REPORT

FINANCIAL SECRETS OF THE FORESTS

HOW SECRECY FUELS DEFORESTATION IN BRAZIL AND CAMEROON

FINANCIAL TRANSPARENCY COALITION

CRADEC

CEFILAT
Centro de Economía y Finanzas para el Desarrollo Latinoamericano

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GLOSSARY OF TERMS

YOURLOGO

Beneficial Ownership Transparency (BOT) refers to the natural person(s) who ultimately own or exercise effective control over an entity or arrangement and who ultimately benefit from these activities, as defined by the FATF. BOT is understood to include the establishment of high-quality, centralised registries of all beneficial owners, with broad public access to this information.

Brazil's Legal Amazon, known as "Amazônia Legal" in Portuguese, covers over five million square kilometres and accounts for 59% of the country's total territory. It encompasses all nine states within the Amazon basin: Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, and Tocantins, as well as most of Mato Grosso and the western part of Maranhão. This region was designated by the Brazilian government in 1948 to facilitate the economic and social development of the Amazon area. The Legal Amazon includes not only the Amazon rainforest but also parts of the Cerrado savanna and the Pantanal wetlands.

Deforestation is a specific type of land conversion involving the transformation of natural forest into agricultural or other non-forest land uses, including tree plantations. It also encompasses the severe and sustained degradation of natural forest. The Food and Agriculture Organization (FAO) defines deforestation as the conversion of forest to other land uses, regardless of whether it is human-induced or not.

Environmental crimes are activities that contravene the criminal laws of a particular jurisdiction. According to the United Nations Office on Drugs and Crime (UNODC), such activities are deemed illegal when carried out without authorisation, when contracts and concessions are secured through corruption and intimidation, or when extraction breaches agreed terms, such as quotas.

Geographic Information Systems (GIS), also known as spatial analysis, involve the process of using GIS to examine the locations, attributes, and relationships of features within spatial data. In this context, we compile data from diverse sources—such as satellite imagery on deforestation, land boundaries, logging permits, company ownership records, and crop data—to study the relationships between these attributes.

Illicit deforestation refers to the clearing of forests in contravention of applicable legislation, regulations, or schemes by entities lacking legal authorisation. This includes activities such as clearing forests without the necessary permits or licences, obtaining such permits through fraudulent means, over-logging forestry concessions, or misreporting forestry exports to tax or other authorities.

Illicit financial flows (IFFs) are cross-border transfers of money that contravene national or international laws, as well as human rights and environmental standards. These flows often stem from activities such as corruption, tax evasion, natural resource crimes, or transnational criminal activities. The illicit nature may relate to their origin, transfer, or use.

Legal ownership refers to the ownership of assets such as shares, real estate, or other property as recognised by law within a registered entity. A legal owner may hold shares in a company, possess legal rights to forestry or other extractive licences, and is the entity recorded in such documents.

Trade misinvoicing is the illicit practice whereby any party involved in an international transaction manipulates the value, volume, quantity, or quality of an export or import in their customs or other official declarations. This manipulation may involve either over-invoicing or under-invoicing.

ABBREVIATIONS

AML – Anti-Money Laundering

BO – Beneficial Owner

EUDR – European Union Deforestation Regulation

EUTR – European Union Timber Regulation

EITI – Extractive Industries Transparency Initiative

FAO – Food and Agriculture Organization

FATF – Financial Action Task Force

GFW – Global Forest Watch

GIS – Geographic Information System

IFFs – Illicit Financial Flows

MNC – Multinational Corporation

UNCAC – United Nations Convention against Corruption

UNCTAD – United Nations Conference on Trade and Development

UN COMTRADE – United Nations Commodity Trade Statistics Database

UNEP – United Nations Environment Programme

UN FCITC – United Nations Framework Convention on International Tax Cooperation

UNODC – United Nations Office on Drugs and Crime

UKTR – UK Timber Regulation

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INTRODUCTION

Tropical primary forests are being destroyed at an alarming rate, threatening biodiversity and the livelihoods of millions of people worldwide. According to Global Forest Watch, a total of 4.3 million hectares (Mha) of tropical primary forests were lost in 2025 alone—an area almost the size of Denmark—driven by agricultural expansion and fires.[1] Globally, from 2001 to 2025, an average of 3.7 $GtCO_2e$ per year was emitted in areas where the dominant drivers of loss resulted in deforestation, further endangering biodiversity and the livelihoods of millions of people.[2]

This report reveals that the scale of illicit financial flows (IFFs) associated with illicit deforestation is often greater than previously estimated, amounting to billions of dollars, primarily from countries in the Global South—many of which suffer from high levels of public debt and lack adequate financing for climate, biodiversity, or forestry initiatives. To estimate the extent of these losses, we conducted a trade mispricing analysis of the timber sectors in Brazil and Cameroon, two of the top ten countries experiencing the greatest primary tropical forest loss globally. Additionally, we analysed soy and beef production in the state of Mato Grosso, which accounts for one-fifth of Brazil's forest loss in 2025.[3]

This report reveals that the scale of illicit financial flows (IFFs) associated with illicit deforestation is often greater than previously estimated, amounting to billions of dollars, primarily from countries in the Global South.

Brazil saw a loss of 1.6 million hectares of tropical primary forest in 2025, being the most affected country in the world.[4] A significant share of this was commodity-driven and sold to large corporations. Meanwhile, Cameroon, Africa's largest timber exporter, ranked sixth globally in 2025 for primary forest loss, with 110,000 hectares lost. This was associated with 130 $MtCO_2e$ in emissions in the same year, largely driven by logging and large-scale commercial agriculture.[5]

The loss of forests and broader biodiversity also represents a significant economic loss, which can be quantified in terms of illicit financial flows. These flows relate to the volume of illegally extracted timber and commodities grown on illicitly logged land, as well as the taxes, royalties, and other payments to governments that are not made on such illicit gains. We estimated the trade mispricing related to illicit wood product flows in this report at US$289 million per year in Cameroon between 2013 and 2023, and US$214 million in Brazil between 2013 and 2024. It is often the case that taxes on exports are not paid because volumes, quality, or quantity are misdeclared, thereby reducing their taxable value.

In the case of Brazil, we were also able to estimate the economic value of timber extracted illicitly, as well as crops grown on illicitly logged land. In these instances, it is likely that at least some taxes are paid on this illicit produce, while fines and sanctions could generate significant revenue. Furthermore, land restoration could finance biodiversity protection and provide employment opportunities beyond large-scale commercial timber and agriculture. The economic value of crops grown on illicitly logged land in the State of Mato Grosso, Brazil, was estimated at US$10 billion for soy and US$4 billion for beef. We also estimated that approximately US$1.28 billion of wood product exports originated from illicitly logged land.

