impact assessments”. Santander said it had “told JBS and the Brazilian public (in printed advertisements) that we want zero deforestation in the beef supply chain as a whole”.

‘Close attention’

In its Soft Commodities Sector policy, Santander states it will pay “particular attention” when providing financial services to clients involved with “High-Risk Geographies” in the cattle sector.136 Meanwhile Barclays’ claims in its Forestry and Palm Oil Statement that its clients will be subject to “enhanced due diligence”.137 The banks’ behaviour completely contradicts these fine words and risks misleading the public and the banks’ shareholders of the actual steps they take to mitigate their exposure to deforestation. They appear to have prioritised profit over Amazon conservation, while voluntary policies – often not implemented - are used to greenwash their reputations. Worse, an absence of regulation requiring these banks to consider or report on JBS’s deforestation risk, means they can continue to ineffectively assess the deforestation risks in their supply chains and investments.

When this was put to the banks, Santander replied stating it “has set out specific sectoral policies for analysing social and environmental risks in our customers’ activities within sensitive sectors, including soft commodities”. Barclays stated it had updated its policies in August 2020 and that it was committed to helping its “corporate clients achieve zero net deforestation”. The updated policy makes no mention of the commodity of beef, yet the bank stated that “other commodities are a significant and growing concern”.

Unlike the aforementioned financiers, some have taken action and publicly criticised JBS. In July 2020, Nordea Asset Management, part of Northern Europe’s largest financial services group138 and with $261 billion under management, dropped JBS from all its funds. Its head of environmental responsibility noted: “After a period of engagement with the company … we did not feel we were seeing the response that we were looking for.”139

A leaked HSBC document seen by Global Witness on its financial exposure to JBS also heavily criticised the company, stating: “We have asked multiple times for clarity on how traceability of original provenance on cattle could be solved, but JBS has no vision, action plan, timeline, technology, or solution.”140 However, in the same document, HSBC then recommended that investors buy shares in JBS. It remains to be seen what further action HSBC will take on JBS now the company has announced some action on indirect suppliers.
THE LAWLESS AND THE LANDLESS

“Pará is not a lawless land. It’s a land where the law works for the few.”

Not only are banks exposed to deforestation in JBS’s supply chain, but also to human rights abuses linked to ranchers the company buys from.

Rafael Saldanha is reported to be among the most influential cattle ranchers in the south of Pará and owns various businesses that cost millions of dollars to establish. Yet he is accused of environmental crimes, land-grabbing and even murder.

He stands accused by prosecutors of being involved in the killing, in 1998, of two representatives of a national organisation that campaigns for land rights, called the landless rural workers’ movement (Movimento dos Trabalhadores Rurais Sem Terra - MST), in an ongoing criminal investigation. He claims the allegations are false. In 2003, his ranch Fazenda Vale Verde was reported to have been inspected by the Ministry of Work, finding slave labour, freeing 16 people and fining Saldanha over $4500 - a decision Saldanha and his lawyers are still contesting. Ibama then inspected the ranch in 2005, discovering illegal deforestation and placing it on their blacklist.

In 2009, he acquired another ranch, Fazenda Santa Tereza. In April 2019 Pará prosecutors charged him of illegally obtaining public land in this deal, in an ongoing case. He denies the charges and claims the ranch was bought in accordance with Brazilian law.

In 2008, a community that describe themselves as landless peoples made the same argument by occupying the area to force authorities to investigate the legality of the ranch owner’s land claim. They aimed to show it was public land, could not be bought or sold by ranchers, and should be redistributed to the families of the landless. They left the area after guarantees the rule of law would be upheld but returned in 2014 after they suspected foul play in Saldanha’s acquisition of the area.

Violence, threats and intimidation followed these events. In 2016 a local news outlet reported the landless people were shot at and their plantations and huts burnt down by people they said were employees of the ranch. Global Witness obtained a police witness statement of the 2016 event that claimed men from the ranch started a fire that burned down the witnesses’ hut, and that as they were trying to put the fire out, employees of the ranch shot at their settlements.

In 2017, an investigation by the parliamentary committee of human rights of the State of Pará interviewed landless people occupying the area days after another incident. They documented testimonies from four witnesses that claimed they were shot at and their plantations once again burned down.

One witness recounted to the committee how, before these events, a manager of Fazenda Santa Tereza had turned up threatening to kill them by setting fire to them. Other witnesses also told of how the manager intimidated and harassed them. The manager publicly denied causing the fires and alleged the accusations against him were lies.

The committee’s investigation, which was accompanied by police, took photos of bullet holes in a building by the gate of the landless peoples’ area, noted bullet casings collected by the community and took pictures of their burnt plantations and a burnt school roof. In the report, the parliamentarians recommended prosecutors investigate the manager of Fazenda Santa Tereza for his alleged conduct against the landless peoples.

Then again in 2018, local and national media reported how late one night in July armed men rounded up the landless people from their huts, firing their guns as they
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did so.\textsuperscript{165} One witness recounted how “they laid us down on the floor and shot close to our feet. They made us run away and then started burning our cars, motorbikes and huts, even throwing dogs alive into the fire, and then shooting toward us as we fled the scene.”\textsuperscript{166}

Global Witness interviewed two representatives of the landless people present during the incident, who repeated the above claims that armed men working for the ranchers entered the area the night of July 28th 2018, harassing them and setting fire to their belongings.\textsuperscript{167} As yet Global Witness understands no police investigations have been finalised on these events nor charges brought against anyone.

It was after this torrid period, in April 2019, that prosecutors in Pará accused Saldanha of illegally acquiring Fazenda Santa Tereza – the same arguments the landless people and their lawyers used\textsuperscript{168} – in an ongoing case.\textsuperscript{169} When all these allegations were put to Rafael Saldanha via his lawyers, they replied claiming the opposite was true, stating the ranch was the target of “invasion, with various pregnant cows tortured and killed, areas of pasture burned by the invaders, and forested areas reserved for conservation deforested, with ranch staff threatened and not permitted to enter the ranch”.

Despite this history of accusations and court cases, Global Witness research found JBS repeatedly purchased cattle from Saldanha, contrary to its commitments. The Greenpeace agreement states signatories must stop buying from any ranchers accused by prosecutors of land grabbing or agrarian conflicts once they become aware of these issues.\textsuperscript{170} As seen above, Saldanha stands accused by prosecutors of both, in ongoing cases, all of which has been well reported for years in the press and which JBS could and should have known about.

JBS purchased from Saldanha through his Fazenda Santa Tereza ranch in 2015 – despite the fact that Ibama had reportedly found illegal deforestation in the ranch.\textsuperscript{171} The company then stopped buying from there, yet continued buying from another of Saldanha’s ranches between 2015 and 2019: Fazenda Primavera.\textsuperscript{172}

A Global Witness analysis can reveal that Fazenda Santa Tereza is included in the list of cattle suppliers to Fazenda Primavera, supplying 3066 cattle to it between 2015 to 2019.\textsuperscript{173} The ranch, therefore, remained in JBS’s supply chain as an indirect supplier and it failed to monitor this case to see if it complied with the Greenpeace agreement.

Worse still, according to government satellite data of August 2008, Fazenda Primavera had deforestation in it, which, according to official permit data, was illegal, contravening JBS’s prosecutor’s agreement.\textsuperscript{174} Saldanha denies any of this took place.

JBS thus bought cattle from a rancher accused by prosecutors in ongoing cases of land grabbing and of murdering two landless workers movement representatives, and from ranches with illegal deforestation and slave labour, all of it contrary to the voluntary and legal agreements. Yet all of this went un-monitored by the audits.

When these allegations were put to JBS, it replied stating it had “received no notification or complaint from the Prosecution Office or from Federal or State Land Institutes containing information about those cases,” and that it was therefore not possible “to proceed with the procedure for blocking the supplying farms on its system.”
MARFRIG: GREENWASHING A GREENWASHER

Marfrig describes itself as the world’s second-largest beef producer,\textsuperscript{175} with a workforce of over 30,000 employees\textsuperscript{176} and reporting a gross profit of over $1 billion in 2019.\textsuperscript{177} As with JBS, DNV-GL also audits Marfrig’s adherence to the Greenpeace agreement. In five successive audits between 2015 and 2019, DNV-GL found Marfrig was fully compliant.\textsuperscript{178} In 2019, the company claimed it was the “only company to be certified 100% in compliance” by all Greenpeace agreement audits.\textsuperscript{179} Marfrig has used these audits to promote its green credentials to financial backers that often fail to ask enough questions about the validity of the audits.\textsuperscript{180}

In a July 2019 press release trumpeting its record, Marfrig announced the issue of half a billion dollars in so-called ‘Transition Bonds’.\textsuperscript{181} The proceeds would be used to invest in “sourcing cattle from the Amazon Biome, more specifically from the Brazilian states of Mato Grosso, Pará and Rondônia”.\textsuperscript{182} The company also published a ‘Sustainable Sourcing Protocol’ for these bonds, wherein it claimed: “Marfrig remains in conformity with the [Greenpeace] commitment for the fourth consecutive year,” again citing DNV-GL audits as proof.\textsuperscript{183}

Despite civil society pressure, Marfrig does not have a prosecutor’s agreement in Pará, though it does for other Amazon states.\textsuperscript{184} Nonetheless, Brazilian law requires Marfrig not to purchase from ranches that caused illegal environmental degradation, at risk of being subjected to civil or criminal proceedings by prosecutors if they do.\textsuperscript{185} (see methodology for details)

To find out whether Marfrig complied with these legal requirements, Global Witness obtained the company’s cattle transport permits for 2017, 2018 and 2019 in Pará and subjected them to the same analysis that was done for JBS. During this period, Marfrig purchased from 89 ranches with over 3,300 hectares of deforestation,\textsuperscript{186} all illegal according to Imazon and permit data consulted by Global Witness.\textsuperscript{187} Of these cases, 39 correspond to the period of time covered by the Greenpeace agreement. Yet none appeared in DNV-GL’s audits in 2017, 2018 and 2019.\textsuperscript{188} Marfrig’s failure to do proper checks is then rewarded by financiers that fail to do adequate due diligence and that buy the company’s allegedly ‘sustainable’ Transition Bonds. Those that clear forests are thus emboldened to deforest again. For access to each ranch please use this link.

When these allegations were put to Marfrig, it denied any of its purchases from the aforementioned ranches breached its agreements. It claimed that 42 of the 89 ranches contained deforestation that preceded the cut off date for its Greenpeace agreement (October 2009), but failed to reply to the legal arguments Global Witness sent them showing why they should not be purchasing from ranches with illegal deforestation that occurred after July 22nd 2008. The company also claimed 15 cases contained deforestation that happened after it had purchased from them, that 11 cases contained deforestation polygons by Brazil’s National Institute for Space Research that were false positives. It also claimed that 14 cases contained deforestation that was below 6.25 hectares and five cases where the company was unable to identify the ranches in its internal databases. Global Witness in turn, evaluated all of these explanations and found each justification to be invalid, standing by the initial allegations. In two cases the company claimed it had blocked the suppliers and that no slaughter had been registered, but failed to provide information on whether it did this after we had informed them or during the period considered by our investigation (2017 to 2019). For a detailed analysis of Marfrig’s justifications and Global Witness’s counterclaims, please access this link.
DEFRAUDING THE AMAZON

The municipality of São Felix do Xingu in Pará contains a famous protected area called Triunfo do Xingu of more than a million hectares. Studies claim it is facing higher deforestation compared to other areas, threatening the survival of its remarkable species. These include the rarely sighted spotted tiger cat and the tapir. Both are on the International Union for Conservation of Nature’s red list of threatened species. But thousands of cattle ranches are encroaching closer to its forests threatening its unique biodiversity. Between 2017 and 2019 Marfrig purchased cattle from at least 71 ranches with illegal deforestation in the municipality.

One such ranch was Fazenda Espora de Ouro II. Marfrig purchased cattle from it in consecutive years despite illegal deforestation. Additionally, the ranch was fraudulently declared on the government’s land registry as belonging to an individual who could not have been its owner. That ‘owner’ then appeared to deceitfully modify the ranch’s boundaries to remove evidence of illegal deforestation. Global Witness outlines the details of this case below:

In January 2016, the rectangular ranch contained two remnants of Amazon forest looking like two lonely lungs:

**FAZENDA ESPORA DE OURO II PROPERTY BOUNDARIES IN 2016**

But by July that year, these trees – equivalent to 36 football fields – had disappeared:

**FAZENDA ESPORA DE OURO II – PROPERTY BOUNDARIES AS OF 2016**

Marfrig purchased from the ranch in October 2016 and again in 2017 contrary to its Greenpeace agreement and none of which appeared in DNV-GL’s audits. With an audacious sleight of hand, the property boundary was modified in 2018, so it no longer included the illegally deforested area:

**MODIFIED PROPERTY BOUNDARIES FOR FAZENDA ESPORA DE OURO II IN 2018**

Marfrig continued purchasing from the modified ranch in 2019, now compliant with the company’s commitments – on paper, at least. Between 2017 and 2019 Global Witness found Marfrig was the ranch’s only slaughterhouse customer, raising suspicions the ranch owner modified their boundaries to get round Marfrig’s Greenpeace agreement. One of Brazil’s Environmental Federal State Prosecutors, Daniel Azeredo, has stated that...
modifying the boundaries of ranches in the CAR database to exclude deforestation is one of the causes of fraud in the cattle supply chain.203

But there was further trickery.

All rural properties must be registered on an electronic database called the Cadastro Ambiental Rural (CAR),204 detailing the owner, boundaries and forest cover.205 Owners206 face criminal or civil sanctions for any false or partial information they self-declare.207 Yet Global Witness has learned the declared titleholder could not have been its true owner.

The ranch is overlapped by a large settlement of landless families in the process of claiming land.208 This is managed by the National Institute of Colonization and Agrarian Reform (INCRA),209 which can assign small lots to fellow settlers until they receive an official land title.210 For the project, but the alleged owner of Fazenda Espora de Ouro II was not a beneficiary.211 Yet a Freedom of Information request to INCRA revealed no land has been titled nor beneficiary registered in the vicinity.212 This means the declared owner cannot be its legal holder.

Global Witness consulted INCRA's database of registered settlers for the project, but the alleged owner of Fazenda Espora de Ouro II was not a beneficiary.213 Yet a Freedom of Information request to INCRA revealed no land has been titled nor beneficiary registered in the vicinity.214 This means the declared owner cannot be its legal holder.

Pará prosecutors have previously warned criminals fraudulently exploit landless peoples' areas for cattle production.215 The audits have nothing to say about such cases.

When asked about all these allegations, the alleged ranch owner did not reply. When these allegations were communicated to Marfrig, it justified the purchase claiming that two polygons of deforestation overlapping within the ranch by Brazil's National Institute for Space Research (INPE) were lower than 6.25 hectares. Yet the overlap of these two polygons of deforestation identified by INPE in the ranch were of 7 hectares for one polygon, and 13 hectares for the other, well over the amount stated by Marfrig. The company said nothing about the allegations of fraud, or about the fraudulent modification of the ranch’s land boundaries that removed a further two polygons of illegal deforestation from within it.

Marfrig also purchases from ranches accused by state agencies of committing environmental crime, contrary to its Greenpeace agreement. Fazenda MD, also in Sao Felix do Xingu, contains forests within its 1,247 hectares. Yet 23 hectares was217 illegally deforested in 2011 and 2017, as no permits authorised the clearance.218

Marfrig should thus have blocked it as a supplier. Yet it purchased 216 cattle from the ranch. Worse, this was followed by 140 more cattle being purchased by Marfrig up to June 2018, despite the farm being blacklisted in May that year by Ibama219 after inspections found illegal deforestation in the ranch. Marfrig should have checked this on Ibama’s list of embargoed areas but failed to do so, and was exempted from any accountability by flawed audits that also did not catch the case. When this was put to the company, it alleged the two polygons of deforestation found by INPE within the ranch in 2011 and 2017 were false positives and were below 6.25 hectares. Yet INPE’s polygons of deforestation in both cases exceeded 6.25 hectares and were illegal, which was then validated by Ibama through its field inspections, resulting in the ranch being placed on its list of embargoed areas, which the company simply ignored.

This is one of the biggest beef companies in Brazil failing to abide by its commitments, not held to account due to flawed audits, and as a result, encouraging fraud and deforestation.
Marfrig and the ‘sustainable’ bonds

Like JBS, Marfrig failed to monitor indirect suppliers, despite its Greenpeace commitments. DNV-GL’s audits concluded: “Indirect suppliers are not systematically verified yet.”

Global Witness’s analysis shows between 2016 and 2019 in the state of Pará, 1,160 of the company’s indirect suppliers contained over 34,000 hectares of deforestation that occurred after January 2009. Marfrig failed to monitor them to check if they complied with its legal obligations. Nor did it check whether 1,030 indirect suppliers’ adhered to its Greenpeace agreement, containing more than 27,000 hectares of deforestation that occurred after October 2009.

Marfrig told financiers of its ‘Sustainable Transition Bonds’ it would send a Request for Information (RFI) form to direct suppliers, requesting information on who they buy cattle from to check for deforestation. The three banks leading on the sale of Marfrig’s Transition Bonds were BNP Paribas, ING Bank and Santander. Marfrig claims by 2025 it will aim to cover 100% of indirect suppliers using these RFIs. But these tools are voluntary, relying on the goodwill of direct suppliers to report back and do not specify what Marfrig will do with that information to ensure its indirect suppliers with deforestation are blocked.