The financing lost to illicit financial flows, tax evasion, and tax abuses is needed to close the forestry financing gap of approximately US$216 billion annually,[6] while also helping to address the estimated annual biodiversity financing gap of around US$700 billion.[7] Finally, these losses could also contribute to wider climate financing, where an even greater gap of at least US$1.3 trillion[8] annually has been committed as part of the New Quantified Climate Finance Goal (NQCFG).

Crucially, in this report we demonstrate that financial and land ownership secrecy is a key driver behind illicit deforestation, which, in turn, is responsible for a significant proportion of global greenhouse gas emissions. Using the most up-to-date sources of Geographic Information Systems (GIS) data available, we reveal that the secrecy surrounding land, crops, cattle, property, companies, and beneficial ownership transparency systematically prevents the identification of those benefiting from illicit deforestation, allowing them to export their products to the European Union, the United States, the United Kingdom, China, Vietnam, and other markets without restriction.

Financial and land ownership secrecy is a key driving behind illicit deforestation.

International initiatives aimed at tackling this crisis will ultimately fail or have limited impact unless they are accompanied by concrete measures to improve public access to company and asset registries. These registries pertain to land ownership, forestry concessions, as well as legal and beneficial ownership. The relevant regulations include the European Union Timber Regulation, in force since 2013, the UK Timber Regulation (UKTR), and the US Lacey Act. The European Union Deforestation Regulation (EUDR), expected to come into effect in December 2026, goes further by prohibiting companies from selling agricultural products on the EU market that are derived from recently deforested land—defined as land deforested after 31 December 2020—regardless of whether the deforestation was human-induced or not.

International initiatives aimed at tackling this crisis will ultimately fail or have limited impact unless they are accompanied by concrete measures to improve public access to company and asset registries.

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DEFORESTATION AND ILLICIT FINANCIAL FLOWS

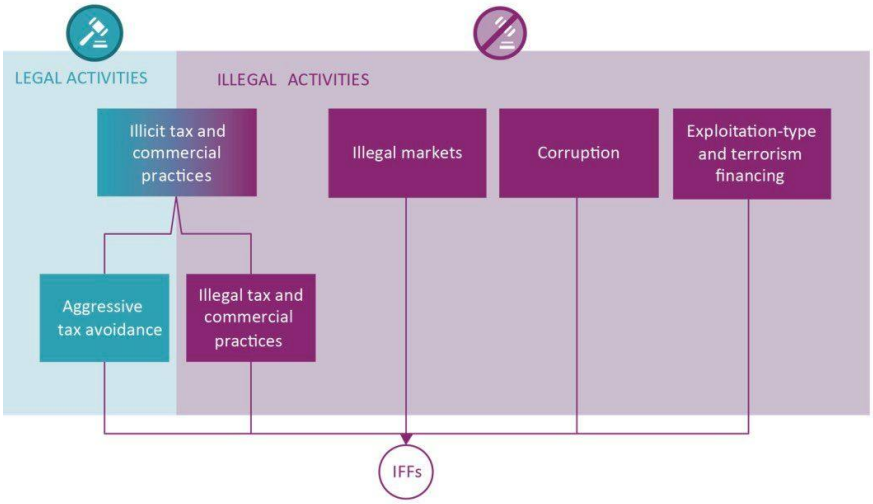
TThis report examines illicit financial flows (IFFs) linked to illicit deforestation, focusing on the economic losses arising from the illicit extraction of resources and other illicit activities, primarily originating in countries of the Global South. It also explores how these IFFs move through opaque trading relationships to destination countries, typically in the Global North and China, where these products are ultimately consumed.

Illicit Financial Flows (IFFs) are commonly categorised into four key categories (see Figure 1), namely: [9]

- Illicit tax and commercial practices (such as tax evasion, tax avoidance, and trade mispricing)
- Illegal markets activities (including illegal natural resource extraction)
- Corruption (such as bribery of public officials) and terrorism financing
- Exploitation- type and terrorism financing

Illicit deforestation and illegal logging are considered major sources of IFFs.[10] These encompass illegal tax and commercial practices, including cases where legally sourced timber is subject to trade mispricing and tax abuses, as well as instances where timber is illegally sourced, which fall under illegal market-related IFFs. Also, the growing of crops such as soy and palm oil, and the use of land for cattle pasture, constitute illicit financial flows if the land has been illicitly deforested.

Figure 1: Categories of activities that may generate illicit financial flows



Source: UN DESA briefing, citing UNCTAD and UNODC[11]

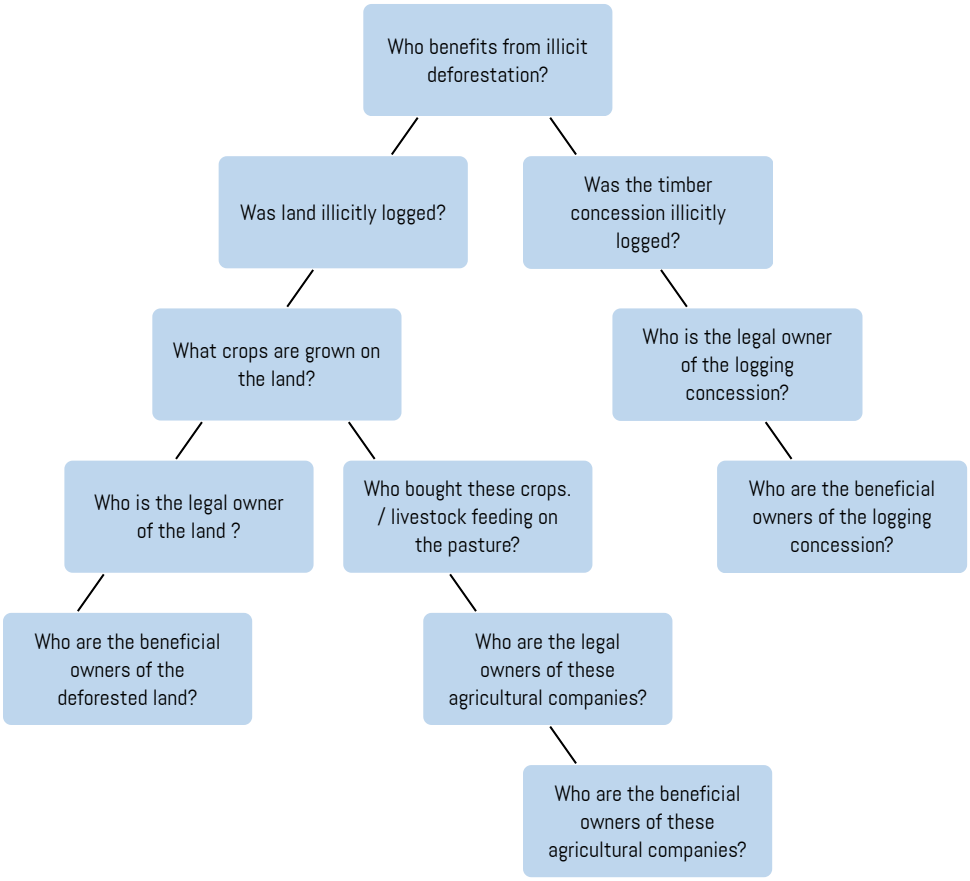
The United Nations Environment Programme (UNEP) estimates that illicit logging accounts for 15–30% of all logging activities; however, this estimate is not based on detailed monitoring of forest loss, as conducted here. This range corresponds to an estimated US$51–US$152 billion in illicit financial flows annually from illegal logging, representing a significant loss of capital and billions in lost tax revenues due to the undeclared extraction of natural resources. [12] However, these estimates do not account for the agricultural commodities grown on illicitly logged land.