The environmental research agency Vigeo Iris, with offices in South America, Europe the US and Asia, analysed Marfrig’s ‘Sustainable Transition Bonds’. It stated: “We consider the identification and management of the risks linked to deforestation to be limited… due to the lack of access to registration documents for properties where indirect suppliers operate.”

Other big investors doubted whether Marfrig’s bonds could be labelled as sustainable. PGM is a Dutch investment group that manages pension assets worth 252 billion Euros. In August last year, they publicly stated that Marfrig’s so-called sustainable bonds could “not qualify as a sustainability bond” because it wasn’t “financing new sustainable activities or investing in a climate solution.”

Another global investor, Insight Investments, responsible for managing over £620 billion in assets, decided against investing in the bonds, stating they did not “go beyond business as usual spending” and that the “impact indicators will not really give us much sense of how this has led to improvements.” Their concerns are valid. Global Witness investigated one of Marfrig’s biggest direct suppliers in the Amazon state of Pará, Sitio Nacional. This ranch supplied it with more than 3,590 cattle up to July 2019. The farms that supplied cattle to Sitio Nacional were then analysed for deforestation. Of all its suppliers, deforestation of more than six hectares occurred in at least eight. These contained more than 300 hectares of deforestation. Yet somehow these actions are rewarded as “sustainable” by the financiers that bought the bonds and by those that facilitated the sale.

Like JBS, Marfrig also appears to detract from its legal obligation to have adequate checks in place to ensure the cattle it purchases via indirect suppliers complies with the law. The company argues the “lack of an official traceability system makes it difficult” to monitor indirect suppliers, thus seeking to justify a decade of inaction. This only serves to embolden indirect suppliers involved in illegal deforestation. In addition, as stated above, the legal analysis commissioned by Global Witness shows there is publically accessible data that Marfrig could use to monitor indirect suppliers.

When these claims were put to the company, it acknowledged that it needs to do more on indirect suppliers. A spokesperson said: “Marfrig knows that it is necessary to go further and since last year it has been working on an ambitious plan in partnership with the IDH - The Sustainable Trade Initiative, to implement its commitments.”

The company added it was important to “highlight the principle of inclusion, as the exclusion strategy does not solve the problem, as excluded producers continue to produce in unsustainable conditions, putting the conservation of biomes at risk”. It also stated it was “building innovative financial mechanisms and partnering with banks operating in the Brazilian agricultural sector”, outlining its “Request for Information tool (RFI)” and a “Indirect Suppliers Mitigation Risk Map” which it claims will “mitigate risks associated with indirect suppliers”. The company did not explain why these efforts could not have been initiated a decade ago, and it did not reply to the problems Global Witness highlighted concerning the RFI tool, nor justify why it would take five years to do something it had committed to doing ten years ago. Nor did it dispute the failure to monitor indirect suppliers over the period Global Witness considered, or the deforestation therein.
Marfrig’s bankers

As revealed in Global Witness’s September 2019 report ‘Money to Burn’, well-known banks like Santander and Morgan Stanley have financed Marfrig’s activities. At that time, a spokesman for Santander said: “At the time of our analyses, Marfrig was in compliance with these agreements, which involved third-party audits of ranchers,” citing the problematic DNV-GL audits as proof. Asked whether Santander would pressure Marfrig over its indirect suppliers, Santander replied: “We will take it into account in our environmental and social risk assessments.”

Yet Global Witness has learned that as of March 2020, Santander still held over $3 million of shares in Marfrig while as of April 2020 BNP Paribas held $3.25 million. Santander, alongside BNP Paribas and ING Bank were also lead arrangers for Marfrig’s “transition bond” – announced at the height of the media coverage of the 2019 Amazon fires.

Santander and BNP Paribas are also founding members of the Banking Environment Initiative that aims for zero deforestation by 2020. The banks appear to have failed to do adequate due diligence on the deforestation risks posed by Marfrig, or to scrutinise how their financing is compatible with their zero-deforestation commitments.

Santander has also faced other accusations of financing companies linked to deforestation. In 2016 it was issued a $15 million fine by Ibama after they accused the bank of financing agricultural production in a protected area. The bank claimed their financing had nothing to do with seed production, and that if Ibama did not agree they might take the case to the courts. When all these issues were put to Santander, it replied stating that in “the event that any illegality is verified, Santander Brasil has the contractual power to declare the early maturity of the debt and demand its payment”, adding that “it is essential that measures to protect the Amazon rainforest be intensified, coordinating the actions of the banks with the government and public initiatives.” ING did not reply despite offers to comment.

In February this year, BNP Paribas told Global Witness it stood by its decision to participate in Marfrig’s transition bond, stating that “the use of proceeds of this bond is strictly focusing on reducing deforestation and land rights issues within Marfrig’s cattle supply chain”. This response did not address the fact that Marfrig had ten years to monitor and remove indirect suppliers with deforestation from its supply chains, but failed to. Only through a financial instrument a decade later did it begin to consider possible solutions like the RFI, which other investors like PGGM and Insight Investments rejected as insufficient. When Global Witness’s new allegations were put to BNP concerning Marfrig’s purchase of cattle from 89 ranches with illegal deforestation, contrary to the company’s legal and voluntary agreements and which were not picked up on by successive audits, the bank did not reply to these specific points. It did, however, state that it “can decide to put a company under monitoring or terminate the relationship” in the event it breaches the bank’s commitments. It also elaborated on Marfrig’s Transition Bonds, stating that the “bond framework adheres to the best principles” and was subject to a “third-party review” by Vigeo Eiris prior to the bond issuance.

Last year a Morgan Stanley spokeswoman conceded the bank had financed Marfrig, but noted it had not done so in 2018 or 2019. She insisted deforestation risks are analysed carefully. Yet as of March 2020 the bank held over $41 million in shares in Marfrig. Once again, there appears to have been a failure to undertake adequate due diligence on deforestation risks. When this was put to Morgan Stanley, the bank replied stating that its shares in Marfrig were “held on behalf of clients or are attributable to other client-related activities in the ordinary course of trading activity and are not held as a strategic or proprietary investment on behalf of Morgan Stanley”.

Like JBS, Marfrig seems to be greenwashing its image, using flawed audits to secure huge sums in supposedly “sustainable” financing from an unquestioning financial sector with inadequate due diligence on deforestation risks.

These banks appear not to ask for any detailed information on Marfrig’s supply chain so they can assess the company’s exposure to deforestation, highlighting shortcomings in their due diligence practices.
MARFRIG, LANDGRABBERS AND INDIGENOUS LAND

Various studies show protecting indigenous lands correlates with improved forest conservation, reflecting the skill and leadership of indigenous peoples in environmental stewardship. Yet these are under threat from a hostile new president. This despite Brazil being a signatory to the International Labour Convention 169 on Indigenous and Tribal Peoples, which should guarantee the human rights of indigenous peoples to their land.

In 1998, Jair Bolsonaro called the Brazilian cavalry incompetent compared to their American counterparts who almost eliminated indigenous peoples. In 2016, he said “giving” them land was a ploy to make agribusiness unviable, that he would reduce such areas, also threatening to arm ranchers with guns in an Amazon state where indigenous peoples were having their land demarcated. In 2017 he said if it were up to him, he would make it easier for people to carry guns and that he would not give one centimetre of land to indigenous peoples. This rhetoric has added fuel to a violent land dispute in Apyterewa - one of the Amazon’s most biodiverse indigenous areas. Marfrig has sourced cattle from ranchers involved in the dispute.

Apyterewa, more than five times the size of Mexico City, is home to the Parákanã indigenous peoples. After a long struggle, in 2007 the Ministry of Justice finally recognised the land as their territory. A task force was set up to remove non-indigenous occupants, leading to reduced deforestation. But the cattle raisers did not give up. In 2013 the Brazilian government’s indigenous institute (FUNAI) accused rancher Orcimar Arantes do Prado, and other ranchers, of land grabbing in Apyterewa and of plotting to bomb an area inside the territory, according to a leaked official document seen by Global Witness.

Yet between 2014 and 2017 cattle transport permits show Mr do Prado sent 744 cows to Marfrig, contrary to its Greenpeace commitments not to source from alleged land-grabbers.

Two years after these purchases Mr do Prado was accused of ordering the murder of a high profile trade unionist. Carlos Cabral Pereira, himself allegedly involved in land grabbing there. Mr do Prado’s lawyers deny the accusations and speculated others were responsible for the alleged murder. In 2018, Mr Pereira had reportedly campaigned for Bolsonaro’s election because of his rhetoric, hoping he would legalise land ownership in Apyterewa by non-indigenous occupants. The same year, the Ruralistas, a congressional block supportive of agribusiness, lobbied the Temer government to delay removing land-grabbers from Apyterewa. After Bolsonaro’s victory, some of Mr Pereira’s land in the indigenous area reportedly tripled in value. Following the subsequent dispute, he was shot in the head, allegedly by hitmen. There is no suggestion Marfrig was in any way involved in the murder or that Marfrig bought cattle from Mr do Prado after the accusation, but this illustrates the violent
context in which these land-grabbers operate within the supposedly protected indigenous area.

Marfrig’s links to Apyterewa do not end there. Another ranch illegally located inside the Parakana’s land was an indirect supplier linked to the company’s supply chain. A rancher by the name of Antonio Borges Belfort, illegally reared cattle in Apyterewa between 2016 and 2019 in his ranch Fazenda Sol Nascente, containing over 45 hectares of illegal deforestation, sending the cows to a legal farm he owned, Fazenda Serra de Pedra, from which the beef giant then bought 274 cattle between 2018 and 2019. The investigative journalist outlet Reporter Brasil unearthed further evidence the ranch was being used as a laundering vehicle. This contravenes Marfrig’s commitment to Greenpeace to ensure their supply chain does not impinge on indigenous lands. It also breaches the company’s commitment to monitor indirect suppliers with deforestation, to ensure cattle from these suppliers does not enter its slaughterhouses.

When these allegations were put to Antonio Borges Belfort through an intermediary contacted by Reporter Brasil, he said he would not comment. When these allegations were put to Marfrig, the company claimed the Serra de Pedra ranch was fully compliant with its agreements at the time of purchase.

Antonio Borges Belfort is an old acquaintance of alleged murderer Orcimar Arantes do Prado, the two having legally challenged the decision to create Apyterewa in 2007, participating in the case all the way to its end in 2014.

None of the land-grabbing ranchers was picked up on by DNV-GL’s audits. Meanwhile, Marfrig’s many financial backers are exposed to these environmental and human rights abuses of indigenous lands and peoples.

The Parakana indigenous peoples had their land recognised in 2007. © Manizilda Cruppe / EVE / Greenpeace

Deforested area for cattle ranching in Apyterewa’s land. Cattle ranching is the primary driver of forest destruction in the Brazilian Amazon. © Manizilda Cruppe / EVE / Greenpeace
MINERVA: THE ‘POSTER CHILD’ FOR DEFORESTATION-FREE INVESTMENTS

Minerva is the third-largest beef trader in Brazil, able to slaughter over 3.5 million cattle every year, exporting meat products to over 100 countries. The company hired US accounting giant Grant Thornton, which operates in 140 countries with a global revenue of $5.72 billion, to monitor its compliance with the Greenpeace agreement. In 2017, it found Minerva was 100% compliant with the agreement. The same year, Federal Prosecutors in Pará audited Minerva’s purchases of cattle, finding only 0.26% of irregular purchases that could not be justified by the company. In its Annual Sustainability Report that year, Minerva claimed its products “are not associated with non-responsible socio-environmental practices” and “the percentage of regulated purchases, based on the use of maps and perimeters, rose from 92% to 99%.”

The good news did not stop there. In 2018, Grant Thornton found Minerva was again 100% compliant with the Greenpeace agreement. The company itself claims to analyse 100% of its direct suppliers to screen out deforestation. A 2019 statement claimed its operation guarantees Minerva’s products are not associated with “embargoed areas nor with deforested areas in the Amazon biome.” This impressive series of audits portray Minerva as a paragon of responsibility. But does this stand scrutiny?

Global Witness analysed Minerva’s cattle purchases for 2017, 2018 and 2019 in Pará and subjected them to the same analysis as those of JBS and Marfrig. The research found at least 16 direct suppliers contained over 680 hectares of deforestation, all illegal, according to Imazon and permit data consulted by Global Witness. Grant Thornton’s Greenpeace agreement audits for 2017 and 2018 did not pick up any cattle purchases from non-compliant ranches over that period, despite Global Witness finding eight ranches with deforestation that sent cattle to Minerva in those years (audits for 2019 have not yet been published). Once again, an elite firm of international auditors failed to identify non-compliance. Yet it is clear Minerva is leagues ahead of JBS and Marfrig in its compliance with its agreements, given the low number of cases. For access to each ranch please use this link.

When asked for comment on the aforementioned allegations, Minerva claimed six of the ranches had deforestation that preceded July 22nd 2008, four of the ranches have since been blocked as suppliers, and two of the farms which had deforestation identified by Brazil’s National Institute for Space Research were false positives. Of the remaining four ranches, the company says it did not register purchases from two of them, another had deforestation that was lower than 6.25 hectares, while it claims the last ranch had overlapping land boundaries that made monitoring its compliance difficult. Global Witness in turn evaluated all the justifications, and found them to be invalid, standing by the initial allegations. For a more detailed description of Minerva’s claims and Global Witness’s counter claims, please access this link.

When Grant Thornton was asked for comment on why these 16 cases were missing from its audits, it replied stating “our work is limited to the scope under the related agreements, and that “for reasons of professional confidentiality” it is not allowed to “provide detailed information on the work performed”. It failed to mention that it provided several recommendations on how the prosecutor’s agreement could be reformed, which then influences the scope of the very audits it carries out.

Auditors are crucial in verifying Minerva’s cattle purchases comply with its agreements. © Bruno Kelly / Greenpeace
TRIUMPH INTO TRAGEDY

Birds are vital in removing waste from forests, controlling insect populations and helping pollinate and disperse seeds. The armadillo is also an ‘ecosystem engineer’, its burrows offering shelter and protection for myriad species. But in the protected area of Triunfo do Xingu, which means ‘Triumph of Clean Water’, they are under threat. It has been one of the most deforested protected areas in Pará, home to various threatened species. Last year’s Amazon fires badly impacted the area.

Within this region are vast ranches belonging to Agropecuária Santa Barbara (AGROSB). It was founded in 2005, and claims to be one of the biggest cattle and agriculture companies in Latin America. AGROSB is owned by a company co-founded by controversial Brazilian billionaire, Daniel Dantas. Investigative journalism outlet Reporter Brasil and NGO Mighty Earth reported last year that JBS, Marfrig and Minerva all bought cattle from the company.

Complementary research by Global Witness shows that AGROSB moved cattle from six indirect suppliers it owns - with over 4,400 hectares of deforestation to another of its ranches, Fazenda Espírito Santo. This ranch then sold cattle to Minerva in 2018 and 2019. Yet according to government satellite data, Fazenda Espírito Santo also contained deforestation, amounting to 10 hectares, for which, according to Imazon, it did not appear to have state or federal permits. Deforestation is thus embedded across multiple ranches that are involved in Minerva’s supply chain. None of this appeared in Grant Thornton’s 2018 audits. Once again, an apparent triumph of supply chain due diligence masks deforestation.

When these allegations were put to AGROSB, it replied stating that Brazil’s National Institute for Space Research (INPE) deforestation data should not be taken as evidence that forest clearance occurred in the ranch, and that instead it “should be used as a supplementary tool for the environmental agencies”. It added that remote analysis carried out by the Environmental Secretariat of the State of Pará (SEMAS) of Fazenda Espírito Santo’s land boundaries did not find any indication of deforestation in the area identified by INPE, determining the area was apt for pasture. Minerva agreed with AGROSB's assessment and claimed all the deforestation that happened in the farm preceded 22nd July 2008, making the ranch suitable to purchase from. Global Witness in turn disputes these claims. For a more detailed assessment of these issues, please access this link.

The great unknown

Minerva’s exposure to indirect suppliers is far more extensive. Grant Thornton admitted in its audit report Minerva “does not have systems or controls that allow for the monitoring of the totality of cattle purchases in the Amazon biome” from indirect suppliers. That alone breaches the Greenpeace agreement. Of all the indirect suppliers sending cattle to Minerva’s direct suppliers between 2016 and 2019, some 1,660 contained deforestation - totalling 43,000 hectares that occurred after January 2009. A total of 1,480 indirect suppliers should have been monitored to comply with the Greenpeace agreement, yet were not. This fundamentally undermines Minerva’s claims of environmental responsibility.

Unlike JBS and Marfrig, Minerva does not blame its failure to monitor whether its indirect suppliers are legally compliant on the lack of an official traceability system or on a lack of transparency. Instead, it argues a “lack of government subsidies” means it cannot trace and monitor its indirect suppliers. Yet this company made over $800 million in gross profits in 2019.

When all these allegations were put to Minerva, a spokesperson said: “Minerva Foods has been pioneering the monitoring of its indirect suppliers through a partnership with the National Wildlife Federation and Wisconsin-Madison University.”

The company said that the first report on its progress on monitoring indirect suppliers “is expected by late December 2020.” It failed to explain why this was not done almost a decade ago. However, unlike its competitors JBS and Marfrig, Minerva does at least promise to report on progress by the end of 2020, rather than 2025.
CASE STUDY

A SILENT FOREST

Rondon is in the top 10 most deforested municipalities in the infamous ‘Arc of Deforestation’ that spreads from the mouth of the Amazon south-west across Pará. Scientists call these areas a “silent forest”, as they have been denuded of their species. Partly deforested ranches in this devasted area are the source of some of Minerva’s cattle.

Minerva purchased cattle directly from Fazenda São Vicente from 2017 to 2019, despite the ranch containing 170 hectares of illegal deforestation. At least 10 other ranches containing deforestation totalling 264 hectares supplied Fazenda Sao Vicente between 2016 and 2019, almost all in Rondon. Two of these ranches have areas embargoed by Ibama. Minerva claimed deforestation within Fazenda São Vicente preceded July the 22nd 2008 and was therefore compliant with its prosecutor’s agreement, which Global Witness disputes – for more details please access this link.

Minerva also bought cattle from another non-compliant ranch, Fazenda Imperador which contained 70 hectares of illegal deforestation. Ten of Fazenda Imperador’s suppliers contained over 300 hectares of deforestation that Minerva failed to monitor. Minerva claims it has since blocked the ranch.

That amounts to over 900 football fields of forests cleared in just two supply chains among the thousands of farms that directly or indirectly are involved with the company.
Minerva’s Bankers

In September 2019, Global Witness exposed Bank of America and the World Bank’s financing of Minerva. The World Bank stated then that all Minerva’s direct purchases were from zero deforestation areas. Yet this report illustrates that was not the case. The case studies appear to breach the World Bank’s Forest Action Plan aimed at “ensuring investments related to forests contribute to sustainable management of forests and value chains”. Regarding Minerva’s indirect suppliers, the World Bank last year insisted further progress depends on government legislation and law enforcement in Brazil, implying it was beyond Minerva’s capacity to monitor these supply chains. The work of civil society now shows monitoring indirect suppliers was possible throughout the period Minerva claimed a lack of government subsidies stopped it from being able to do this. In relation to Global Witness’s claims that Minerva purchased from 16 ranches that were not compliant with its agreements, the World Bank said geospatial analysis carried out by the company has “clarified the status of the ranches” and that as a result it was applying “a strict purchase policy to its direct suppliers”. Global Witness disputes these claims – for a more detailed analysis of these disputes please access this link.

Other banks are exposed to Minerva’s behaviour. HSBC underwrote almost $1 billion in bonds for the company throughout the period it failed to monitor its indirect suppliers. In 2016, HSBC won the Best Corporate High-Yield Bond award of Latin Finance Deals for its services to the beef company. This contradicts the bank’s forest policy, which states it “will not knowingly provide financial services to customers involved directly, or indirectly via the supply chain, in … forests being converted to non-forest use”. When Global Witness’s allegations were put to the bank it replied that it welcomed “well-researched, informative contributions from civil society organisations” but that “client confidentiality prevents us from commenting on specific companies”. In HSBC’s Agricultural Commodities Policy, in the section that deals with palm oil, it states that “new customers are required to consent, before financial services are provided, to HSBC being able to disclose publicly whether the customer is or was a customer of the bank”. Yet in the same document it fails to make this commitment for the cattle sector in the Amazon, despite the industry’s links to large-scale deforestation.

In January this year, JP Morgan acted as a manager of a share issuance for Minerva worth almost $300 million. In its environmental policy, the bank claims it carries out “enhanced reviews” of clients with operations in “critical habitats”. If such a review was carried out it was deficient. The bank is also a member of the Soft Commodities Compact – a global initiative of multinational companies linked to commodities involved in deforestation that aimed to achieve “zero net deforestation” by 2020. JP Morgan appears to have failed this goal as well. The bank is also exposed to JBS, holding $1.27 million in shares as of March 2020. The bank did not respond to the offer of a comment.

As Global Witness has repeatedly highlighted, banks and investors seem ready to break their deforestation policies at will, with little evidence of rigorous due diligence on deforestation risks.

The unparalleled biodiversity of the Amazon is being imperilled by cattle ranching. © Alois Indrich / Greenpeace
HOW CREDIBLE ARE THE CREDIT RATING AGENCIES?

A company’s credit rating shows investors it is a safe bet. Three credit rating agencies dominate the industry: Moody’s, Standard & Poor’s (S&P) and Fitch.\(^{337}\) So important are they, that when they gave their highest ratings to three trillion dollars worth of bad credit, it helped crash the global economy in 2008.\(^{338}\) Now their ratings could be contributing to another crisis: the destruction of tropical forests.

As the devastation of the Amazon escalated, these three agencies failed not only to downgrade the ratings of JBS and Marfrig for their links to deforestation but gave them more favourable ones, despite promising to take into account the environmental performance of companies.\(^{339}\) As of May 2020, S&P upgraded JBS’s credit rating, without mentioning its links to deforestation.\(^{340}\) In a 2020 report, S&P described Marfrig’s credit rating as “stable”. Once again, deforestation was not mentioned.\(^{341}\)

The agency Fitch also upgraded JBS’s credit rating in June 2020.\(^{342}\) Yet reviewing the last three years of Fitch’s reporting on JBS’s ratings shows deforestation was simply not a consideration.\(^{343}\) Fitch also recently upgraded Marfrig’s credit rating. Deforestation was again not considered.\(^{344}\) Neither did Moody’s recent credit upgrades for JBS and Marfrig include deforestation as a risk.\(^{345}\)

Some agencies evaluate a company’s environmental performance separately from its credit rating. S&P, for example, said: “There is no link between an ESG Evaluation and a credit rating – they are two separate opinions. When assigning an ESG Evaluation to a rated entity, we do not expect to learn any new ESG-related information material enough to affect the credit rating.”\(^{346}\) Thus, if a company is linked to environmental damage, this, according to S&P, should not impact its credit rating.

Even when ESG risks were highlighted, these had little to do with environmental issues and rarely impacted a rating. In Moody’s upgrade of JBS’s ratings for example, they only highlighted “judicial processes” and “litigations” against the company as risks for investors, but despite this upgraded the rating anyway.\(^{347}\) In S&P’s credit upgrade for JBS they stated the only ESG risks for investors related to official investigations of the company’s “major shareholders for corruption”\(^{348}\) - but again this did not stop the upgrade.

ESG issues are thus ignored, or seen exclusively as governance risks. Meanwhile, JBS and Marfrig are rewarded for their failures by investors that do inadequate due diligence, encouraged by credit ratings and agencies that do not sufficiently factor in the companies’ links to the destruction of the Amazon.

When these allegations were put to the credit rating agencies, Moody’s replied stating its “credit ratings reflect the likelihood that entities will meet their debt obligations on time and in full, and incorporate ESG and climate risks to the extent that they are material to credit. Beyond credit ratings, Moody’s and its affiliates offer a variety of tools for evaluating companies on the basis of ESG and climate factors.”

Fitch replied stating it had registered our allegations “as a complaint for review by Fitch Ratings’ control function”. It added: “JBS scores five under one of its ESG Relevance Score risk elements, which means that this ESG element has a significant impact on its rating and acts as a constraint on its speculative grade rating. Marfrig, also speculative grade, has a score of 4 under a similar ESG risk element that also impacts its ratings.” Standard and Poor’s did not respond to our requests for a comment.
AN ABSENCE OF LAWS, AN ABSENCE OF FORESTS

It is not just banks, investors and credit rating agencies failing to tackle deforestation. Governments allow financial institutions to do billions of dollars worth of business with the beef giants, without requiring due diligence on deforestation risk or human rights abuses.

Banks and investors’ headquartered in Brazil, the EU and the US either provided or facilitated over $9 billion in investments and loans received by JBS, Marfrig and Minerva between 2017 and 2019. Of this, $4 billion - or 44% of the total - were from EU and US-headquartered backers. Yet of these jurisdictions, only France has a law requiring large businesses, including banks, to identify and prevent serious environmental and human rights harms - which covers the need to act on forest destruction.

Then there are credit rating agencies. Yet as previously mentioned, over the last two years they have upgraded JBS, Marfrig and Minerva’s ratings without sufficiently taking into account or mentioning the companies’ links to deforestation. This shows the inadequacy of leaving it to business to combat forest destruction. Governments are effectively complicit in the destruction of the Amazon by failing to require deforestation-free supply chains and finance as the market norm.

As Amazon deforestation rises - casting the failure of voluntary commitments into sharp relief – there is a growing debate on the need for new laws requiring businesses, including banks and investors, to undertake due diligence on deforestation and forest-related human rights abuses. Each year, the environmental organisation Global Canopy Project, assesses the voluntary no-deforestation commitments of major companies and financial institutions. In 2019 its Forest 500 list concluded “voluntary commitments to end tropical deforestation by 2020 have failed”, claiming the financial sector is “ignoring the problem.”

Joint briefings published by Global Witness and the environmental legal specialists Client Earth detail the measures that would enable the UK and EU to “tackle deforestation, environmental harm and human rights abuses by introducing mandatory due diligence.”

These ideas appear to be gaining traction. In March 2020, a UK government-taskforce – the Global Resources Initiative – recommended that the government ‘urgently’ adopt a mandatory due diligence obligation so that businesses and financial institutions avoid deforestation in their supply chains and portfolios respectively. In September 2020, the UK government undertook a public consultation on a potential law to address its role in imported deforestation. The EU is also contemplating new laws to tackle deforestation associated with EU imports and financing. In the latter half of 2020 the European Parliament put out a landmark report citing the need for new laws, including on finance. Over a million people also made submissions to an EU consultation on deforestation which also put the possibility of new laws on the table. Key companies like Nestle and Tesco are also backing calls for regulation.

Investments and loans received by the three beef companies between 2017 and 2019

<table>
<thead>
<tr>
<th>Beef traders</th>
<th>Amount of investments and loans received between 2017 and 2019 in USD</th>
<th>% share of finance by jurisdiction of origin (according to the headquarters of the financier facilitating or providing the finance)</th>
</tr>
</thead>
</table>
| JBS          | $4.8 billion                                                 | Brazil – 59%  
|              |                                                               | US - 34%  
|              |                                                               | EU - 2% (excluding UK)  
|              |                                                               | UK - 1%  
|              |                                                               | Others – 1% (of which Canada accounted for 50%) |
| Marfrig      | $3.5 billion                                                 | Brazil - 45%  
|              |                                                               | EU - 14% (excluding UK)  
|              |                                                               | UK - 14%  
|              |                                                               | US - 12%  
|              |                                                               | Others – 14% (of which Japan accounted for 65%) |
| Minerva Foods | $1.3 billion                                                 | Brazil - 45%  
|              |                                                               | US – 30%  
|              |                                                               | UK – 14%  
|              |                                                               | EU – 9% (excluding UK)  
|              |                                                               | Others - 1.5% (of which Switzerland accounted for 33%) |
Faraway consumers are exposed to deforestation in the beef companies’ supply chains. In 2019, Mighty Earth exposed how Walmart, Carrefour, Sainsbury’s and Marks and Spencers were all buyers of JBS products. Yet Sainsbury’s recently signed an open letter by more than 40 leading companies, threatening to boycott products from Brazil if its congress approves a bill they warned would “encourage further land grabbing and widespread deforestation which would jeopardise the survival of the Amazon.” Global Witness contacted Sainsbury’s and asked if they still sold JBS beef, to see if their concern for the Amazon extended to their current products, yet received no reply.

Another NGO, Chain Reaction Research, assesses the risks major corporations face sourcing from or financing companies linked to deforestation. Last year it investigated Carrefour, the French supermarket with over 12,000 stores across Europe, South America, Africa, Middle-East and Asia. Some of Carrefour’s beef products originated from Amazon-based slaughterhouses operated by JBS and Marfrig, despite the supermarket’s promise to eliminate deforestation risk from its products by 2020. Chain Reaction also reported that Carrefour’s policy “does not apply to processed or frozen beef products”. Neither does it publish progress reports or a list of its beef suppliers.

Mighty Earth also alleged McDonald’s, Subway and Nestle bought from Marfrig, while the Bureau of Investigative Journalism (BIJ) reported Burger King was a major Marfrig customer. The BIJ also reported that JBS, Marfrig and Minerva exported beef worth nearly £1 billion to the UK in recent years. Export data obtained by Global Witness shows that in March 2020 alone, the three companies shipped more than $44 million-worth of beef to global markets, including EU, US and Chinese importers. Companies in China like Sunlon Supply Chain Service Dalian and Wuhu Shuanghui Import & Export Trade dominated imports, accounting for a combined 50% of the total from the country. In 2017, the supply chain data experts TRASE found JBS, Marfrig and Minerva’s beef exports to more than 400 importers were worth more than $4 billion.

Top 10 importing jurisdictions of JBS, Marfrig and Minerva beef products (TRASE data 2017)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Jurisdiction</th>
<th>Amount in USD</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CHINA</td>
<td>1,386,770,301</td>
<td>34.40%</td>
</tr>
<tr>
<td>2</td>
<td>IRAN</td>
<td>470,210,221</td>
<td>11.66%</td>
</tr>
<tr>
<td>3</td>
<td>EUROPEAN UNION (excluding the UK)</td>
<td>442,811,235</td>
<td>10.98%</td>
</tr>
<tr>
<td>4</td>
<td>EGYPT</td>
<td>377,066,530</td>
<td>9.35%</td>
</tr>
<tr>
<td>5</td>
<td>RUSSIAN FEDERATION</td>
<td>268,056,830</td>
<td>6.65%</td>
</tr>
<tr>
<td>6</td>
<td>CHILE</td>
<td>263,220,292</td>
<td>6.53%</td>
</tr>
<tr>
<td>7</td>
<td>UNITED STATES</td>
<td>141,484,576</td>
<td>3.51%</td>
</tr>
<tr>
<td>8</td>
<td>UNITED KINGDOM</td>
<td>116,362,948</td>
<td>2.89%</td>
</tr>
<tr>
<td>9</td>
<td>SAUDI ARABIA</td>
<td>105,367,676</td>
<td>2.61%</td>
</tr>
<tr>
<td>10</td>
<td>UNITED ARAB EMIRATES</td>
<td>71,781,431</td>
<td>1.78%</td>
</tr>
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</table>
TOO MANY SIGNS,
TOO MANY WARNINGS

For years, Brazilian civil society has repeatedly flagged the beef companies' exposure to deforestation.

In 2017, Imazon warned Amazon slaughterhouses owned by JBS, Marfrig and Minerva were at risk of buying from cattle ranches with deforestation. That same year, Greenpeace Brasil suspended its agreement with JBS after an Ibama investigation accused the company of purchasing cattle from ranches with illegal deforestation. The NGO called the “illegal practices” a “blatant violation” of the prosecutor’s agreement, saying it would suspend negotiations with the company until it could prove its supply chain was deforestation-free. A few months later, Greenpeace Brasil also suspended its agreements with Marfrig and Minerva, stating: “No slaughterhouse can guarantee its production is not linked to the destruction of forests.”

Also in 2017, Reporter Brasil reported Brazilian prosecutors had accused JBS of buying cattle from an alleged illegal land grabber they claimed responsible for illegal deforestation.

In 2018, Brazilian NGO Oeco reported on the failure of JBS to comply with its prosecutor’s agreement, after the Federal Prosecutor’s Office in Pará revealed 19% of all JBS’s cattle purchases in 2016 were non-compliant.

In 2019, an investigation by Repórter Brasil, the Guardian and the Bureau of Investigative Journalism (BIJ) alleged JBS was purchasing cattle from embargoed areas. JBS denied the claim.

Also in 2019, following the public outrage at the Amazon fires, Reporter Brasil and the Bureau reported Marfrig “bought cattle from a farm using deforested land in a part of the Amazon … ravaged by forest fires.”

In March 2020, Reporter Brasil accused JBS and Marfrig of purchasing cattle from ranches that had, in turn, bought cattle from an Amazon rancher accused of a massacre. JBS denied the rancher was on their list of suppliers while Marfrig claimed they were tackling the problem of indirect suppliers in a new partnership with WWF.

In June 2020, Greenpeace Brasil accused JBS, Marfrig and Minerva of purchasing thousands of cattle linked to ranches with deforestation in the state of Mato Grosso. This July, Amnesty International released a report claiming cattle illegally grazed in the Amazon ended up in JBS’s supply chain. The company said it was dealing with issues raised in the report through numerous initiatives.

In September the sustainability risk analyst Chain Reaction Research (CRR) published a report exposing how in 2019 JBS purchased from 983 Amazon ranches with 20,296 hectares of deforestation and had over 1,800 indirect suppliers with over 50,000 hectares of deforestation in its supply chain. Yet these were only samples. Using these cases, CRR estimated that in 2019 JBS may have purchased from direct suppliers with 200,000 hectares of deforestation, with indirect suppliers linked to its supply chain containing over 1.5 million hectares of forest clearance.
THROUGH THE HAZE

Between 2005 and 2013, state interventions helped bring about an unprecedented 70% drop in Amazon deforestation, making Brazil a world leader in the reduction of harm to rainforests. The Greenpeace and the prosecutor’s agreements were essential advances in this effort. Yet the consistent exposure by Greenpeace Brasil, Reporter Brasil, Imazon, Amnesty International, Chain Reaction Research, as well as others, and now Global Witness, question the extent to which JBS, Marfrig and Minerva are willing to go to fully abide by their commitments. The election of President Jair Bolsonaro has made the situation worse, with the safeguards and agencies that protect the Amazon coming under ferocious attack. As a result deforestation of the most climate critical forest on earth is rising steeply, and all the progress made between 2005 and 2013 is being lost.

In the middle of this crisis, the beef companies are continuing to purchase cattle without effective measures in place to ensure compliance with their agreements, while also failing to make their supply chains fully transparent, trackable and accountable. They are also standing by as independent and publicly available cattle transport permits are, in some Amazon states, becoming increasingly difficult for civil society organisations to access. Worse, the companies are even claiming that accessing these permits is not legal, contradicting various legal analyses commissioned by Global Witness and others which shows accessing these documents was and is possible. The time has come for them to act. Yet their responses to the allegations inspire little confidence they are fully complying with their commitments.