US$51–US$152 billion in illicit financial flows annually from illegal logging, representing a significant loss of capital and billions in lost tax revenues due to the undeclared extraction of natural resources.

Additionally, the figure is outdated, as the value of the logging and timber sector in 2024 was US$1.5 trillion.[13] A 15% share of this would represent US$225 billion, which is a conservative estimate. This report confirms that such a high proportion of illicit logging is indeed occurring in Brazil, where illicit logging consistently accounts for over 30% of all logging activities. In Cameroon, trade mispricing discrepancies alone represent more than 10% of the timber value. Logging outside designated concessions is also widely reported, although it remains difficult to verify.

Figure 2 highlights several concerns regarding financial transparency related to illicit deforestation. To trace the flow of money, we begin by identifying parcels of land or forestry concessions. In Brazil, it is possible to identify land parcels in the environmental registry, where logging permits are made publicly available and legal owners can be traced. In Cameroon, a system of forestry concessions exists, allowing us to trace the legal owners of two key types of forestry concessions: Sales of Standing Order, which are sold by auction, and Forest Management Units, which are permanent titles.

Figure 2: Determining who benefits from illicit deforestation



Source: FTC own elaboration

After identifying forest ownership, we determine whether there is a logging permit corresponding to the observed forest loss in satellite images. If the land has been illicitly logged—that is, logged without a valid licence—we then check whether any commercial crops are grown on this land and attempt to map the ownership structures of all these companies and assets. In both Brazil and Cameroon, beneficial ownership information is generally unavailable, except in the specific case of illegal logging offences in Brazil, where some company ownership details are included in the sanctions or fines issued for illegal logging. Cameroon, as part of the Extractive Industries Transparency Initiative (EITI), is committed to making public certain beneficial ownership information related to the mining, oil, and gas sectors, but not for other sectors.

Tax havens and financial secrecy also contribute to deforestation, as researchers have found that financial flows from high-secrecy jurisdictions actively fund land-clearing activities. For example, 68% of all investigated foreign capital flowing into nine of the leading companies in the soy and beef sectors in the Brazilian Amazon rainforest was transferred from tax havens between 2000 and 2011.[14] Researchers in Brazil found that almost all transactions involving soybean exports, particularly those of high value, are triangular transactions involving tax havens or privileged tax regimes. The flow of goods does not correspond to the financial flows. For instance, researchers found that Cayman-based companies sell goods at considerably higher prices to other countries during international transit or even beforehand, often without any economic substance to justify the price difference.[15]

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International initiatives against deforestation and illicit financial flows

Deforestation has been a key issue since the Rio Earth Summit in 1992, which dedicated an entire chapter to combating it. Currently, a global target to achieve zero deforestation by 2030 has been agreed upon by 145 countries at the COP26 climate summit in Glasgow in 2021.[16] The importance of halting deforestation is also reflected in UN Sustainable Development Goal 15.2, which called for stopping deforestation by 2020.

Many export markets also prohibit the sale of illegally sourced timber. This includes the US Lacey Act, the EU Timber Regulation (EUTR), the UK Timber Regulation (UKTR), Japan's Clean Wood Act, China's Forest Law, Australia's Illegal Logging Prohibition Act, and similar legislation in South Korea, Indonesia, and Vietnam. Despite these regulations, tropical timber is still commonly used across all consumer markets, ranging from high-end applications such as luxury furniture and musical instruments to everyday items.

The Financial Action Task Force (FATF) classifies environmental crimes as money laundering offences. Illegal logging, along with other forestry-related crimes, is categorised as an environmental crime. The FATF concluded that, due to the low-risk and high-reward nature of environmental crimes, these offences provide a lucrative and relatively safe source of revenue for criminals.[17] A 2021 FATF survey of 44 countries found that most destination countries for illicit commodities have not yet incorporated environmental crimes into their money laundering legislation.[18]

Some countries and regions have enacted legislation against environmental crimes. This includes the European Union with its 6th Anti-Money Laundering Directive (6AMLD) and the United Kingdom through the revision of the Economic Crime Act (2023). However, enforcement remains weak, and there have been very few sanctions in money laundering cases to date. In the United States, the proposed Fostering Overseas Rule of Law and Environmentally Sound Trade (FOREST) Act[19] aims to restrict access to US markets for commodities originating from illegally deforested land. However, this Act has not been passed, so it remains legal to import commodities linked to deforestation.

European Union and the United Kingdom have banned commodity agriculture on illicitly deforested land. Taking this a step further, the European Union Deforestation Regulation (EUDR) will prohibit companies from selling products in the EU market that are derived from land deforested after 31 December 2020.[20] The regulation will be implemented in stages, commencing on 30 December 2026 for large and medium-sized operators, and on 30 June 2027 for micro and small operators. It will apply to companies selling palm oil, soy, coffee, cocoa, wood, and rubber, as well as certain derived products such as beef, leather, furniture, and chocolate.

While banning illicit logging and commodities produced on illicitly logged land is an important step, it is equally crucial to identify not only the legal owners—namely, the companies behind this trade—but also their beneficial owners, that is, the shareholders who directly benefit from the company rather than merely acting on behalf of others. This is why asset transparency regarding land, forestry concessions, and the identification of crops and cattle as agricultural commodities linked to specific plots of land or concessions is critically important in combating this illicit trade.

The FACT Coalition found that the United States still permits shell companies to conceal the true beneficiaries behind environmental crimes, such as illegal deforestation and the illicit gold trade,[21] making it more difficult for law enforcement to detect them.[22] They recommend passing the proposed Corporate Transparency Act (CTA) to establish a beneficial ownership registry and to make it publicly accessible for accountability purposes.

In the EU the 5th Anti-Money Laundering Directive (AMLD) established publicly accessible beneficial ownership registries. However, these were later invalidated following a European Court of Justice (ECJ) ruling in November 2022, which revoked public access. The 6th AMLD provides on-request access to civil society and journalists, allowing partial access but with significant hurdles and delays. In the United Kingdom, the beneficial ownership registry remains publicly accessible free of charge. However, this has not yet been replicated in the UK's overseas territories and Crown Dependencies.

FATF updated its recommendation 24 in 2022, and recommended centralised registries of beneficial owners. It has led to the establishment of government-run beneficial ownership registries worldwide. However, these registries rarely provide public access, except in some cases related to extractive industries, which seldom include the forestry sector. The Financial Transparency Coalition, Transparency International, Tax Justice Network and the FACT Coalition among other civil society organisations advocate for public access to beneficial ownership registries.

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BRAZIL

Billions lost to illicit deforestation.

Brazil, home to the world's largest rainforest, loses billions of dollars through illicit financial flows linked to illegal deforestation, which is largely driven by permanent agriculture, primarily soy and cattle farming.

Despite President Luiz Inácio Lula da Silva, who hosted world leaders at the COP30 conference in late 2025, announcing in January 2023 that Brazil aims to end deforestation in the Amazon and other biomes by 2030, significant challenges remain. [23] This commitment is a welcome development but relies heavily on increased climate financing to achieve its goals. Meanwhile, Brazil's landmark Soy Moratorium – which bans the cultivation of soy on land deforested after 2008 – is facing substantial backlash following a court appeal by commercial farmers.

Brazil's Environmental Crimes Law (Law 9.605/98)[24] imposes penalties for illegal deforestation, including fines and imprisonment. Article 45 of this law criminalises the cutting of hardwood in violation of legal provisions, as well as its transformation into charcoal for industrial, energy, or any other use, whether economic or otherwise.

Analysing illicit timber trade

Here, we examine the revenue loss resulting from illicit financial flows linked to illegal deforestation, with a focus on the Brazilian timber sector. We employ the Partner Country Method (PCM) to calculate trade discrepancies between import and export prices, using data from UN COMTRADE.

In Brazil, timber exports were generally within normal variation for most years. However, between 2018 and 2023, significant trade discrepancies emerged, potentially indicating an increase in illicit financial flows during that period (see Table 1 below for detailed results). In 2022 alone, an unexplained trade discrepancy between import and export prices amounted to US$1.17 billion, even when allowing for an 8% variation in how import and export prices are reported.

Table 1: Unexplained Trade Discrepancies in Brazilian Wood Products, 2013–2024

Year	Exported by Brazil (in US$ millions)	Imported by all trade partners (in US$ millions)	Trade Value Gap (%)	Unexplained discrepancy (in US$ millions)
2013	2,003	2,193	91.36	29,284
2014	2,242	2425	9245	3,814
2015	2,270	2499	90.87	46466
2016	2,361	2,586	91.31	35,964
2017	2,780	3,024	91.94	21,306
2018	3,144	3,661	85.88	265,318
2019	2,904	3472	83.66	335,019
2020	3,140	3,602	87.20	209,914
2021	4495	5,222	86.08	367,397
2022	4,734	6,279	7540	1,165,957
2023	3420	3,958	8641	264,110
2024	3,663	3,774	97.06	-182,053
Total				2,562495

Source: UN COMTRADE, FTC own analysis

The primary destination countries for these illicit financial flows during this period were the United States, Mexico, China, and the United Kingdom. UNCTAD's methodological guidelines for measuring illicit financial flows acknowledge that trade mispricing is a valid method; however, it is important to carefully examine discrepancies to identify legitimate explanations. [i] In this analysis, we consider differences in customs pricing as the main valid explanation. The remaining discrepancies are assumed to result from the under-declaration of timber export values in the source country.

In other years, specifically from 2013 to 2017, the discrepancies can be attributed to differences in the reporting of import and export prices, with an 8% range observed based on wood trade data from Brazil, as the cost of insurance and freight is included. However, under President Jair Bolsonaro, who was elected in 2018 and served from 2019 to 2022, there was a significant increase in unexplained trade discrepancies related to timber exports from Brazil, amounting to US$2.5 billion. This gap was eliminated by 2024.

However, if we consider source-based methods of illicit financial flows as well as the domestic consumption of illicit timber, the actual figure may be higher. Public data from Imaflora[27] indicates that the domestic market consumes most timber products, with less than 10% of Brazilian timber production exported. According to SIMEX, a Brazilian NGO initiative, between 35% and 42% of all deforestation occurring in the Legal Amazon territory across multiple states was unlicensed. [28] Given that total timber exports from Brazil amounted to US$3.6 billion in 2024, we can conservatively estimate that approximately US$1.28 billion of timber exports originated from illicitly logged land in the same year.

Given that total timber exports from Brazil were US$3.6 billion in 2024, we can conservatively estimate that approximately US$1.28 billion of timber exports originated from illicitly logged land in the same year.

Availability of data sources concerning landed assets and company owners

The Legal Amazon[29] region covers nearly 49% of the country's territory. Nationwide, 36% of the land is public, 44% is private, and 17% is unregistered or has unknown tenure, with 6% of the public land still undesignated.[30] Large privately owned properties constitute the single largest category, reflecting a legacy of unequal access to land.[31]

Lack of access to land ownership data is a significant issue. In Brazil, some land ownership information is publicly available through the Land Archives (Acervo Fundiário),[32] which forms part of the Land Management System (Sistema de Gestão Fundiária, SIGEF).[33] However, identifying specific individual owners is often impossible, even when submitting transparency requests under the Brazilian Access to Information Law, filed with the Service of Information to Citizens (e-SIC).[34]

There are competing and unclear land demands, particularly in the Legal Amazon, where land grabbing, fraudulent land titles, and uncoordinated policy incentives complicate the land tenure situation.[35] Nationwide, overlapping claims across land tenure categories account for more than 50% of the registered territory, significantly contributing to deforestation.[36]

In addition, there is a second registry containing land information called the Rural Environmental Registry (CAR),[37] which aims to consolidate data on native vegetation, land use, and environmental assets. It provides strategic information for monitoring deforestation, protecting native vegetation, and planning rural development. Established by the New Forest Code (Law 12,651/2012), the CAR is essential for environmental and economic planning in rural areas. All rural properties in Brazil are required to register with it.