And the audits carried out by DNV-GL and Grant Thornton – which play such a crucial role in verifying the beef traders’ compliance – are, in our view, deficient. Too many cases of ranches with deforestation have escaped their attention. There are also questions of conduct in the case of DNV-GL. Both firms must account for the failings exposed in this investigation.

JBS, Marfrig and Minerva flaunt these flawed audits to assure the financial world their credit and investments are not linked to deforestation, while their banks and lenders fail to scrutinise and hold them to account for their failures. Worse, as banks compete to carve out their share in the niche ‘green finance’ markets to show off their environmental credentials, they fail to address concerns raised about deforestation in their much larger ‘non-green’ financial portfolios. Despite civil society repeatedly exposing deforestation and human rights violations in Brazil – including those linked to the beef giants – banks and their home stock exchanges have not fully grasped there will be little trust in ‘green finance’ products if the same banks offering them are making headlines for their exposure to large-scale environmental destruction in crucial ecosystems like the Amazon. All the while credit rating agencies encourage the financial sector to carry on investing and lending to the beef companies, without sufficiently prioritising environmental concerns in their credit scores.

Supermarkets, fast food outlets and importers profit from the beef companies’ failures by buying their tainted beef. Aside from France, governments do not require any of these actors to carry out due diligence before buying from or investing in the beef giants, with no laws in place to hold them to account. The result is a perfect storm. Every player from the ranches that raise cattle, to the goliaths of Brazil’s beef industry, international auditors, iconic financial backers, supermarkets, importers and fast-food chain stores, are either destroying rainforests directly, complicit in their destruction or not doing enough.

Companies and finance are failing to take the action necessary to ensure they are not fueling deforestation. Governments must now take action commensurate with the urgency of the situation and introduce regulation obliging banks, investors, supermarkets and importers to ensure they undertake rigorous checks on deforestation and forest-related human rights abuses.

Financial institutions and others now need to put their money where their mouth is to ensure they are not complicit in forest destruction, and withdraw their backing from the beef giants if they are unable to verifiably show they are not involved in the destruction of the Brazilian Amazon.

The future of this climate critical rainforest, its biodiversity and local communities now depend on companies, financiers and governments taking urgent action to ensure they are not complicit in this irreversible destruction.

Anything else is just greenwashing.
RECOMMENDATIONS

Governments in countries whose businesses import, finance or invest in forest-risk commodities should:

- introduce legislation requiring businesses, including finance, to identify, prevent, mitigate and report on deforestation risk and forest-related human rights risks.
- ensure that trade negotiations with Brazil do not increase the pressure on Brazil’s forests by promoting trade in beef and other commodities linked to the deforestation of the Amazon.

The financial actors, importers and supermarkets exposed to the beef companies should:

- immediately suspend any services, financing or contracts with JBS, Marfrig and Minerva and all meat traders sourcing in the legal Amazon until, at minimum, the conditions are in place to undertake basic due diligence on the companies, including full supply chain transparency.
- clearly signal what they will do if JBS, Marfrig and Minerva fail to acknowledge and act on the facts of this report and other civil society exposés— including on the evidence of deforestation and human rights abuses in their supply chain in breach of their own policies and legal requirements.
- investigate and report on whether they have legally misled their shareholders or clients as to their due diligence processes, including any potential exposure to handling the proceeds of crime.
- adopt a zero tolerance policy for threats and attacks on environmental and human rights defenders.
- call for Brazilian state authorities to ensure that publicly available and independent data that tracks the lifecycle of cattle, such as cattle transport permits, are easily accessible.

Credit Rating Agencies should:

- immediately suspend ratings services to JBS, Marfrig and Minerva if they are unable to address the methodological issues that perversely incentivise deforestation.

JBS, Marfrig and Minerva should:

- ensure full, accessible and publicly available data on their supply chain which would allow independent scrutiny, including by civil society, of their entire supply chain and any actions taken against non-compliant suppliers identified.
- create a more detailed, time-bound plan to remove all non-compliant indirect suppliers from their supply chains that is appropriate to the urgency of Amazon deforestation.
- require suppliers, at point of purchase, to provide full documentation that tracks the cattle’s lifecycle and owner throughout the supply chain as well as proof of full compliance with Brazil’s Forest Code.
- immediately commit to a mandatory reporting policy, which requires staff if they become aware of any suspected breach of Brazilian law or human rights abuses by their suppliers to report this to relevant authorities.
make it a formal condition of entering into business with them, that ranches are required to comply with legislation and company policies. If ranchers breach these conditions take legal action against them.

**DNV-GL, Grant Thornton and future auditors**

- DNV-GL and Grant Thornton should investigate and publicly report on why their auditing of JBS, Marfrig and Minerva failed to identify the cases uncovered by Global Witness. Do not take on any further audits related to the companies until this is done and until the necessary measures to address these issues are adopted.
- Other auditors considering taking on future audits should require these follow a methodologically robust process. This should include analysis based on 100% of cattle purchases, and that company data is cross-checked against independent and public data, and full company clarifications or comments appear in an annexed document to the audits.

**Environmental Federal Prosecutors should:**

- strengthen the audit methodologies to monitor the beef companies’ compliance with their non-prosecution agreements. This should include requiring that 100% of their cattle purchases are audited and that the audit’s initial findings are available in full.
- ensure that company comments provided to auditors to clarify or justify purchases from non-compliant ranchers be published in full and separately to the audits.
- review whether the current margin of error provided to beef companies for monitoring deforestation within ranches to check on their compliance with the non-prosecution agreements should be updated. This should consider the progress that has been made in satellite technologies that now permits identifying deforestation that is lower than 6.25 hectares.
- write into non-prosecution agreements a requirement for the beef companies to suspend cattle purchases from ranchers that are under investigation by prosecutors or that face legal action related to allegations of agrarian related violence and/or landgrabbing and/or human rights abuses.

**The Brazilian government should:**

- reverse the recent de-funding of forest enforcement and protection agencies and fully implement Brazil’s Forest Code.
- ensure that the rights of indigenous and forest communities are met.
- ensure that publicly available and independent data that tracks the lifecycle of cattle, such as cattle transport permits, are easily accessible.

The Amazon captures 5% of global annual carbon emissions, and is home to an estimated 390 billion individual trees. Vinicius Mendonça, Ibama
**METHODOLOGY**

Wherever deforestation amounts, or numbers of cattle, or ranch name or rancher from which JBS, Marfrig and Minerva purchased cattle, is mentioned in the report, these were the result of this methodology. It describes the method through which Global Witness was able to make those claims.

Global Witness obtained cattle transport permits (GTA) for the years 2014 to 2019 from the website of the Sanitary Agency of the State of Pará (Agência Sanitária do Estado do Pará - Adepará) to identify the cattle suppliers to JBS, Marfrig and Minerva over the 2017 to 2019 period.

The Federal Government requires these documents for sanitary control as cattle are transported around the country. They show movements of cattle from birth to slaughter. Legal research commissioned by Global Witness shows these are publically accessible documents (this analysis can be found below).

The data were filtered using the information in the GTAs that permitted to see the destination of the cattle to slaughterhouses owned by JBS, Marfrig and Minerva between 2017 and 2019. In the case of JBS and Marfrig, only GTAs that indicated the end-use of the cattle as “for slaughter” were used, while for Minerva the filters “quarantine” and “export” were used, given the company only exports livestock from Pará and does not have a slaughterhouse there. The aim of this was to ensure only these cattle would be considered in the analysis and not others that may not have been slaughtered, quarantined or exported on/from the premises of the beef companies. Additionally, Global Witness only used GTAs with the status “in transit” and “arrived at destination”, excluding those with the status “cancelled”. Cancelled GTAs are when a GTA was issued but then subsequently cancelled, thus indicating the cattle never went to the slaughterhouse.

Global Witness then downloaded all ranch boundaries from a publically available website of the State of Pará - the rural environmental registry (SICAR). SICAR is a rural environmental property registry that requires all cattle ranchers to upload information on: the size of the ranch, the owner of the ranch and the shapefile of the ranch, among other details.

We then matched the SICAR data with the GTA data. This was done through an automatic process which matched GTA and SICAR data on the following:

- the name of the ranches on the GTA and SICAR
- the name of the ranch owners on the GTA and SICAR
- the establishment code named in the GTA with a unique code for rural properties on SICAR called the “numero de recibo”. Part of these codes identifies the ranches’ location in a municipality.

The first selection concerned the ranches where there was zero name difference between the names on the GTA and the SICAR. Subsequently, there was a second selection of names that did not exactly match between the GTA and the SICAR. This was done to select those cases where the differences were exclusively due to:

- capital letters versus smaller letters on the GTA and the SICAR respectively
- differences between accents in one name but not the other (for example São and Sao)
- slight variations in spellings, but where the owner of the ranch and its municipality were the same, and wherein no other ranches with that spelling owned by that rancher were found
- where in the GTA the name of the owner was placed in brackets next to the name of the ranch, which apart from that coincided precisely with the ranch name and owner on the SICAR

Apart from matching ranch names, the CPF/CNPJ of the ranch owner had to coincide, the name of the owner had to coincide, as well as the rural establishment code on the GTA with the first digits of the “numero de recibo” on the SICAR data set.

The shapefiles of these ranches were then visualised in a software tool called QGIS. Global Witness then obtained official Amazon deforestation data from the Brazilian Government’s National Institute for Space Research (INPE-PRODES) and overlaid that with the land boundaries of the ranches that supplied to the beef companies over the period.

Once this process was done, deforestation polygons were then checked to see if they complied with the beef companies’ Greenpeace and prosecutor’s agreements:

- Deforestation identified in a ranch after July 22nd 2008 – the date that the prosecutor’s agreement contemplates
- Deforestation identified in a ranch after October 2009 – the date that the Greenpeace agreement contemplates
- Deforestation in a ranch that exceeded 6.25 hectares
Deforestation that preceded the date of purchase on the GTA

Deforestation where 10% or more of the official deforestation polygon was within the ranch. This was an additional criterion used according to a protocol recently developed by the NGO Imaflora, which aims at unifying the different methodologies for the Greenpeace and prosecutor’s agreement and in which the beef companies participate. This did not apply to the period we contemplated - nonetheless we applied this filter to reduce the number of cases.

Some ranches with deforestation overlapping inside its boundaries by less than 6.25 hectares were analysed and validated by Global Witness. This was done since the Greenpeace Agreement does not have a minimum requirement for deforestation size and nor did the prosecutor’s agreement over the period analysed.

Subsequent to this analysis, a further process of validating the deforestation identified by Global Witness was done on a platform of a company used to visualise deforestation: TERRAS390/BusCar391.

The criteria used by TERRAS were the following:

1. Polygons of deforestation identified after 22/07/2008;
2. Waste class deforestation polygons identified subsequent to 22/07/2008;
3. Deforestation polygons under cloud cover identified subsequent to 22/07/2008;
4. Deforestation polygons bigger than 6,25 hectares (not added up);
5. Only that deforestation that was at least 60 meters from the border of the ranch was considered, which was equivalent to two land pixels on Landsat imagery.

Once these filters had been applied, each deforestation polygon was then subjected to visual validation by TERRAS on the 1:50,000 scale using Sentinel and Landsat imagery, with before and after images, to remove false positives.

This process produced two lists of ranches:

1. The first list where the deforestation found by Global Witness was validated and confirmed
2. The second list where deforestation found by Global Witness did not adhere to the criteria stipulated above

For each of these cases a PDF was produced with before and after imagery of deforestation, with an outline of the methodology. (See this link for these PDFs)

Global Witness then replicated the visual validation that TERRAS carried out on the same ranches, using Landsat and Sentinel imagery and using the methodology of the Brazilian Government’s National Institute for Space Research for visual validation of deforestation (INPE-PRODES - Metodologia PRODES - DETER (Edição revisada) – page 17 onwards).

During this process, some of the ranches on list 2 were re-included into list 1, and PDFs were produced for these using QGIS imagery.

Once a final list had been developed, Global Witness then obtained from the NGO Imaflora historic land boundaries for those ranches as they were in 2017 and 2018, already having downloaded the ranch boundaries as they were in October 2019 from the environmental rural registry mentioned above (SICAR). Imaflora downloads the land boundaries of rural producers across the Amazon every year from official state websites. They do this since those same websites do not keep historic land boundary data sets for rural producers, yet these do change their boundaries on SICAR. It is thus important to see if these modifications impacted or not the ranches compliance with the beef companies legal and voluntary agreements.

Having obtained historic land boundaries for the selected ranches, Global Witness then checked them all to see if there had been changes to the ranch boundaries during the 2017 and 2019 period, in order to remove those instances where boundaries were modified to entirely exclude deforestation – barring one case study, which we placed in the report (Fazenda Espora de Ouro II) as an example of what Global Witness alleges was an act of fraud. Of all the ranches analysed, 68 modified their boundaries over the period, a modification which either excluded or included deforestation.

This process permitted us to arrive at a combined final list of 379 ranches, within which we were able to discern over 17,000 hectares of deforestation that occurred after July 22nd 2008.

Methodology for arriving at the illegality of the deforestation in the 379 ranches

Global Witness accessed publically available deforestation permits from the relevant Pará state entity SEMAS (https://www.semas.pa.gov.br/) and federal deforestation permits from the relevant federal forest inspection agency - Ibama (http://www.ibama.gov.br). This was done to see if the deforestation identified in the 379 ranches had the legally required permit or not.
This permit (called Autorização de Supressão de Vegetação) is required for rural producers that want to deforest in their property under article 26 of Brazil’s Forest Code - its main forest law. Under Chapter 5 of the law, titled “Of vegetation suppression for alternative use of land”, article 26 states: “The suppression of native vegetation for the alternative use of land, both on public and private land, depends on the property being registered in the Environmental Rural Registry (CAR) mentioned in article 29, and on prior authorisation from the competent state organ.” The competent state organ in Pará authorised to issue such permits is the Environmental Secretariat (SEMAS). The term native vegetation is defined in article 1, para A1 of the law as “forests and other forms of native vegetation.”

Additionally, Brazil has a Federal Decree on infractions related to the environment, Article 43 of which makes it an administrative infraction (not a crime) to: “Destroy, damage forests, or other forms of vegetation,...without authorisation from the competent authority.” Thus, if no authorisation for deforestation is granted, this is considered an infraction under this law. [Criminal offences against the environment are found in Law 9,605, from article 38 onwards].

It is possible to download the SEMAS Pará state permits from the following link: https://monitoramento.semas.pa.gov.br/simlam/index.htm

To access the permits click on “Licenciamento”, then on “Listar AUAS”. Then click on “Busca Avançada” and a further click on “Filtrar Busca”, which brings up the list of permits. At the time of access (March 2020) there were 122 registered permits, for which the following information is available:

Nº Título/Nº Processo/Modelo/Empreendimento/ Município/Ações

These contained the following information, which permitted a cross-check with the 379 ranches previously identified:

- Geographic coordinates for the permitted deforestation, which were overlaid onto the 379 ranches to see if these coordinates coincided within the boundaries of the ranches – none did. Where there were errors in the data, such as geographic coordinates where the longitude was placed where the latitude should be placed or vice versa, resulting in coordinates that were not in the state of Pará, Global Witness corrected these as much as possible.

- “Numero de recibo” – these are unique codes assigned to rural properties and which appear on some of the permits. These codes were also compared to the equivalents for the 379 ranches - none coincided.

Name of the Producer/the ranch/the company permitted to deforest, which were compared to the equivalents on the list of 379 ranches - none coincided.

CPF-CNPJ – unique tax codes for individuals, companies and rural property owners, which were compared to the equivalents of the 379 ranches – none coincided.

Of the 122 permits subjected to the above comparisons, 43 could not be downloaded and could not be subjected to that analysis due to problems with the state database. Nonetheless, information could be seen on the database that permitted further analysis. As a result, these 43 ranches were subjected to the following analysis:

- 31 of the 43 permits had the names of companies available on the SEMAS database. It was possible, using the companies’ names, to find the CNPJ (individual tax code) of the company through the official site of the Brazilian government (http://receita.economia.gov.br/), and compare these to the CNPJs of our list of 379 ranches – none coincided.

- 8 of the permits were for 7 individuals named on the SEMAS database. The names of these individuals were compared against the list of property owner names for the 379 ranches – none coincided.

- 2 of the permits were for rural properties named on the SEMAS database. These were searched on the SICAR database using the municipality of the location of the ranch detailed on the SEMAS database, then finding the declared owner of the ranch and their CPF. This was then compared to the 379 ranches – none coincided.

- 2 of the permits were of settlements where landless families reside - none of which coincided with the 379 ranches.

As a precaution, Global Witness did a freedom of information request to the Pará state entity SEMAS for the deforestation permits, and asked if any were missing, and received a reply stating all permits were on the publically accessible database. Additionally, Global Witness requested if any smaller state entities at the municipal level were able to provide these permits, and received a reply saying that for cattle grazing related deforestation, municipalities were not able to provide these permits.

As a result of this analysis, Global Witness concluded that none of the deforestation in the 379 ranches had the legally required permits, breaching the Forest Code and the Federal Decree, being therefore illegal. Furthermore, a Brazilian environmental lawyer specialist in the area validated the legal analysis and agreed with the findings.
Nowhere do we make the claim that the owners of the 379 ranches were responsible for the illegal deforestation. The only claim is that illegal deforestation happened within the boundaries of the relevant ranch contrary to the beef companies’ prosecutor’s agreement, as referenced in the report.

This analysis was replicated for the same permits as stored on the federal database, and the same result was obtained.