Although it is not a land registry and is not intended to serve as one, it provides self-declared environmental information about landholders, whether individuals or companies. Consequently, the CAR registry has often been exploited fraudulently or with ill intent to claim and seize land.[38] During the Forest Code reform in 2012, it was decided to address historically widespread non-compliance by offering a degree of amnesty—primarily for fines, and partially for the requirement to restore farms affected by illegal deforestation prior to 2008.

Reforestation or compensation for forest deficits was not implemented on a significant scale for several years due to a lack of systematic enforcement and effective market incentives. One study reports that only 6% of landowners responsible for unlawful deforestation in Pará and Mato Grosso stated they were taking the necessary measures to compensate for or restore their legal reserves, while 76% indicated they would only do so in response to government fines or market incentives.[39]

All legal entities operating in the country must register with the Federal Tax Authority and obtain a unique tax identification number. Company records are accessible through the CPF (Cadastro de Pessoas Físicas, Individual Taxpayer Registry) and

CNPJ (Cadastro Nacional da Pessoa Jurídica, National, National Register of Legal Persons). The CNPJ database contains information about legal entities, including the company name, address, legal representatives, and economic activities.[40]

CNPJ does not include beneficial ownership data for key shareholders; this information is governed by separate legislation under Articles 53 and 54 of Normative Instruction RFB No. 2,119/2022. Beneficial ownership data is disclosed to the Brazilian Federal Tax Authority as part of tax legislation and filing requirements. This data is shared with other competent authorities, particularly those involved in combating money laundering and terrorist financing. However, beneficial ownership information is not publicly available and can only be accessed by competent authorities.[41]

Establishing connections between companies often requires further investigation beyond public records or access to databases available to investigative authorities through judicial orders.[42] This may involve examining embargo notices and fines where the individuals or companies responsible are identified. While CNPJ records provide information about company details, such as directors and addresses, they are insufficient to determine who benefits from the company's activities.

Mato Grosso State: the world's beef and soy capital as the epicentre of illicit activity

Illicit financial flows linked to deforestation in Brazil are significant across multiple sectors beyond timber, as exemplified by the State of Mato Grosso, one of Brazil's most important regions for both soybean and livestock production. It also faces considerable climate and environmental challenges, including illicit deforestation. In 2023, Mato Grosso slaughtered 34.06 million cattle, accounting for 17.4% of Brazil's total,[43] sourced from approximately 21 million hectares of pastureland.[44] Additionally, Mato Grosso produced 30% of Brazil's soybean output in 2023, amounting to 39.34 million tonnes.[45]

Illicit financial flows linked to deforestation in Brazil are significant across multiple sectors beyond timber, as exemplified by the State of Mato Grosso, one of Brazil's most important regions for both soybean and livestock production.

From 2002 to 2025, Mato Grosso lost 9.8 Mha of tropical primary forest. Of this amount in 2025 alone, Mato Grosso lost 330,000 ha, accounting for a quarter of the total deforested area for Brazil.[46] From 2001 to 2025, Mato Grosso lost 15 Mha of tree cover, equivalent to 26% surface area in 2000, resulting in 6.7 GT of CO_2 equivalent emissions.[47]

Policies such as the Soy Moratorium, implemented since 2008 to prohibit soy cultivation on lands deforested after that date, have significantly reduced deforestation. Similarly, Cattle Agreements have helped reduce deforestation related to cattle production. However, despite these largely voluntary measures, indirect effects from agricultural activities continue to contribute to forest loss.[48]

In Mato Grosso, we found that plots lacking deforestation permits between 2010 and 2023 account for a significant proportion of the total soya and beef production area—48% for soya and 15% for intensive grazing pasture. Very few farms obtain Environmental Recovery Plans that allow them to regularise the absence of a prior logging permit. It is estimated that only 20% (156 out of 770 assessed farms) have such plans. It remains unclear whether holding a permit negates the illicit nature of the deforestation, as the plan may not be implemented.

In Mato Grosso, we found that plots lacking deforestation permits between 2010 and 2023 account for a significant proportion of the total soya and beef production area—48% for soya and 15% for intensive grazing pasture.

In the case of pastureland, we found that 3.2 million hectares were used for grazing without deforestation permits during that period, representing 15% of the total in the state (see Table 2 below). Given that the average stocking rate per hectare is 1.57 and the average price per head is R$4,440, this corresponds to a total production value of R$224 billion (US$3.9 billion) on land lacking deforestation permits in 2022. It is important to note that we considered plots of land without deforestation permits cumulatively from 2010 to 2022, even though some may have obtained permits during that time.

Our analysis found that 5.8 million hectares of soybeans were cultivated on land without deforestation permits in 2022, representing 48% of the total production in Mato Grosso during 2022–2023. Given an average yield of 62.3 soybean sacks per hectare and a price of R$160.52 per sack, the total value of soy in 2022 amounted to R$58.6 billion (US$10.3 billion). Similarly, other reports found that 91% of the deforestation in the Amazon was illegal.[50]

The total carbon emissions associated with intensive grazing for cattle meat linked to deforestation in Mato Grosso were estimated at 3,349 $MtCO_2e$ from 2001 to 2023.[51] Considering that 15% of illicit deforestation is attributed to cattle production, we can estimate a total of 502.35 $MtCO_2e$ over this period. Annually, approximately 21.84 $MtCO_2e$ in emissions are associated with intensive pastureland established without deforestation permits. This amount of CO_2 emissions is equivalent to 2843 million flights between New York and Los Angeles.[52] For reference, this corresponds to about 5.1 years' worth of flights between the two destinations.

The total carbon emissions associated with intensive grazing for cattle meat linked to deforestation in Mato Grosso were estimated at 3,349 $MtCO_2e$ from 2001 to 2023.

Between 2001 and 2023, soy cultivation in the State of Mato Grosso was associated with a total of 627 $MtCO_2e$. Of this, 40% was linked to illicit deforestation, resulting in cumulative emissions of 250.8 $MtCO_2e$ over the period. On an annualised basis, this equates to approximately 10.90 $MtCO_2e$ per year attributable to soy cultivation related to illegal deforestation between 2001 and 2023. This volume of emissions is equivalent to the annual emissions produced by driving 2.3 million typical petrol-powered cars, roughly the number of registered vehicles in Greater London (2.6 million).[53]

During the period from 2001 to 2023 a total of 627 MtCO2 was associated with soy cultivation in the State of Mato Grosso. Of this 40% was related to illicit deforestation, resulting in 250.8 MtCO2 of cumulative emissions over this period.