As a result, Global Witness concluded that the deforestation in the 379 ranches that sold to the beef companies between 2017 and 2019 did not have such permits, and was therefore illegal, breaching the cited part of the company’s prosecutor’s agreement.

Methodology for the identification of deforestation in the beef companies’ indirect suppliers

The GTAs permit the analysis of which ranches all of the beef companies’ total direct suppliers (with and without deforestation) buy their cattle from – so called indirect suppliers - to check if deforestation occurred in them. The beef traders should be monitoring deforestation in these ranches according to both agreements, and should be blocking those where cattle go from an indirect supplier to one of their direct suppliers and then to the slaughterhouse.

Global Witness quantified the amount of deforestation in the beef companies’ indirect suppliers by following the same methodology for the direct suppliers, but without the validation done in coordination with Imazon. The minimum 6.25 hectare filter for deforestation polygons was not applied, due to the fact that smaller deforestation in ranches is substantial and the agreements did not stipulate a minimum size of deforestation over the period contemplated.

The deforestation found in the indirect suppliers was subject to the following analysis:

- Deforestation after January 2009 for the prosecutor’s agreement. This date was selected rather than the 22nd of July 2008 date stipulated by the prosecutor’s agreement, to remove any instances of possible deforestation that may have preceded the 22nd of July 2008 date, but which could only be verified through the kind of visual validation carried out for the direct suppliers. Due to the sheer number of indirect suppliers with deforestation, it was not possible to subject them to this same level of additional validation. Thus this extra precaution.

- Deforestation after October 2009 as per the Greenpeace agreement requirements.

- Deforestation that preceded the date of purchase of the cattle by the beef companies on the GTA.

- Only direct suppliers that received cattle from indirect suppliers, and then sold cattle within 15 months of the arrival of that cattle to the beef companies, were considered. This was done to avoid those instances where an indirect supplier provided cattle to a direct supplier, which then only sold to the beef companies some years later, since this exceeds the average fattening period for cattle. Global Witness used a “fattening” period for cattle in direct supplier’s ranches of 15 months, to determine this filter. This period was based on an academic study by the Federal University of Minas Gerais, found here (page 35, para 3).

- More than 10% of the deforestation polygon had to overlap inside the ranch (we used the protocol coordinated by Brazilian NGO Imaflora to apply this filter – a protocol recently agreed on by the beef companies).

Wherever deforestation amounts, or numbers of cattle, or ranch name or rancher is mentioned in the report, these were the result of this methodology. Please contact Global Witness for any further information requests.

Further documentation and code for obtaining the relevant data and performing the analysis described above can be found here.

Argument for Marfrig’s legal responsibilities

Marfrig should not be purchasing cattle with illegal deforestation as per Brazilian law, as laid out by Federal Prosecutor’s in Marfrig’s prosecutor’s agreement for other Amazon states – laws which apply nationally.

Prosecutor’s cite Law no 6.938/81 (National Policy on the Environment), Article 2, number IV, which defines a polluter as “a legal or physical person, as a public or private legal entity, responsible, directly or indirectly, for activities that cause environmental degradation” while article 14 of the same law and article 225 of the Constitution of the Federal Republic state that the “causer of environmental damage, even indirectly, will be made responsible for that damage without the necessity of proving guilt, by virtue of the precautionary duty imposed on all in relation to the environment.” Law no 6.938/81 also states, in Article 14 §1, that the polluter “is obligated, independently of the existence of guilt, to repair or provide indemnity for damage caused to the environment and third parties,
that are affected by its activities. The Public Prosecutor’s office has the legitimacy to propose civil and criminal punishments for any damage to the environment.”

Federal Prosecutors also argue, through Articles 4.3 and 6.2 of the Law for Consumer Defence that “measures must be adopted for the identification and provenance, of quality and legality, of all products provided to consumers”.

Thus, when Marfrig buys cattle from ranches (directly or indirectly) with illegal deforestation, Federal Prosecutors argue it is failing in its precautionary duty to the environment, being thus a polluter that is responsible for causing environmental degradation (even if indirectly), failing to ensure the legal provenance of the products it then makes available for consumers, subjecting it to possible civil and criminal proceedings for breaking the aforementioned laws.

Global Witness used the date of 22nd of July 2008 as the date from which Marfrig should not be purchasing from ranches with illegal deforestation due to the revised Forest Code of 2012, article 59 of which states that “rural property owners cannot be penalized for infractions committed prior to July 22nd 2008”, provided they adhere to a “program for environmental regularization.” Thus we followed the date set by the Forest Code in this instance.

Excerpts of the legal arguments for the public accessibility of the cattle transport permits commissioned from legal experts

1. GTAs e e-GTAs.

The Guia de Trânsito Animal (Animal Transit Certificate, hereinafter referred to as “GTA”) was introduced by Portaria 22/95 issued by the Ministry of Agriculture, Livestock and Supply (hereinafter referred to as “Ministry of Agriculture”). It is an official public document issued by the Brazilian State through a federal representation office in some states of our Federation, mandatory for the transit of livestock, fertile eggs and other materials concerning animal breeding within our borders. It brings information on the origin, destination, sanitary conditions (health issues, vaccination) and the purposes of the displacement. It is issued and signed by veterinarians habilitated by the Federal Superintendence of Agriculture, Livestock and Supply, the local representation of the Ministry of Agriculture in each state.

Normative Instruction 18/06, issued by the Ministry of Agriculture, brought the official model of GTA to be followed in all states of the Federation. According to its article 4, it is incumbent to each state the issuance of the GTA, through its official department of animal sanitary defence, under the umbrella of the Ministry of Agriculture.

Normative Instruction 19/11, also issued by the Ministry of Agriculture, introduced the electronic format of the GTA, the so-called e-GTA. It stated that the e-GTA’s system must comply with the Brazilian Electronic Government Program, introduced by Decree 8,638/16, which is for the full disclosure and accessibility of online public information to civil society, aiming to stimulate social control and citizen’s participation in public matters. Nowadays, it is possible, in various states of our Federation, for anyone to access online the contents of any active e-GTA.

2. Regarding the public character of the GTA.

Since it is filled in, issued and kept by public officers in the performance of their duties, the GTA may be deemed a public document. A very relevant part of the legal literature and court precedents support this conclusion, as below described.

The information shall be deemed public whenever it has been produced, kept or guarded by any public entity and official, and is of evident public interest, except for a small group of documents and information classified as restricted, secret or confidential, upon justification by the competent authority, according to the law.

There are some court precedents in Brazil which have expressly declared the GTA a public document, including one recent manifestation by Supreme Court’s Minister Edson Fachin.

The GTA is an open document in the sense that our law does not specify or limit the reasons why and situations in which it should be disclosed, accessed and used. Notwithstanding being mandatory for purposes of animal transit, the law does not limit its use for such purpose, nor expressly forbids its consultation and use for other purposes.

In Brazil the general legal principle of constitutional and administrative law is that public officers and entities may only perform those acts expressly demanded from them by the law, while private citizens and legal entities are free to perform any acts not expressly forbidden by the law. Article 5, II, of the Brazilian Federal Constitution, sets forth that “no one shall be obliged to do or refrain from doing something except by virtue of law”.

Prominent professor of law Mr Hely Lopes Meirelles compares the activities of a public administrator with those of a private one as follows:

“In Public Administration there is neither freedom nor personal will. While in private administration everything the law does not forbid is allowed, in Public Administration it is allowed only what the law expressly allows.”
Under Brazilian law, everything must always be in accordance with our main law: the Federal Constitution. All legal matters emanate from the Constitution and must be in harmony with it. Even the behaviours of our President, Ministers, Governors, Congressmen, judges, prosecutors and even police authorities are subject to the Constitution. Also, any type of existing law and regulation below the constitution (law, decree, act, normative instruction, ordinance etc.) must be in accordance with the Constitution, reflecting and emanating the principles established therein. Therefore, any law, public act, order or decision, including sentences passed by judges, must necessarily comply with all articles of the Constitution, especially those setting forth the so-called fundamental rights and guarantees of individuals. These rights and guarantees are so relevant that they are deemed cláusulas pétreas, meaning “clauses that can never be supressed, amended or modified”.

All issues submitted to the appreciation of our Judiciary could end up in the Constitutional Court, the actual summit of our legal system: the Supreme Court of Justice (Supremo Tribunal Federal). Also, any type of law issued by the two houses of our National Congress, or by the Executive Power (presidency, ministries, state governors) are also subject to the ultimate validation of the Supreme Court.

With regard to the publicity of public documents, the Brazilian Constitution is very clear: the general rule is for publicity of any information of private, collective and general interest, excepting those which secrecy might be deemed indispensable for some very relevant and lawful reason, such as the security of the civil population and of the State. However, those exceptions must be expressly predicted by the law and openly declared by a competent authority.

Article 5 of the Brazilian Constitution (establishing the individual fundamental rights), includes the publicity of public information:

**Art. 5.** All persons are equal before the law, with no distinction whatsoever, Brazilians and foreigners residing in the country being ensured of inviolability of the right to life, liberty, equality, security and property, on the following terms:

(...) 

**XXXIII – all persons have the right to receive, from the public agencies, information of private interest to such persons, or of collective or general interest, which shall be provided within the period established by law, subject to liability, expect for the information whose secrecy is essential to the security of society and of the State;**

Meanwhile, article 37 of the Constitution mentions the publicity principle among the guiding principles of the public administration:

**Art. 37.** The governmental entities and entities owned by the Government in any of the powers of the Union, the states, the Federal District and the Municipalities shall obey the principles of legality, impersonality, morality, publicity, and efficiency, and also the following:

(...) 

**Paragraph 3.** The law shall regulate the forms of participation of users in governmental entities and in entities owned by the Government, especially with regard to:

(...) 

**II - the access of users to administrative records and to information about Government initiatives, with due regard for article 5, X e XXXIII;**

Item X of article 5 referred to in the final part of item II above refers to the protection of intimacy, private life and image of individuals as another principle of similar constitutional status. However, this constitutional provision does not apply to information of undeniable public interest, such as, for instance, any information on goods to be traded in the market, with possible impacts on public health, consumers’ rights, environment and so on. Or in cases in which a commercial activity or individuals are infringing some law. Wherever there is a crime or illegality being committed, the competent authorities should be notified to be able to do something to stop, investigate and prosecute it. Therefore, the right to intimacy or confidentiality of private data or image might always be weighed against other principles which, sometimes, will prevail.

The General Law for Protection of Personal Data (Law 13,709/18, which will only be in full effect next year) in its article 7 sets forth some circumstances in which there is no need of the owner’s consent for a third party to use its information, amongst which we underline the following: in studies and researches carried out by a research centre, respecting anonymity whenever possible and in the exercise of rights in judicial, administrative and arbitral proceedings. And then there is paragraph 3 of said law, stating: “the treatment of personal data the access of which is public must consider the purpose, the good faith and the public interest justifying its publicity”.

Therefore, even the specific law on the matter of protection of personal and sensitive information recognises the prevalence of the principle of publicity in certain cases and situations.
A Brazilian prominent constitutionalist, Mr José Afonso da Silva, reminds us that the publicity principle is one of the fundamental guiding principles of the Public Administration, and applies to any type of document kept, concluded or under elaboration by public officers of any kind, and thus should be made available to anyone interested in examining them at any time.\(^{399}\)

Another prominent Brazilian professor of constitutional law, Mr Celso Antônio Bandeira de Melo, points out that it is an administrative duty to keep its actions and behaviours in full transparency, for any citizen may be informed of public matters.\(^{399}\)

In compliance with the Constitution, Law 12,527/11 (known in Brazil as “LAI”, meaning “Law of Access to Information”) institutes the Brazilian FOI system and regulates the constitutional right of citizens to access any and all public non classified information. It applies and must be observed by the three Powers of the Union\(^{400}\). It reflects and reinforces the constitutional principle of publicity of all public information, except when secrecy is expressly declared by one of the very few authorities entitled to do so, and only in situations authorized by the law. This law also regulates the constitutional principle for protection of information of individuals, however limiting its scope and range with regard to the general principle for disclosure of any information of public interest.

Article 23 of the above mentioned Law 12,527/11 provides the hypothesis in which it is possible the declaration of secrecy. The list is both exceptional and exhaustive:

Art. 23. It is deemed indispensable for the security of the society and of the State, and, therefore, subject to classification as information which free disclosure and access may:

I – endanger the defence and national sovereignty or the integrity of the national territory;
II – harm or endanger the development of negotiations and international relations of the Country, or those secretly transmitted by other States and international bodies;
III – endanger the life, security or the health of the population;
IV – offer substantial risk to the financial, economic and monetary stability of the Nation;
V – harm or endanger the plans or strategic operations of the Armed Forces;
VI – harm or endanger research projects and the scientific and technological development, as well as systems, goods, facilities or areas deemed nationally strategic;
VII – endanger the security of institutions or national or international high authorities and its family members;

or

VIII – compromise intelligence activities, as well as investigation, ongoing inspection, regarding the prevention and repression of infractions.

According to article 23 above, it looks clear that none of the exceptions to the general rule for publicity seem to apply to GTAs. If there was any reason to believe that the free access and use of GTAs by the general public should be restricted because it would actually constitute some of the above situations, then some competent authority would have to expressly classify the GTAs, justifying and exposing its reasons. The competent authorities entitled to do so are very few, and the procedure to be followed for classification is detailed by Law 12,527/11.\(^{401}\)

The general rule for publicity expressed in the Federal Constitution and in Law 12,527/11 means that all information produced and kept by any public authority should be public and open to general consultation. In case some public information was not classified but, for some reason, is not yet open to public access, then it is subject to the so-called FOI request, also predicted and regulated by said law. It does not seem to apply to the GTAs though, since they are, or used to be, already open for public consultation at the proper governmental websites, in due observance of the general principle for publicity.

One of the reasons of existence of the GTA seems to be to assure to the civil society the access to relevant information on animals in transit within the country. It is clearly comprehended in one of the most fundamental principles of any democracy, which is the social control of all public matters. It is evident and even intuitive, and consequently a legal value consolidated as a constitutional principle (the principle of publicity), that any information on relevant matters such as health conditions, origin and destination of animals in transit within our borders should be always open and accessible to the population.

Under another point of view, no other interest or reason of the State, such as the general safety of the population, or protection of private data or image, seem to be higher than the type of public interest contemplated by this document. Therefore, nothing really seems to justify any type of secrecy covering the information contemplated in the GTAs. In reality, it is quite the opposite: the safety of the population is better served if GTAs are fully accessible by all citizens at any time.

The Ministry of Transparency, Supervision and General Controller’s Office of the Union, by means of a publication on the application of the law on general access to information in the Federal Public Administration, disposes:
The access to information is understood as a right which strengthens the participation of the civil society in matters of the State and the collectiveness, and which contributes to the accomplishment of other rights by the citizens. The importance of the accessibility of information for the enforcement and defence of rights is an issue contemplated in article 21 of Law No. 12,527/11, which emphasizes the guarantee of access to information necessary for the judicial and administrative protection of fundamental rights.\footnote{402}

The Manual on Access to Information for States and Municipalities, issued by the Controller’s General Office of the Union, states:

> “The guarantee of access to information brings advantages to the society and to the Public Administration. In general, the access to public information is an important requirement for the battle against corruption, the improvement of public management, social control and citizenship. The access to public information turns the active participation of civil society in governmental actions possible and, therefore, brings many gains, such as the accomplishment of fundamental rights.”\footnote{403}

This has been the understanding adopted by many Brazilian courts of law when deciding in lawsuits dealing with issues involving the publicity of public and administrative acts:

> “The principle of publicity of administrative acts honours the control and knowledge by all those interested and any and all persons, of documents existing in public bodies which demonstrates the accomplishment of administrative acts of the interest of the collectiveness.”\footnote{404}

> “The publicity and right to information should not be restricted based on discretionary act, except when justified, in exceptional cases, for the defence of the honour, image and privacy of third parties or whenever the measure is essential for the protection of the public interest.”\footnote{405}

> “The right of receiving information of private, general and collective interest from the public entities, excepting those which secrecy is deemed indispensable for the security of society and of the State, is safeguarded in the Federal Constitution (art. 5, XXXIII), and it constitutes abuse of power the violation of such norm, which may be corrected by this mandamus.”\footnote{406}

As pointed out by the Ministry of Transparency, Supervision and General Controller’s Office of the Union, in a publication on the “application of the law of access to information of the Federal Public Administration”:

> “The information produced and kept by the public sector must be made available to society, except for the exceptions provided in the law. In this sense, it is a basic principle found in Law 12,527/11 the so-called maximum disclosure, in which the publicity is the rule and secrecy the exception. The behaviour of disclosing data by initiative of the public administration itself not only imply on a reduction in the number of accesses, but suggests the perspective in which it is incumbent to the government solely the possession of such documents, being the people the real owner of the public information.”\footnote{407}

Thus, it is possible to conclude that the public access and consultation of GTAs, as well as the subsequent analysis, systematization and careful disclosure of information therein contemplated, or any opinion based on their analysis, is in consonance with a series of very relevant rights and guarantees consecrated in our Federal Constitution, reflected in lower legislation, and widely recognized by some of our most prominent legal scholars and courts of law.

From yet another angle, the legal reason behind the access and use of GTAs’ information may reinforce the legality of its very access and use, as well as its full conformity with the constitutional order. For instance, in case the person, entity or organisation accessing and subsequently disclosing some of the data contained in the GTAs do so for the purpose of protecting the environment will be acting in strict obedience of another duty imposed to the public authorities, individuals or organisations forming the collectiveness referred to in article 225 of the Federal Constitution:

**Article 225.** All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations.

Also, the consumers’ right provided by article 5, XXXII, of the Federal Constitution, and articles 6, II and III, and 31 of the Consumers’ Defence Code, assure to all Brazilian consumers the full access to any type of information on the products they might acquire. According to the Constitution, the State shall promote the consumers’ defence, another principle found in the list of fundamental rights and guarantees of individuals.

It is evident and intuitive that any type of information on the origin, sanitary conditions and destination of animals in transit within our borders, as well as on the
state of the facilities in which the animals are dealt with, and finally on any possible environmental impact of livestock activities, will always be of very high public interest, not only for possible consumers, but for the entire population.

Also, Article 57 of Decree 7,724/12 allow access to private information in cases of statistics and scientific research of obvious public or general interest, and of other people’s human rights’ defence. It is a growing sense that the environment is a modern type of human rights. These provisions and the Brazilian FOI (Lei de Acesso à Informação) may certainly be invoked and sustain one of the many legal justifications for accessing, using and even disclosing the information found on the GTAs. Even if they do not seem to apply to the GTA access, since they refer to personal information not open to the public and accessible through a FOI request. The information found on GTAs is – or should be - metaphorically already in the middle of the street, wide open and fully accessible on the Internet to anyone, at any time.

At this point, it is instructive to note that FOI dates back to 2011 and Decree 7,724 is from 2012. Evidently, since then the world has changed and evolved considerably, especially with regard to the kind of technology available to access information on the Internet. Legally speaking, it means that the interpretation of these laws should also evolve to consider this new era where all information - public and private - is much more open and accessible to anyone than before. The general constitutional principles mentioned above are especially appropriate to help in this necessary process of updating the so-called spirits of laws passed in older times.

Therefore, under all angles, from the constitutional law to consumers’ law, passing through the environmental and criminal law, it is always possible to argue and defend that any person is entitled to access information on the sanitary conditions of animals in transit within the Nation and which may possibly end up in their fridges and on their tables. Also, they have the right to know if their production involves any type of environmental harm, deforestation or other illegalities such as frauds and modern slavery.

As for the later disclosure or publication of information found on GTAs in the context of reports of social and political importance, this is clearly covered by the freedom of speech constitutional provision, another fundamental right foreseen in article 5. Especially if the aim of this disclosure is as relevant as human rights’ or environmental protection, which are not only relevant but also legal values equally protected by the same Constitution.

3. On the bulk access to GTAs using the latest software

The Brazilian FOI imposes on our Public Powers the obligation to make all public information accessible to the general public, in a clear, transparent and easily reachable way to any citizen. Paragraphs 2 and 3, and items II and III of article 8, disposes:

**Article 8.** It is incumbent to public entities to promote, independently from any request, the disclosure in a site of easy access, within the scope of its duties, information of collective and general interest produced and kept by them.

(…) Paragraph 2. For the accomplishment of the provided for in the caput, public entities must use all legitimate means and instruments within their reach, being mandatory the disclosure in official websites.

Paragraph 3. The websites mentioned in paragraph 2 above, in the form of the regulation, must observe the following requirements, amongst others:

(…) II – enable the recording of reports, including those open and not owned, such as spreadsheets and texts, for the purpose of facilitating the analysis of information; III – enable the automated access by external systems in open format, structured and readable by machine;

The combined reading of the above dispositions is clear: public entities have the duty to promote and disclose information of general and collective interest produced and kept by them, enabling the automated access by external systems in open formats, structures and readable by machines, in official websites.

Notwithstanding, article 8 of Decree 7,724/12, reproduces and thus reinforces the provisions of the FOI:

**Article 8.** The websites of public entities, in compliance with the norms set forth by the Ministry of Planning, Budget and Management, must meet the following requirements, among others:

(…) III – enable the recording of reports, including those open and not owned, such as spreadsheets and texts, for the purpose of facilitating the analysis of information; IV – enable the automated access by external systems in open format, structured and readable by machine;

Besides, Law 12,965/14 which institutes the so-called Internet Civil Framework (Marco Civil da Internet), sets forth principles, guarantees, rights and duties for the use of Internet within the country, providing that:
Article 4. The discipline of the use of internet in Brazil aims to promote:

(...)

III - innovation and promotion of the wide diffusion of new technologies and models of use and access; and

IV - adherence to open technological standards that allow communication, accessibility and interoperability between applications and databases.

Article 24. The guidelines of the action of the Union, the States, the Federal District and the Municipalities in the development of the internet in Brazil are:

(...)

III - promotion of the rationalization and technological interoperability of electronic government services, among the different branches and levels of the Federation, to allow the exchange of information and the speed of procedures;

IV - promotion of interoperability between different systems and terminals, including between different federative levels and various sectors of the society;

V - preferential adoption of open and free technologies, standards and formats;

The combined analysis of the above legislation, in light of the constitutional principle of publicity of public information, clearly indicates that the whole public legal system regulating the inclusion, disclosure and accessibility of information produced and kept by any official legal entity, points to the absolute openness, interoperability of systems and terminals, preferably by means of adoption by the public bodies of open and free technologies, standards and formats. Therefore, if there is no hacking activities involved in the access of GTAs, but solely the use of high-tech instruments and equipment matching the standards and formats of our official websites, then there seems to be no way to call it illegal.

Under Brazilian law, in fact every legal provision we could find seem to go towards the fulfilment of the constitutional principle of publicity and transparency of any and all public information, meaning all information produced or kept by any public entity, servant, officer or worker.

Disclosure of partnerships developed with landless and indigenous peoples

In this report Global Witness highlights the plight of landless peoples in the case study “The Lawless and the Landless”, and of indigenous peoples in the case study “Marfrig, Landgrabbers and Indigenous Land”. After having researched and reported on these cases, Global Witness is developing partnerships with a civil society organisation that is helping the landless peoples in their struggle for land, and with an indigenous organisation that represent the Parakanas. It should be noted that these partnerships are being developed after these investigations, and were not used to exchange information for the case studies reported on in this publication, and will begin subsequent to the report being published.
BEEF, BANKS AND THE BRAZILIAN AMAZON

1 World Animal Foundation, “They are the most primitive large mammals on the planet, having been around for 20 million years – changing very little”, https://www.worldanimalfoundation.com/animal_encyclopedia/params/category/173341/item/994002/

2 Rainforest Alliance, Species profile, Amazonian Tapir, please see the picture, https://www.rainforest-alliance.org/species/amazonian-tapir, https://tapirs.org/resources/educator-resources/resources-of-the-forest/

3 Indiegogo, Chasing Tapirs in the Amazon, Scouting Expedition, Conserving South America’s largest land mammal in the world’s largest tropical forest, “the tapir has a key role in seed dispersal, carrying seeds in their stomach for long distances within their home ranges. For this reason, tapirs are known as gardeners of the forest”. https://www.indiegogo.com/projects/chasing-tapirs-in-the-amazon-scouting-expedition

4 NCBI, AOB Plants, Inter-plant communication through mycorrhizal networks mediates complex adaptive behaviour in plant communities, 2015, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4497361/, BBC, Wood wide web: Trees’ social networks are mapped, 2019, “Research has shown that beneath every forest and wood there is a complex underground web of roots, fungi and bacteria helping to connect trees and plants to one another”, https://www.bbc.co.uk/news/science-environment-48257315


7 Tropical Forest Canopies: Ecology and Management, Arbooreal tropical forest vertebrates: current knowledge and research trends, 2011, https://link.springer. com/chapter/10.1007/978-3-642-19473-3_0


9 Smithsonian Tropical Research Institute, Balboa, Republic of Panama, University of Amsterdam, The Netherlands, Instituto Nacional de Pesquisas da Amazonia-INPA, Mauana, Brazil, University of Brasilia, Brazil, Smithsonian Tropical Research Institute, Balboa, Republic of Panama, and University of Saskatchewan, Canada, Cidade Universitária – Ilha do Fundão, Rio de Janeiro, Brazil, Universidade Estadual do Rio de Janeiro (UERJ), Rio de Janeiro, Brazil The origin of the modern Amazon rainforest: implications of the palynological and palaeobotanical record “The data indicate that the Amazonian rainforest is more likely to be a product of a dynamic geological history stretching back over the past 25 million years rather than the last few hundred thousand years”, 2010, https://www.academia.edu/1889959/The_origin_of_the_modern_Amazon_rainforest_implications_of_the_palynological_and_palaeobotanical_record


11 Observatory of the Clima; Imaffra; Emissões do Setor de Agropecuária, 2018, para 2 pages 1 and 4. On para 1 page 2 para 1 the report claims that agriculture accounts for 30% of Brazil’s total greenhouse gas emissions (GSE), and then in 2 page 2 page of that report they claim that 69% of those 30% agricultural GSE emissions relate to the cattle sector; https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEw5aLKqEiKE4AhUKEw5aKMuvAYgQFggcODA&url=https%3A%2F%2Fwww.imaffra.org%2Fdownloads%2Fbiblioteca%2Ffotorelatios%2FUEEG_2018-Agro_Final_v1.pdf&usg=AOvVaw2M17eVGxlRuxAaacIVI

12 Science Advances, Estimating the global conservation status of more than 15,000 Amazonian tree species, 2015, https://advances.sciencemag.org/content/1/10/e1500936

13 PNÁS, Biological annihilation via the ongoing sixth mass extinction signified by vertebrate population losses and declines, July 25, 2017, “The maps highlight that regions of known high species richness harbor large absolute numbers of species experiencing high levels of decline and population loss (particularly evident in the Amazon, the African central region, and south-east Asia)”, https://www.pnas.org/content/114/30/609


15 IMAZON, Sob a Pata do Boi, ebook, Introducao, page 7, para 4 (criação de gado na Amazônia, atividade responsável por dois terços do desmatamento acumulado na região – a criação de gado na Amazônia, responsável por dois terços dos acumulados de deforestação na região), https://www.imazon.org.br/publicacoes/sob-a-pata-do-boi-como-a-amazonia-vira-pasto, Carlos Eduardo Pellegrino Cerri 1, [OrCiDi], Carlos Clemente Cerri 2, Stoécio Malva Ferreira Maia 3 [OrCiDi], Maurício Roberto Cherubin 1 [OrCiDi], Brigite. Josefine Feigl 2 and Rattan Lal 4Reducing, Amazon Deforestation through Agricultural Intensification in the Cerrado for Advancing Food Security and Mitigating Climate Change, 2018, reference: “Cattle pastures represent the largest single use (about 70%) of cleared lands in the Amazon.”

16 Science Advances, Amazon Tipping Point, Thomas E. Lovejoy and Carlos Nobre, 21 Feb 2018, https://advances.sciencemag.org/content/4/2/eaat2340, Full

17 Google Books, Feeding the World: Brazil’s Transformation into a Modern Agricultural Economy, page 53, https://books.google.com/books?id=3WR0RDwAAQBAJ&pg=PA53&lpg=PA53&dq=biggest+global+beef+companies+ranked%2C+Imajona+&source=bl&ots=dcl0RvdSpiouQ&sig=ACfU3U17P7QZVD_MZdGdPHdH_nf5CqwQAHn&ved=2ahUKEw5aLKqEiKE4AhUKEw5aKMuvAYgQFggcODA#v=onepage&q=biggest%20global%20beef%20companies%20ranked%2C+Imajona&f=false


23 Instituto para Investigação Agrária e Desenvolvimento Rural, Matérias-Princeps: Ela Não Comeu, 2018, https://bd3bdf2f9-2cc8c4d0-45
Global Forest Watch, Download data, Para has the second largest forest area in the Amazon region.
50 On record for the area in Km² burned in the Amazon since 2010, http://queimadas.inpe.49

51 Área queimada (km²) por bioma por ano, 2019 was the third worst year of accumulated deforestation in the region, https://imazon.org.br/publicacoes/sob-a-pata-do-boi-como-a-amazonia-vira-pasto/.


54 IMAZON, Will Meat-Packing Plants Help Halt Deforestation in the Amazon?, 2017, pages 22-23 state “Responding to market appetite, local ranchers and new migrants to the Amazon deforested more areas in order to plant pastures. As a result, the herd in the Brazilian Amazon[1] grew from 37 million head (23% of the national herd) in 1995 to 85 million in 2016, or almost 40% of the national herd.” https://imazon.org.br/publicacoes/sob-a-pata-do-boi-como-a-amazonia-vira-pasto/.


56 Guardian, Brazilian meat companies linked to farmer charged with ‘massacre’ in Amazon https://www.theguardian.com/environment/2020/mar/03/brazilian-meat-companies-linked-to-farmer-charged-with-massacre-in-amazon


58 Reuters, U.S. bans fresh Brazil beef imports over safety concerns (“JBS, the world’s largest meat packer, must change the way it does business” on the U.S. ban”), https://reuters.com/article/us-agr-beef-agreement/us-bans-fresh-brazil-beef-over-safety-claims-idUSKBN2110ZM


60 See methodology for how we arrived at these conclusions


63 Daniel Nepstad,1 David McGrath,2 Claudia Stickerl,1 Anelanc,3 Andrea Azevedo,3 Briana Swette,1 Thaiszine Bezerra,1 Maria DiGiano,1 João Shimada,1 Ronaldo Serpa da Motta,4 Eric ArmiJo,1 Leandro Castrol,5 Paulo Brando,3 Matt C. Hansen,7 Max McGrath-Horn,1 Oswaldo Carvalho,1 Laura Hess8 Slowing Amazon deforestation through public policy and inter-state programs/amazon/prodes

64 IMAZON, Sob a Pata do Boi, ebook, Introdução, page 7, para 1: “O TAC da Carne is the approach to the food system framework for the MFP as frigorificos at the region in the Amazon”, https://amazon.org.br/publicacoes/sob-a-pata-do-boi-como-a-amazonia-vira-pasto/.


CompromissoPublico_DNVGL-2017_PT.pdf
2017: https://www.google.com/url?sa=t&rct=...
CompromissoPublico_DNVGL-2019_PT.pdf
70 JBS, JBS ANNUAL AND SUSTAINABILITY REPORT 2019, page 93 on the PDF
EM 2019, a empresa norueguesa DNV-GL, internacionalmente reconhecida como um
consultor e certificadora socioambiental, confirmou 100% de conformidade
socioambiental nas aquisições de gado realizadas pela companhia em 2018,
no bioma Amazônia. Translated: In 2019, the Norwegian company DNV-GL,
internacionalmente reconhecida como um consultor e certificadora socioambiental,
confirmou 100% de conformidade socioambiental nas aquisições de gado realizadas
pela companhia em 2018, no bioma Amazônia.
71 DNV-GL, Divulga relatório que reafirma seu compromisso com o fim
desse desmatamento, na Amazônia, Relatório de 2019, onde a empresa
segue sua política de compra responsável de matéria-prima em atendimento
divulga-relatorio-que-reafirma-seu-compromisso-com-o-fim-do-desmatamento-
da-amazonia-105374
72 Procuradoria da República no Pará, Frigoríficos melhoram índices de compra
de gado com origem legal no Pará, e MFP pede cerca a fraudes de produtores
73 Please see Global Witness’ methodology for how we arrived at these claims
74 Please see Global Witness’ methodology for how we arrived at these claims
75 Please see Global Witness’ methodology for how we arrived at these claims
76 Ministero Publico Federal, Frigoríficos melhoram índices de compra de gado
com origem legal no Pará, e MFP pede cerca a fraudes de produtores ilégas, Page
19, JBS – geral, row 3 where it says Quantity of irregular cattle acquired without
77 Please see Global Witness’ methodology for how we arrived at these claims
78 Global Witness analysis of JBS 2018 Para based cattle purchases cross
checked with SICAR and then PRODES, where the CAR and PRODES areas overlapped by at
least 10 hectares.
79 See methodology for how we arrived at these figures
80 Greenpeace Brasil, CRITÉRIOS MÍNimos PARA OPERAÇÕES com GADO e PRO-
DUTOS BOVÍNOS EM ESCALA INDUSTRIAL NO BIOMA AMAZÔNIA https://storage.
81 Ministerio Publico Federal, Termos de Ajuste de Conduita, JBS, page 3,
Article 2.1.1. para F, https://documentcloud.adobe.com/link/view/errurnumaa-
id:scds:Us:eb18e4af-43f6-4d6b-9707-3be5b0a9bd50
82 DNV-GL audits from 2016 to 2018 – Global Witness files.
83 See methodology for how we arrived at these conclusions
84 DNV-GL audits from 2016 to 2018 – Global Witness files.
85 Greenpeace Brasil, CRITÉRIOS MÍNimos PARA OPERAÇÕES com GADO e PRO-
DUTOS BOVÍNOS EM ESCALA INDUSTRIAL NO BIOMA AMAZÔNIA https://storage.
86 JBS, Press release, JBS announces “Together for the Amazon” program,
September 2020 https://jbs.com.br/jbstopelaamazonia/wp-content/up-
87 DNV-GL, Evaluation of the Fulfillment of the “Public Livestock Commit-
tment” , JBS S.A., 2019, page 9, https://www.google.com/url?sa=t&rct=...
88 HSBC Global Research, JBS (JBSS.E), Buy: Catalysts abound, page 1 (please
ask Global Witness for the document). The same document was refered to in a
recent Guardian article: HSBC sounds alarm over investment in meat giant due
to deforestation inaction, August 2020, https://theguardian.com/environment-
2020/aug/12/hbcs-sounds-alarm-over-investment-in-meat-giant-jbs-due-to-
deforestation-inaction
89 Reporter Brasil, Amazônia: como criadores de gado driblam acordo com MPF e
incentivam desmatamento https://reporterbrasil.org.br/2020/06/amazonia-como-criadores-de-gado-
(drriblam-acordo-com-mpf-e-incentivam-desmatamento/}
90 Everything you need to know about the Amazon, Mark J Potkin, July 2020
(Book) https://global.oup.com/academic/product/the-amazon-9780190668280?c-
try=us&cc=sa/18/16459?tipo=ranking&indicador=16533
91, Jorge Andrade, São Félix do Xingu: um caso de desmatamento em escala
de gado em terras indígenas, 2019, https://www.google.com/url?sa=t&rct=...
92 Instituto Brasileiro de Geografia e Estatística - IBGE, Portal Cidades@, São Félix
do Xingu - Resultados de Conservação e de Terras Indígenas_-_Resultados_Preliminares/
dvcs/ano/2019/resultado/16533resultados_de_conservacao_e_de_terrass_indigenas_-_resultados_preliminares/
dvcs/ano/2019/resultado/16533resultados_de_conservacao_e_de_terrass_indigenas_-_resultados_preliminares/
93 Wikipedia, “São Félix do Xingu is a municipality in the state of Pará in the
Northern region of Brazil. The city is served by São Félix do Xingu Airport.
With an area of 84,212.932 km², it is the largest city in Brazil by area,
besides_de_Conservacao_e_de_Terras_Indigenas_-_Resultados_Preliminares/
dvcs/ano/2019/resultado/16533resultados_de_conservacao_e_de_terrass_indigenas_-_resultados_preliminares/
94 Instituto Nacional de Pesquisas Espaciais – INPE, Terra do: analysis of deforestation before and after a decration of the
Unidades de Conservação e de Terras Indígenas – Resultados Preliminares
See methodology for how we arrived at these conclusions
Please see Global Witness’ methodology for how we arrived at these claims

https://services.ibama.gov.br/ctf/publico/areasesembargadas/ConsultaPublicaAreasEmbargadas.php