Table 2: Mato Grosso pastureland in land plots without deforestation permits

Total of plots (ha.) pastureland lacking deforestation permit	3,220,096
Total cumulative CO_2 emissions linked to pasture land lacking deforestation permit in 2001-2023	502.35 $MtCO_2e$ [54]
Total pastureland Mato Grosso (ha.)	21,000,000 [55]
% ha. of pastureland lacking deforestation permits	15%
Cow heads / ha.	1.57 [56]
Total cow heads	33,500,000 [57]
Cow heads in plots lacking deforestation permits	5,055,551
Average weight per cow head (in kg.)	262.5 [58]
Average weight per cow head (in arrobas)	15 [59]
Price cow head per arroba (in R$)	296 [60]
Price cow head (in R$)	4440
Total cow heads in plots lacking deforestation permits (in R$)	22446,645476
Total cow heads in plots lacking deforestation permits (in US$) - (R$ 5.68 = US$ 1)	3,951,874,203

Source: FTC own analysis, using data from Mato Grosso Authorities (SETE) on unauthorised deforestation

Table 3: Mato Grosso soy production in land plots without deforestation permits

Total ha. soya in plots linked to unauthorised deforestation	5,858,346
Total cumulative CO_2 emissions linked to pasture land lacking deforestation permit 2001-2023	250.8 $MtCO_2e$
Total ha. soya	12,100,000 [61]
% soya in plots lacking deforestation permits	48%
Soybean sacks/ha.	62.3 [62]
Total soybean sacks in plots lacking deforestation permits	364,974,951
Total price / soybean sack (in R$)	160.52 [63]
Total soja in plots lacking deforestation permits (in R$)	58,585,779,105
Total soja in plots lacking deforestation permits (in US$) - (R$ 5.68 = US$ 1)	10,314,397,730

Source: FTC own analysis, using data from Mato Grosso Authorities (SETE) on unauthorised deforestation

Table 4: Mato Grosso timber in land plots without deforestation permits in 2023-2024

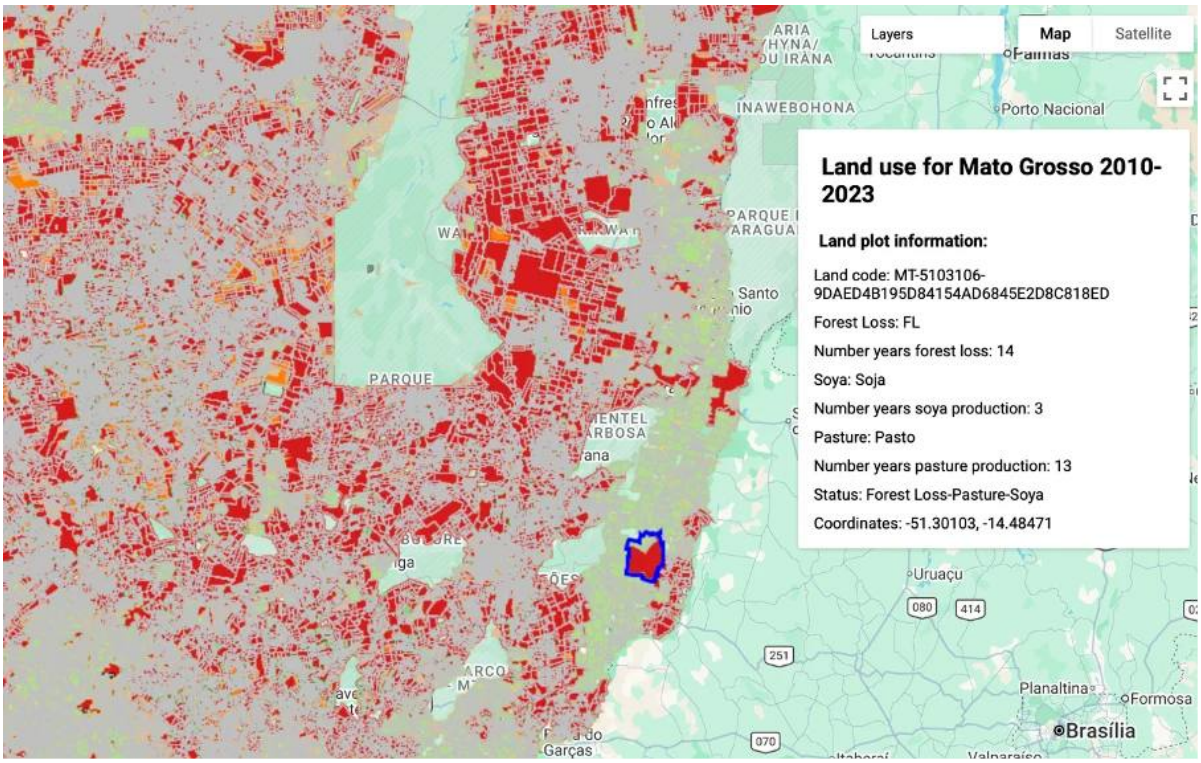
Total deforested land in Mato Grosso (ha.)	190,044 [64]
Total of plots (ha.) lacking deforestation permit	48,926 [65]
% ha. of deforested land lacking deforestation permits	26%
Carbon footprint linked to illicit deforestation in 2023-2024	24.1 $MtCO_2e$[66]
Carbon dioxide emissions per ha of logged land in 2023-2024	492.6 tonnes

Source: Simex for unauthorised logging data

Illlicit deforestation in Mato Grosso continued at a rapid pace in 2023, with a total of 190,044 hectares deforested. Of these, 48,926 hectares (26%) were cleared without permission. Based on Global Forest Watch (GFW) estimates of CO_2 emissions associated with deforestation, this resulted in an additional 24.1 $MtCO_2e$ of emissions during the period from August 2023 to July 2024.

A key factor contributing to this problem is the lack of tenure security, as well as the absence of public registries for legal owners and transparency regarding beneficial ownership of land in both registries containing land data. To illustrate this, we first analysed recent forest loss and its conversion to soybean cultivation and intensive grazing in Mato Grosso – two primary drivers of deforestation in the state – using Global Forest Watch data from 2010 to 2023 (see Annex I for further details). Next, we overlaid spatial data on soybean cultivation and intensive pasture production within deforested areas between 2010 and 2022, the most recent year for which data was available at the time of this report's publication. Finally, we combined this information with a third geospatial layer identifying the owners of the land used for soybean and pasture that experienced deforestation during this period. The results are presented in Figure 3 below.