105 DNV-GL, Relatório de auditoria de conduta, 2018, page 5.

106 Giro do Bôo, Confira as fazendas em destaque do dia 14 de janeiro de 2019, Fazenda El Shaday, 14 de janeiro de 2019, Pecuarista Maria Luísa Costa Amarôlo, São Félix do Xingu-PA Lote: novilhas Nelore com peso médio de 14,6 kg, Ferror da Qualidade: 75% Verde | 25% Amarelo

107 Please see Global Witness’ methodology for how we arrived at these claims

https://services.ibama.gov.br/ctf/publico/areasesembargadas/ConsultaPublicaAreasEmbargadas.php


111 DNV-GL, Evaluation of the Fulfillment of the Public Livestock Commitment, 2017, VII Conclusions, “1.3 Irregularities were detected in 02 purchases, using the criteria for the IBAMA prohibited areas. 1.4 01 irregular purchase was detected, based on the deforestation criteria (PRODES 2010).”


116 Ministerio Publico Federal, Sínteses dos resultados das auditorias relativas a operações comerciais em 2017 realizadas por frigoríficos signatários do Termo de Ajuste de Conduta (TAC) da Pecuária no Pará Belém; JBS’s non compliant cattle purchases found by Global Witness amounted to 60,000 cattle purchases which is almost 20% of its total audited purchases, which were 301207, https://documentcloud.adobe.com/link/review?url=rn:aa-id:sdcfs:U5c9dxez-e26b-3-9081e-8619a5438555&pageNum=1

117 Ministerio Publico Federal, Sínteses dos resultados das auditorias relativas a operações comerciais em 2017 realizadas por frigoríficos signatários do Termo de Ajuste de Conduta (TAC) da Pecuária no Pará Belém; JBS’s non compliant cattle purchases found by Global Witness amounted to 60,000 cattle purchases which is 20% of its total audited purchases, which were 301207, https://documentcloud.adobe.com/link/review?url=rn:aa-id:sdcfs:U5c9dxez-e26b-3-9081e-8619a5438555&pageNum=1

124 Deutsche Bank, Twitter account, https://twitter.com/DeutscheBank/status/137614253126715392

125 World Resources Institute, Blackrock Is Getting Serious About Climate Change. Is This a Turning Point for Investors?, January 2020 https://www.wri.org/blog/2020/01/blackrock-getting-serious-about-climate-change-turning-point-investors

126 World Resources Institute, Blackrock Is Getting Serious About Climate Change. Is This a Turning Point for Investors?, January 2020 https://www.wri.org/blog/2020/01/blackrock-getting-serious-about-climate-change-turning-point-investors

127 Blackrock, Investment Stewardship’s approach to engagement with agribusiness companies on sustainable business practices, January 2020, page 2 last para: “Amongst other things, we ask companies to disclose any initiatives and externally developed codes of conduct, e.g. committing to deforestation-free supply chains, to which they adhere and to report on outcomes, ideally with some level of independent review. In addition, we ask companies to disclose medium- and long-term targets relevant to their business practices that enable shareholders, and others, to assess operational standards, monitor progress and inform enrolments.”

128 Reuters, Clarification of DNV GL’s assessment reports according to the protocol “Public Livestock Commitment” protocol, July 2020 https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:0dbd9907-6796-4c17-a0e9-c27ad8bf88f8&page=1

129 Deutsche Bank, Twitter account, https://twitter.com/DeutscheBank/status/137614253126715392

130 Reuters, Clarification of DNV GL’s assessment reports according to the protocol “Public Livestock Commitment” protocol, July 2020 https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:0dbd9907-6796-4c17-a0e9-c27ad8bf88f8&page=1


133 PROSPECTO PRELIMINAR DA OFERTA PÚBLICA DE DISTRIBUIÇÃO DOS CERTIFICADOS DE RECEBÍVEIS DO AGRONEGÓCIO DA 1ª (PRIMEIRA) E 2ª (SEGUNDA) SÉRIAS DA 5ª (QUINTA) EMISSÃO DA, a data deste Prospecto Preliminar é 18 de setembro de 2019, (currency conversion was used by simply writing: “convert 500,000,000.00 Brazilian Reais to USD” coming up with 84,273,050 USD, which is almost ninety million dollars, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&ved=2ahUKEwiG_znElJ7lAhXMEVAKHAXuQBU&url=https%3A%2F%2Fwww.xe.com%2Fcurrencyconverter%2F%3Ffrom%3DBRL%26to%3DUSD


DE TERRAS PÚBLICAS, Relatório Final, page 153 (Levantamento realizado pelo Ministério Público Federal revela que escritórios do Ibama nas cidades de Xinguara e Conceição do Araguaia estão agindo e interferindo com fazendeiros e agentes da criminalidade envolvidos com a exploração e comercialização ilegal de madeira. O fazendeiro Rafael Saldanha - envolvido com grilagem de terra, trabalho escravo e desmatamento ilegal - subornou o agente do Ibama de prenome Pereira com R$ 30 mil para não multá-lo – English translation: “The rancher Rafael Saldanha – in- volved in land grabbing, slave labour and illegal deforestation – bribed an agent of Ibama named Pereira with 30 thousand Reais to not fine him.”)


155 Assembleia Legislativa do Estado Pará Comissão de Direitos Humanos e Defesa do Consumidor, RELATÓRIO DE DILIGÊNCIA DOS DEPUTADOS MEMBROS TITULARES DA COMISSÃO DE DIREITOS HUMANOS E DEFESA DO CONSUMIDOR – CDHEDCA DA ASSEMBLEIA LEGISLATIVA DO ESTADO DO PARÁ ÀOS ACAMPAMENTOS DO MOVIMENTO SEM TERRA - MST “HUGO CHAVES” NA FAZENDA “SANTA TEREZA” E ”FREI HENRY” FAZENDINHA”, NOS MUNICÍPIOS DE MARABÁ E CURIONÓPOLIS RESPECTIVAMENTE, page 7: “Há que se ressaltar a legitimidade dos acampados, pois mostraram-se firmes de propósitos, mas cientes de que a colaboração com a justiça lhes beneficiaria, ao ponto de decidirem retirar-se da fazenda, deslocando o acampamento para as imediações da mesma, a fim de permitir a vistoria do INCRA fixada pelo juízo em audiência de justificação realizada em 15 de dezembro de 2009, permanecendo fora da área até 2014, quando indevidamente toma posse da fazenda, depois convertida em propriedade pelo ITERPA, o SR. RAFAEL SALDANHA DE CAMARGOS.” DOCUMENT SEE BY GLOBAL WITNESS  

156 Assembleia Legislativa do Estado Pará Comissão de Direitos Humanos e Defesa do Consumidor, RELATÓRIO DE DILIGÊNCIA DOS DEPUTADOS MEMBROS TITULARES DA COMISSÃO DE DIREITOS HUMANOS E DEFESA DO CONSUMIDOR – CDHEDCA DA ASSEMBLEIA LEGISLATIVA DO ESTADO DO PARÁ ÀOS ACAMPAMENTOS DO MOVIMENTO SEM TERRA - MST “HUGO CHAVES” NA FAZENDA “SANTA TEREZA” E ”FREI HENRY” FAZENDINHA”, NOS MUNICÍPIOS DE MARABÁ E CURIONÓPOLIS RESPECTIVAMENTE, page 7: “Há que se ressaltar a legitimidade dos acampados, pois mostraram-se firmes de propósitos, mas cientes de que a colaboração com a justiça lhes beneficiaria, ao ponto de decidirem retirar-se da fazenda, deslocando o acampamento para as imediações da mesma, a fim de permitir a vistoria do INCRA fixada pelo juízo em audiência de justificação realizada em 15 de dezembro de 2009, permanecendo fora da área até 2014, quando indevidamente toma posse da fazenda, depois convertida em propriedade pelo ITERPA, o SR. RAFAEL SALDANHA DE CAMARGOS.” DOCUMENT SEE BY GLOBAL WITNESS  

52

159 Governo do Estado do Pará, Polícia Civil do Estado do Pará, Numero 00201/2016/000185-7.

160 Assembleia Legislativa do Estado Pará Comissão de Direitos Humanos e Defesa do Consumidor, RELATÓRIO DE DILIGÊNCIA DOS DEPUTADOS MEMBROS TITULARES DA COMISSÃO DE DIREITOS HUMANOS E DEFESA DO CONSUMIDOR - CDHCDA ASSEMBLEIA LEGISLATIVA DO ESTADO DO PARÁ AOS ACAMPAMENTOS DO MOVIMENTO SEM TERRA - MST "HUGO CHAVES" NA FAZENDA "SANTA TEREZA" E"FREI HENRY" FAZENDA "FAZENDINHA", NOS MUNICÍPIOS DE MARÁBA E CURIÓNPOLIS RESPECTIVAMENTE, DOCUMENTO OBTIDO POR GLOBAL WITNESS FROM THE PARLIAMENTARY COMMITTEE.

161 Assembleia Legislativa do Estado Pará Comissão de Direitos Humanos e Defesa do Consumidor, RELATÓRIO DE DILIGÊNCIA DOS DEPUTADOS MEMBROS TITULARES DA COMISSÃO DE DIREITOS HUMANOS E DEFESA DO CONSUMIDOR - CDHCDA ASSEMBLEIA LEGISLATIVA DO ESTADO DO PARÁ AOS ACAMPAMENTOS DO MOVIMENTO SEM TERRA - MST "HUGO CHAVES" NA FAZENDA "SANTA TEREZA" E"FREI HENRY" FAZENDA "FAZENDINHA", NOS MUNICÍPIOS DE MARÁBA E CURIÓNPOLIS RESPECTIVAMENTE, DOCUMENTO OBTIDO POR GLOBAL WITNESS.


164 FAZENDINHA, NOS MUNICÍPIOS DE MARABÁ E CURIONÓPOLIS RESPECTIVAMENTE, (page 10, para 2 states: "Parte desse assentamento que estava na fazenda "Fazenda Santa Tereza" e Frei Henry" fazenda "Fazendinha", nos municípios de Marabá e Curiónpolis respectivamente, documento visto por Global Witness).


167 Interviews done by Global Witness – for the safety of the sources their identities are not being revealed.

168 Assembleia Legislativa do Estado Pará Comissão de Direitos Humanos e Defesa do Consumidor, RELATÓRIO DE DILIGÊNCIA DOS DEPUTADOS MEMBROS TITULARES DA COMISSÃO DE DIREITOS HUMANOS E DEFESA DO CONSUMIDOR - CDHCDA ASSEMBLEIA LEGISLATIVA DO ESTADO DO PARÁ AOS ACAMPAMENTOS DO MOVIMENTO SEM TERRA - MST "HUGO CHAVES" NA FAZENDA "SANTA TEREZA" E"FREI HENRY" FAZENDA "FAZENDINHA", NOS MUNICÍPIOS DE MARÁBA E CURIÓNPOLIS RESPECTIVAMENTE, DOCUMENTO Visto por GLOBAL WITNESS.


171 SEE METHODOLOGY FOR JBS’s cattle purchases from Santa Tereza in 2015, and for the Ibama fine see: Assembleia Legislativa do Estado Pará Comissão de Direitos Humanos e Defesa do Consumidor, RELATÓRIO DE DILIGÊNCIA DOS DEPUTADOS MEMBROS TITULARES DA COMISSÃO DE DIREITOS HUMANOS E DEFESA DO CONSUMIDOR - CDHCDA ASSEMBLEIA LEGISLATIVA DO ESTADO DO PARÁ AOS ACAMPAMENTOS DO MOVIMENTO SEM TERRA - MST "HUGO CHAVES" NA FAZENDA "SANTA TEREZA" E"FREI HENRY" FAZENDA "FAZENDINHA", NOS MUNICÍPIOS DE MARÁBA E CURIÓNPOLIS RESPECTIVAMENTE, (page 10, para 2 states: “Parte desse desmatamento (308,47ha) ocorreu no período de 13.07.2008 a 05.09.2010, em Marabá e Curionópolis.”)

172 See methodology for how we arrived at these conclusions. Data extracted from Global Witness’ analysis of Rafael Saldanha’s cattle transport permits.

173 See methodology for how we arrived at these conclusions. Data extracted from Global Witness’ analysis of Rafael Saldanha’s cattle transport permits.

174 See methodology for how we arrived at these conclusions. Data extracted from Global Witness’ analysis of Rafael Saldanha’s cattle transport permits.


179 See methodology for how we arrived at these conclusions. Data extracted from Global Witness’ analysis of Rafael Saldanha’s cattle ranch Fazenda Primaveria, over-laying official government satellite imagery of the shapefile for Saldanha’s ranch on the SICAR website and consulting deforestation permit data.


183 MAFRIG SUSTAINABLE TRANSITION BOND, FRAMEWORK OVERVIEW JULY 2019, http://www.marfrig.com.br/en/documents/?q=&source=web&cd=3&ved=2ahUKEwiHn57eSTqAaKqA8QjHQCd8BQFgQIABAAg&hl=en&gl=uk&strip=1&vwsrc=0


185 Ministry of Public Federal, Termos de Ajuste de Conduta, pages 2 and 3 set forth the legal arguments. LEI Nº 6.938, DE 31 DE AGOSTO DE 1981, Art 14, Para 1, § 1º - “Sem obstar a aplicação das penalidades previstas neste artigo, é o poluidor que-ninguem-esta-livre-do-desmatamento/, “Do outro lado, a Marfrig segue sem pagar os royalties de bônus e assinar o TAC da Carne no Pará, e por isso não entregou sua auditoria ao MPF”.


188 According to article 26 of the Forest Code (https://www.cpt.com.br/codigo-florestal-codigo-florestal-brasileiro-da-supressao-de-vegetacao-para-uso-alternativo-do-solo) a permit is required to deforest within a public or private property. Through a partnership with the Brazilian CSO IMAZON, Global Witness checked whether the property Fazenda de Espouro II had this authorization, using a data set that IMAZON use in a partner program they have with the Federal State Prosecutor’s Office of Para called Amazonia Protegida (http://www.amazoniaprotegida.mp.mp.br/), and found it did not.

189 Global Witness, through partner organisation IMAZON, checked a database

190 See methodology for how we arrived at these conclusions. Global Witness analysis of Marfrig’s 2017, 2018 and 2019 cattle transport permits, Cross-checked for individual tax code and name of ranch alignment with the Rural Registries for Para: SICAR (http://car.semars.pa.gov.br/), to identify ranches that are Marfrig suppliers.

191 Image is from the 2016 Rural Land Registry database (SICAR: http://car.semars.pa.gov.br/) for the property Fazenda Espouro de Ouro II, located in São Félix do Xingu / Pará, with Numero de Referencia: PA-1507300-DF0130108C16468660E2511E-BZ2EBFD1 and Numero de Protocolo: PA-1507300-C817757509D255317AC-95961D0550, provided by the Brazilian civil society organisation Imalflora and their Department for Geospatial monitoring, that downloaded these property boundaries year on year to check on any boundary changes. Please ask Global Witness for the specific documents, which are also available on our website.

192 Global Witness analysis of Marfrig’s 2016, 2017, 2018 and 2019 Cattle Transport Permits, Cross-checked with the Rural SICAR database (http://car.semars.pa.gov.br/) to ensure the property owners individual tax code (CPF) and ranch name and location coincided on both data sets, the property boundaries were then downloaded from the SICAR database in October 2019 and visualised on a GIS platform and then overlaid with official Brazilian government deforestation data from the National Institute for Space Research (INPE, PRODES). This provided the date of deforestation shown on the PRODES data set, ensuring the deforestation occurred after August 2008 (to ensure the deforestation occurred within the time period the beef traders agreed not to purchase cattle from ranches with deforestation).

193 Please see our methodology for how we arrived at these figures


195 See methodology for how we arrived at these conclusions. Global Witness analysis of Marfrig’s 2017, 2018 and 2019 cattle transport permits, Cross-checked for individual tax code and name of ranch alignment with the Rural Registries for Para: SICAR (http://car.semars.pa.gov.br/), to identify ranches that are Marfrig suppliers.

196 Image is from the 2016 Rural Land Registry database (SICAR: http://car.semars.pa.gov.br/) for the property Fazenda Espouro de Ouro II, located in São Félix do Xingu / Pará, with Numero de Referencia: PA-1507300-DF0130108C16468660E2511E-BZ2EBFD1 and Numero de Protocolo: PA-1507300-C817757509D255317AC-95961D0550, provided by the Brazilian civil society organisation Imalflora and their Department for Geospatial monitoring, that downloaded these property boundaries year on year to check on any boundary changes. Please ask Global Witness for the specific documents, which are also available on our website.

197 Global Witness analysis of Marfrig’s 2016, 2017, 2018 and 2019 Cattle Transport Permits, Cross-checked with the Rural SICAR database (http://car.semars.pa.gov.br/) to ensure the property owners individual tax code (CPF) and ranch name and location coincided on both data sets, the property boundaries were then downloaded from the SICAR database in October 2019 and visualised on a GIS platform and then overlaid with official Brazilian government deforestation data from the National Institute for Space Research (INPE, PRODES). This provided the date of deforestation shown on the PRODES data set, ensuring the deforestation occurred after August 2008 (to ensure the deforestation occurred within the time period the beef traders agreed not to purchase cattle from ranches with deforestation).

198 See methodology for how we arrived at these conclusions. Global Witness analysis of Marfrig’s 2017, 2018 and 2019 cattle transport permits, Cross-checked for individual tax code and name of ranch alignment with the Rural Registries for Para: SICAR (http://car.semars.pa.gov.br/), to identify ranches that are Marfrig suppliers.


200 See methodology for how we arrived at these conclusions. Global Witness analysis of Marfrig’s 2017, 2018 and 2019 cattle transport permits, Cross-checked with the Rural SICAR database (http://car.semars.pa.gov.br/) to ensure the property owners individual tax code (CPF) and ranch name and location coincided on both data sets, the property boundaries were then downloaded from the SICAR database in October 2019 and visualised on a GIS platform and then overlaid with official Brazilian government deforestation data from the National Institute for Space Research (INPE, PRODES). This provided the date of deforestation shown on the PRODES data set, ensuring the deforestation occurred after August 2008 (to ensure the deforestation occurred within the time period the beef traders agreed not to purchase cattle from ranches with deforestation).


Ex-PT, sindicalista bolsonarista é morto em meio a disputa por terra indígena no Pará, “Quando os três fazendeiros foram presos, os advogados rejeitaram a hipótese de que esses outros desafetos sindicalistas em São Félix do Xingu e Tucumã, http://www.policiacivil.pa.gov.br/pol%C3%AAcia-civil-prende-suspeitos-de-envolvimento-na-morte-de-sindicalista-em-s%C3%A3o-f%C3%A9lix-do-xingu-e

Brasil 247, Polícia aponta fazendeiros como possíveis mandantes de morte de sindicalista no Pará, “Quando os três fazendeiros foram presos, os advogados rejeitaram a hipótese de que esses outros desafetos sindicalistas em São Félix do Xingu e Tucumã, http://www.policiacivil.pa.gov.br/pol%C3%AAcia-civil-prende-suspeitos-de-envolvimento-na-morte-de-sindicalista-em-s%C3%A3o-f%C3%A9lix-do-xingu-e

"A Terra Indígena Apyterewa é território tradicional do povo Parakanã, homologado por decreto presidencial em 19 de abril de 2007 e integra o complexo de terras indígenas afetadas pela Usina Hidrelétrica de Belo Monte. A regularização fundiária, incluindo a retirada dos ocupantes não indígenas, é uma das condicio-
nantes governamentais do processo de licenciamento ambiental do empreendi-
mento."

Instituto Socio Ambiental, Terra Indígena Apyterewa, Deforestation in the Legal Amazon, This subject presents the deforestation data analysis made by the Brazilian Amazonian Rainforest Satellite Monitoring Project (Prodes) run by the National Institute of Space Research (INPE), The Prodes aims to map deforestation in forest areas of Legal.


GLOBAL WITNESS data

454 Policia Civil, Policia Civil prende suspeitos de envolvimento na morte de sindicalista em São Félix do Xingu e Tucumã, http://www.policiacivil.pa.gov.br/pol%C3%AAcia-civil-prende-suspeitos-de-envolvimento-na-morte-de-sindicalista-em-s%C3%A3o-f%C3%A9lix-do-xingu-e

GLOBAL WITNESS METHODOLOGY

261 Global Witness data – see methodology for how we arrived at these figures


267 https://www.escavador.com/processos/65272723/processo-so-2013-0134676-6-do-superior-tribunal-de-justica


271 Forest 500, Minerva Profile, https://forest500.org/behaviours/companies/minerva-sa


tamanduás have a prehensile tail and are excellent climbers, well adapted to life in the canopy. What a surprise to find them underground!” he notes. “They were one of the species that uses the burrows the most and spend sometimes over 12 hours underground.” In 2013, Mongabay, an organization that covers news and issues related to the Amazon, published an article on this topic. They mentioned that the giant armadillo is an ecosystem engineer in the Amazon as well. Mongabay, “Armored giant turns out to be vital ecosystem engineer,” 2013, https://news.mongabay.com/2013/10/armored-giant-turns-out-to-be-vital-ecosystem-engineer/.


ClientEarth, EU can better protect environment by strengthening corporate responsibility, “The EU can help tackle deforestation, environmental harm and human rights abuses by introducing mandatory due diligence – rules which require companies to identify and prevent the negative impact of their operations and supply chains,” https://www.clientearth.org/forest-conversion/


European Commission, Feedback from: Nestlé, “We share the objectives of the European Commission to minimise the EU’s contribution to deforestation and forest degradation worldwide and promote the consumption of products from deforestation-free supply chains in the EU. An EU legal framework working to this end should enhance the implementation of no-deforestation commitments by businesses while supporting partner countries to strengthen governance, regulation and enable economic development.,” March 2020, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Minimising-the-risk-of-deforestation-and-forest-degradation-associated-with-products-placed-on-the-EU-market/

Tesco, Tesco supports Greenpeace aim to end Amazon deforestation and calls for deforestation-free food in the UK, 5th August 2020, “We stand ready to play our part, and today we call for our government to mandate food companies, as part of its National Food Strategy, to introduce effective due diligence across supply chains to make sure all food sold in the UK is deforestation-free.” https://www.tescoplcs.com/updates/2020/tesco-supports-greenpeace-aim-to-end-amazon-deforestation-and-calls-for-deforestation-free-food-in-the-uk/


Bureau of Investigative Journalism, UK purchased £1bn of beef from firms tied to Amazon deforestation https://www.thebureauinvestigates.com/stories/2019-09-17/uk-purchased-1-billion-of-beef-from-firms-tied-to-amazon-deforestation

Bureau of Investigative Journalism, UK purchased £1bn of beef from firms tied to Amazon deforestation https://www.thebureauinvestigates.com/stories/2019-09-17/uk-purchased-1-billion-of-beef-from-firms-tied-to-amazon-deforestation

TRADE, BRAZIL BEEF [ALL YEARS], https://trade.ec.europa.eu/data


Bureau of Investigative Journalism, UK purchased £1bn of beef from firms tied to Amazon deforestation https://www.thebureauinvestigates.com/stories/2019-09-17/uk-purchased-1-billion-of-beef-from-firms-tied-to-amazon-deforestation


Greenpeace, Brazil meatpackers bought cattle linked to deforestation, says Greenpeace https://uk.reuters.com/article/us-brazil-environment-meat/brazil-meatpackers-bought-cattle-linked-to-deforestation-says-greenpeace-idUKKBN22B0AU

Daniel Nepstad,1* David McGrath,1,2 Claudia Stickler,1,2 Andrea Azevedo,3 Briana Swette,1 Tathiana Bezerra,1 Maria DiGiano,1 João Shimada,1 Ronaldo Serra da Motta,4 Eric ArmiJo,1 Leandro Castello,5 Paulo Brando,3,6 Matt C. Hansen,7 Max McGrath-Horn,1 Oswaldo Carvalho,1 Laura Hessli Slowing Amazon deforestation through public policy and interventions in beef and soy supply chains, 2014, https://www.google.com/url?q=http%3A%2F%2Fwww.greenpeace.org/usa/news/greenpeace-brazil-suspends-negotiations-cattle-giant-jbs%2Fpdf&usg=AOvVaw3s1kxsEs782fIPk-_kfX8-
web%2FDiscourse%2F20190510_Neppstad_Slowing_Amazon_Deforestation_Public-2014.pdf
384Mongabay, Dismantling of Brazilian environmental protections gains pace, 2019 https://news.mongabay.com/2019/05/dismantling-of-brazilian-environmen-
tal-protections-gains-pace/;

Human Rights Watch, Rainforest Mafias, How Violence and Impunity Fuel Defore-
station in Brazil’s Amazon, 2019, https://www.hrw.org/report/2019/09/17/rainfor-
est-mafias/how-violence-and-impunity-fuel-deforestation-brazils-amazon

385MAZON, Um terço do desmatamento da Amazônia ocorreu em Unidades de Conser-
vão no mês de maio. Destruição das florestas segue em ritmo de aument-
amazônia-ocorreu-em-unidades-de-conservacao-no-mes-de-maio-destruico-
das-florestas-segue-em-ritmo-de-aumento/

386To access Pará platform to consult GTAs:

a) Access following link https://siapec3.adepara.pa.gov.br/siapec3/port-
taldeservicos.wsp
b) Then on the right side access option: “Publico Geral”
c) Then, enter in first option of menu “Consulta”
d) then access first option of menu “e-GTA”

387Source Ministry of Agriculture law: Instrução Normativa MAPA No 19 DE
03/05/2011 and Para state law Decreto Estadual nº 2802/1998

388SICAR Car Pará (Rural Environmental Register/Pa) http://car.semas.pa.gov.
.br/#/consulta/mapa

389SICAR Car Pará (Rural Environmental Register/Pa) http://car.semas.pa.gov.
.br/#/consulta/mapa

390https://terras.agr.br/

391https://buscar.terras/app/

392Portaria n.° 22 do Ministério da Agricultura.

393DELANTO, Celso [et al]. Código Penal Comentado. 9ª ed. São Paulo: Saraiva,
2016, p. 879.


395STF. Inq. 2593, Relator(a): Min. EDSON FACHIN, Tribunal Pleno, julgado em
01/12/2016, ACÓRDÃO ELETRÔNICO DJe-168 DIVULG 31-07-2017 PUBLIC 01-08-
2017

Malheiros, 2005.

397§ 3º O tratamento de dados pessoais cujo acesso é público deve considerar a
finalidade, a boa-fé e o interesse público que justificaram sua disponibilização.

398“Abrange toda atuação estatal, não só sob o aspecto de divulgação oficial de
seus atos como também de propiciação de conhecimento da conduta interna de
seus agentes. Essa publicidade atinge assim, atos concluídos e em formação,
os processos em andamento, os pareceres dos órgãos técnicos e jurídicos,
Os despachos intermediários e finais, as atas de julgamento das licitações e contratos
com quaisquer interessados, bem como os comprovantes de despesas e as
prestações de contas submetidas aos órgãos competentes. Tudo isto é papel ou
documento público que pode ser examinado na repartição por qualquer interessa-
do e dele obter certidão ou fotocópia autenticada para fins constitucionais.” SILVA,
José Afonso da. Curso de Direitos Constitucional Positivo. 24ª edição. São Paulo:

399MELO, Celso Antônio Bandeira de. Curso de Direito Administrativo. 27ª

400Art. 1° Esta Lei dispõe sobre os procedimentos a serem observados pela
União, Estados, Distrito Federal e Municípios, com o fim de garantir o acesso a
informações previsto no inciso XXXIII do art.5º, no inciso II do § 3º do art. 37 e no §
2º do art. 216 da Constituição Federal.

Parágrafo único. Subordinam-se ao regime desta Lei:

I - os órgãos públicos integrantes da administração direta dos Poderes Executivo,
Legislativo, incluindo as Cortes de Contas, e Judiciário e do Ministério Público;
II - as autarquias, as fundações públicas, as empresas públicas, as sociedades de
economia mista e demais entidades controladas direta ou indiretamente pela
União, Estados, Distrito Federal e Municípios.

401Art. 27. A classificação do sigilo de informações no âmbito da administração
pública federal é de competência:

I - no grau de ultrassecreto, das seguintes autoridades:

a) Presidente da República;
b) Vice-Presidente da República;
c) Ministros de Estado e autoridades com as mesmas prerrogativas;
d) Comandantes da Marinha, do Exército e da Aeronáutica;e) Chefes de Missões Diplomáticas e Consulares permanentes no exterior;
II - no grau de secreto, das autoridades referidas no inciso I, dos titulares de autar-
quias, fundações ou empresas públicas e sociedades de economia mista;
III - no grau de reservado, das autoridades referidas nos incisos I e II e das que
exerçam funções de direção, comando ou chefia, nível DAS 101,5, ou superior,
do Grupo-Direção e Assessoramento Superiores, ou de hierarquia equivalente,
de acordo com regulamentação específica de cada órgão ou entidade, observado o
disposto nesta Lei.

§ 1º A competência prevista nos incisos I e II, no que se refere à classificação como
ultrassecreta e secreta, poderá ser delegada pela autoridade responsável a agente
público, inclusive em missão no exterior, vedada a subdelegação.

§ 2º A classificação de informação no grau de sigilo ultrassecreto pelas autoridades
previstas nas alíneas “d” e “e” do inciso I deverá ser ratificada pelos respectivos
Ministros de Estado, no prazo previsto em regulamento.

§ 3º A Autoridade ou outro agente público que classificar informação como
ultrassecreta deverá encaminhar a decisão de que trata o art. 28 à Comissão Mista
de Reavaliação de Informações, a que se refere o art. 35, no prazo previsto em
regulamento.

Art. 28. A classificação de informação em qualquer grau de sigilo deverá ser for-
malizada em decisão que conterá, no mínimo, os seguintes elementos:
I - assunto sobre o qual versa a informação;
II - fundamento da classificação, observados os critérios estabelecidos no art. 24;
III - indicação do prazo de sigilo, contado em anos, meses ou dias, ou do evento
que defina o seu termo final, conforme limites previstos no art. 24;
IV - identificação da autoridade que a classificou.

Parágrafo único. A decisão referida no caput será mantida no mesmo grau de sigilo
da informação classificada.

Art. 30. A autoridade máxima de cada órgão ou entidade publicará, anualmente,
escolhida em sítio à disposição na internet e destinada à veiculação de dados e informações
administrativas, nos termos de regulamento:
I - rol das informações que tenham sido desclassificadas nos últimos 12 (doze) meses;
II - rol de documentos classificados em cada grau de sigilo, com identificação para
referência futura;
III - relatório estatístico contendo a quantidade de pedidos de informações
recebidos, atendidos e indeferidos, bem como informações genéricas sobre os
solicitantes.

§ 1º Os órgãos e entidades deverão manter exemplar da publicação prevista
no caput para consulta pública em suas sedes.

§ 2º Os órgãos e entidades manterão extrato com a lista de informações classifica-
das, acompanhadas da data, do grau de sigilo e dos fundamentos da classificação.

402Ministério da Transparência, Fiscalização e Controle-Geral da União. Apli-
cação da lei de acesso à informação na Administração Pública Federal. 2ª Edição

403CONTROLEDORIA-GERAL DA UNIÃO Secretaria de Prevenção da Corrupção
e Informações Estratégicas. MANUAL da Lei de Acesso à Informação para Estados e

404“O princípio da publicidade dos atos administrativos preserva o controle e
o conhecimento por todos os interessados, e por qualquer do povo, dos
documentos existentes nas repartições públicas que demonstram o desen-
volvimento dos atos administrativos de interesse da coletividade.” TJ-SP. APL
00332373420098260576. Relatora: Teresa Ramos Marques. Data de julgamento:
06/03/2015. 10ª Câmara de Direito Público. Data de publicação: 06/03/2015.

405“O princípio da publicidade e o direito à informação não podem ser restringidos com base
em atos de natureza discricionária, salvo quando justificados, em casos excepcio-
nais, para a defesa da honra, da imagem e da intimidade de terceiros ou quando

406 “O direito de receber dos órgãos públicos informações de interesse particular,
geral ou coletivo, ressalvadas aquelas cujo sigilo seja imprescindível a segurança
da sociedade e do Estado, encontra-se assegurado na Constituição Federal (art. 5º,
XXXIII, constituindo-se a abuso de poder a violação de tal dispositivo, passível de
Data de julgamento: 02/02/2017. 3ª Câmara Cível. Data de publicação: 21/02/2017.
“A informação produzida e custodiada pelo setor público deve estar disponível à sociedade, ressalvadas as exceções previstas em lei. Sob esse prisma, é princípio básico da Lei nº 12.527/11 a chamada máxima divulgação, em que a publicidade é a regra e o sigilo a exceção. O comportamento de divulgar dados a partir de uma iniciativa da própria administração pública não apenas implica a redução do número de pedidos de acesso, mas também sugere a perspectiva de que cabe ao governo somente a posse de tais documentos, sendo o povo titular do direito de propriedade da informação pública.” Ministério da Transparência, Fiscalização e Controladoria-Geral da União. Aplicação da lei de acesso à informação na Administração Pública Federal. 2ª Edição Revista, Atualizada e Ampliada. Brasília, 2016. p. 52
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