Figure 3: Land parcels in Mato Grosso exhibiting commodity-driven forest loss



Source: FTC own analysis by Brian Covaro, available at: https://bcovaro.users.earthengine.app/view/mtparcelas

This analysis enabled us to identify the IDs of plots of land that have been illicitly deforested since 2010, as well as their legal owners. However, this data did not provide information about the beneficial owners of these plots or their supply chains—that is, the companies or individuals to whom they sell their produce.

We requested the identification of the individual owners of these plots from the Ministry of Information Management (MGI), arguing that, as they are very likely environmental offenders, their right to privacy should be overridden in the public interest. Nonetheless, the MGI responded that information relating to individual identification cannot be publicly disclosed in this case. Below, we reproduce the response explaining why the individual information could not be disclosed:

The Ministry of Information Management (MGI) [...] responded that information pertaining to the individual identification domain cannot be publicly disclosed in this case.

> "*Regarding access to restricted data contained in the CAR (Full Name, CPF, CNPJ), there is strict confidentiality concerning the information held within the Rural Environmental Registry System. Therefore, the Rural Environmental Registry Board cannot, on its own initiative, disclose the CPF or other personal and asset-related data of rural property holders declared in the CAR. Furthermore, when it comes to the disclosure of personal data that can identify an individual, such as a name, it is essential to exercise caution. A vast amount of data is available across various administrative units.*

The intersection of this data may cause harm to citizens, whether concerning their personal, family, or asset-related security, or even damage their reputation. This practice violates Article 31 of Law No. 12,527/2012 – AIL, which mandates that the processing of personal information must be conducted transparently, respecting individuals' privacy, private life, reputation, and individual freedoms and rights. In light of the above, the request cannot be granted."

This response was given despite deforestation having taken place on these plots of land without the required permits and notwithstanding the existence of a freedom of information law. This legislation, known as the Brazilian Access to Information Law (AIL), was enacted on 18 November 2011 (Law No. 12,527).[67] It implements provisions of the Federal Constitution to reinforce transparency in Brazil's public administration. The AIL establishes rules for administrative procedures related to citizens' access to information and aims to enhance transparency, accountability, and public understanding of government actions.

The Brazilian AIL is one of the most comprehensive laws of its kind worldwide, comprising 47 articles that address various aspects of information access. It establishes deadlines, restrictions, requirements for information, and accountability measures for public servants. Access to information laws, such as the AIL, are recommended by multilateral organisations globally to combat government corruption and illicit financial flows more effectively. The law empowers citizens by enabling them to better understand the government's role and its decision-making processes. UNESCO recognises access to information as a fundamental human right. Additionally, the AIL supports the achievement of the Sustainable Development Goals by promoting transparency and encouraging informed citizen participation.[68]

Company Case Study: Fazenda Santa Silvia – Cocalinho, MT

Due to the lack of transparency concerning the beneficial owners of land in Brazil, only on-the-ground investigations by NGOs or journalists can reveal the beneficial owners and supply chains of recently deforested plots (post-2010) that have been embargoed or lack deforestation permits. To illustrate this, we cross-checked the CAR identification number of one of the top ten plots where recent deforestation occurred with plots investigated by the Brazilian NGO Aidenvironment.

Due to the lack of transparency regarding the beneficial owners of land in Brazil, only on-the-ground investigations by NGOs or journalists can uncover the beneficial owners and supply chains of recently deforested plots.

The farm we identified is located in the municipality of Cocalinho, Mato Grosso, and covers a total area of 100,717.34 hectares.[69] Its CAR identification number in SICAR is MT-5103106-9DAED4B195D84154AD6845E2D8C818ED, and it is one of the largest beef-producing estates in our analysis. A total of 3,168 hectares were cleared illegally on this farm between October 2022 and July 2023, including 940 hectares within the declared Legal Reserve, according to Aidenvironment. The farm had no fire alerts in 2022 or 2023, and it neither overlaps nor borders any protected or indigenous lands.[70]

The farm is owned by a family group called "Agropecuária Santa Silvia", which is affiliated with two other companies: "Casa 5 Investimentos e Participações" and "Jubran Agropecuária".[71] The names of the individuals who are partners or directors of Casa 5 Investimentos e Participações can be found in the Econodata and Serasa Experian databases of publicly available company information.[72] Two directors were identified in these databases; however, they do not include shareholder or beneficial ownership data.

Aidenvironment, through qualitative fieldwork, identified 13 properties linked to these three companies, totalling at least 125,282 hectares. In Cocalinho (MT): Fazenda Santa Silvia (53490 ha), Fazenda Santa Maria (9407 ha), Fazenda Molha Saco (area unknown), Fazenda Pesqueiro (area unknown), Fazenda Amparo (area unknown), Fazenda Ipê (2,000 ha). In Cáceres (MT): Fazenda Estreita (270 ha). In Anaurilândia/Batayporã (MS): Fazenda Santa Ilídia (25,080 ha). In Presidente Epitácio (SP): Fazenda Ponte Funda (2,285 ha). In Alvorada do Sul (MS): Fazenda Jauru (area unknown). In Narandiba (SP): Fazenda Nova Damasco (8,620 ha). In Santa Fé de Goiás (GO): Fazenda Jussara (2,250 ha). In an unknown municipality: Fazenda Formosa (21,880 ha).[73]

The Santa Silvia farm, identified in this case, has been embargoed by the Environmental Agency of Mato Grosso for the illegal clearance of native vegetation, with the embargo dated 22 June 2023. The group is also linked to three further embargoes issued by the Environmental Agency of Mato Grosso in 2016, 2018, and 2022.

With regard to environmental fines, the group received one fine for the unauthorised clearance of 729 hectares on 22 June 2023. Agropecuaria Santa Silvia, which owns Fazenda Santa Silvia, had six environmental fines issued by IBAMA, all of which were imposed in 2019 and 2020.

Another environmental fine was issued in 2022 by the Environmental Agency of Mato Grosso for the illegal clearance of 159.6 hectares of native vegetation in 2020. "Agropecuária Jubran," part of the same group, received five additional environmental fines in 2006 related to a property in Bataypora (MS). The total amount of these fines was BRL 729,895 (US$119,000).

The group produces soy and beef. Aidenvironment was able to identify part of the group's supply chain through qualitative fieldwork. According to their investigation, one warehouse was identified within a 50-kilometre radius of the Santa Silvia farm, owned by individuals and local storage companies or cooperatives, although no links with exporters or major soy traders could be established.[74]

For beef, Aidenvironment identified supply chain links involving JBS and Marfrig. There are six different slaughterhouses sourcing cattle from Cocalinho (MT), including two owned by JBS (Barra do Garças - MT, Água Boa - MT) and two by Marfrig (Nova Xavantina - MT, Paranatinga - MT). By analysing Animal Transit Documents (Guia de Trânsito Animal (GTA)),[75] which are mandatory documents accompanying batches of animals moving from farm to farm and to slaughterhouses, Aidenvironment identified that Agropecuária Jubran, in Cocalinho – MT, directly supplied JBS's abattoir in Água Boa - MT in 2019. Other linked properties, Fazenda Santa Ilídia, in Bataguassu – MS, and Fazenda Jauru, in Nova Alvorada do Sul - MS, directly supplied Marfrig's abattoir in Bataguassu - MS in 2019. Additionally, Fazenda Estreita, in Cáceres - MT, directly supplied JBS's abattoir in Araputanga - MT in 2018.[76]

Importantly, by the time Aidenvironment's report was published in August 2023, Marfrig had responded, stating that Fazenda Santa Silvia and Ipê (a linked property) were "blocked from supplying Marfrig as they do not meet the company's socio-environmental criteria." However, the properties Santa Ilídia and Juaru (intermediate direct suppliers to Marfrig) "comply with all of Marfrig's socio-environmental commitments."[77] Additionally, in September 2024, following approval from Brazil's antitrust agency (Conselho Administrativo de Defesa Econômica, CADE), Marfrig completed the sale of its Amazon abattoirs to Minerva, meaning that these abattoirs mentioned in the RDM report now belong to Minerva.[78]

This case study demonstrates that conducting due diligence on soy and beef supply chains in Brazil linked to illicit deforestation is highly time-consuming and cannot be achieved solely through the analysis of publicly available data. Instead, it necessitates investigative work on the ground, which most companies importing timber, soy, beef, or other commodities associated with illicit deforestation are unlikely to undertake.

More broadly, Mato Grosso, despite being a significant source of illicit soy and beef, continues to supply these products to export markets with little repercussion—unless investigative NGOs and journalists conduct due diligence and publish their findings in the press or NGO reports. Even then, the litigation risk for these NGOs is considerable, as the absence of data may enable those accused to deny the allegations based on fieldwork.

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CAMEROON

Millions lost due to undeclared value of timber exports

The Congo Basin, where Cameroon is situated, contains the largest rainforest in Africa and is second only to the Amazon rainforest in size. Cameroon is the second-largest country within the Congo Basin, encompassing an estimated 11.8% of the biome. Cameroon's forests cover approximately 19 million hectares, or 40% of the country's total land area.[79]

Cameroon has experienced increased rates of illegal logging, timber trafficking, and deforestation driven by shifting agriculture. It ranked sixth among the top 10 countries for tropical primary forest loss in 2025.

Cameroon has experienced increased rates of illegal logging, timber trafficking, and deforestation driven by shifting agriculture. It ranked sixth among the top ten countries for tropical primary forest loss in 2025.[80] Cameroon lost 105,000 hectares of forest in 2025, marking the highest primary forest loss on record in the country. The carbon dioxide emissions associated with this tree cover loss in Cameroon were estimated at 130 $MtCO_2e$ in 2025.[81]

Cameroon has lost 24 million hectares of tree cover between 2001 and 2025, representing an 8% decrease since 2001, and has emitted 1.5 gigatonnes of cumulative CO_2 during this period.[82] The Centre, East, and South regions have been the most affected by deforestation.

Cameroon has committed to achieving deforestation-free agriculture by 2035, with plans in place to reach this ambitious goal within the next decade. From 2017 to 2023, the government progressively increased the export duty on raw logs from 17.5% to 60%. In contrast, processed wood products are subject to a lower export duty of 15%. The 2024 Finance Act further raised the export duty on raw logs from 60% to 75%, aiming to discourage their export. Additionally, the government of Cameroon has announced a ban on the export of 76 wood species, which will take effect in 2028. This policy is shared by the member states of the Central African Economic and Monetary Community (CEMAC), which also includes the Republic of Congo, Gabon, Equatorial Guinea, Chad, the Central African Republic, and the Democratic Republic of the Congo.

The volume of unprocessed timber exports has significantly declined, with Cameroon's raw log exports falling by 20% in 2023. Revenue for forestry operators followed a similar downward trend, decreasing from CFA 77 billion in 2022 (US$37 million at current exchange rates) to CFA 644 billion (US$31.5 million) by the end of 2023.[85] Processed wood facilities currently benefit from tax exemptions on the importation of machinery and other capital-intensive goods; however, these exemptions are expected to end in the coming years.

However, the country also loses millions of dollars each year due to illicit financial flows associated with timber production and exports. In 2021, the National Agency for Financial Investigation (ANIF) estimated that illegal logging and wildlife exploitation resulted in an annual loss of 33 billion CFA francs (US$59 million) for the Cameroonian government.[86] This loss arises because illegal loggers exploit forests without paying the required taxes and fees, thereby depriving the government of a significant portion of its revenue.

In this report, we found, however, that the losses are five times greater than previously estimated. One of the most common types of illicit financial flows relates to trade mispricing, where undervaluation of exports is frequently observed. As in the case of Brazil, we used the Partner Country Method (PCM) to calculate this discrepancy.[87]

We found that cumulative illicit financial flows based on trade mispricing could average US$289 million per year during this period [between 2013-2023].

More specifically, by examining the total value of exports of logs and timber (HS Code 44 in UN COMTRADE) from Cameroon between 2013 and 2023—the latest year for which data is available at the time of writing this report—we found that cumulative illicit financial flows based on trade mispricing could average US$289 million per year during this period. This estimate accounts for adjustments made to correct discrepancies between reported import and export prices, as shown in Table 5 below. Most exports from the source country are reported as Free on Board (FOB), while most imports in the partner countries are recorded on a Cost, Insurance, and Freight (CIF) basis. In countries that declared both prices, the difference was 8%.

One plausible explanation is the underreporting of exports to evade customs duties or levies. It is important to note that this does not necessarily imply illegality; only through firm-level investigation can we determine whether any illegal activities have taken place.

Between 2013 and 2023, Cameroon experienced a cumulative gap between import and export prices in its timber exports to several countries: US$1.2 billion with China, US$760 million with Vietnam, US$504 million with European Union countries, and US$125 million with the United Kingdom. Multiple factors could explain this discrepancy; however, according to the methodological guide for measuring illicit financial flows for the purposes of the SDG indicators, such discrepancies are considered illicit financial flows that warrant further investigation.

Between 2013 and 2023, Cameroon experienced a cumulative gap between import and export prices in its timber exports to several countries: US$1.2 billion with China, US$760 million with Vietnam, US$504 million with European Union countries, and US$125 million with the United Kingdom.

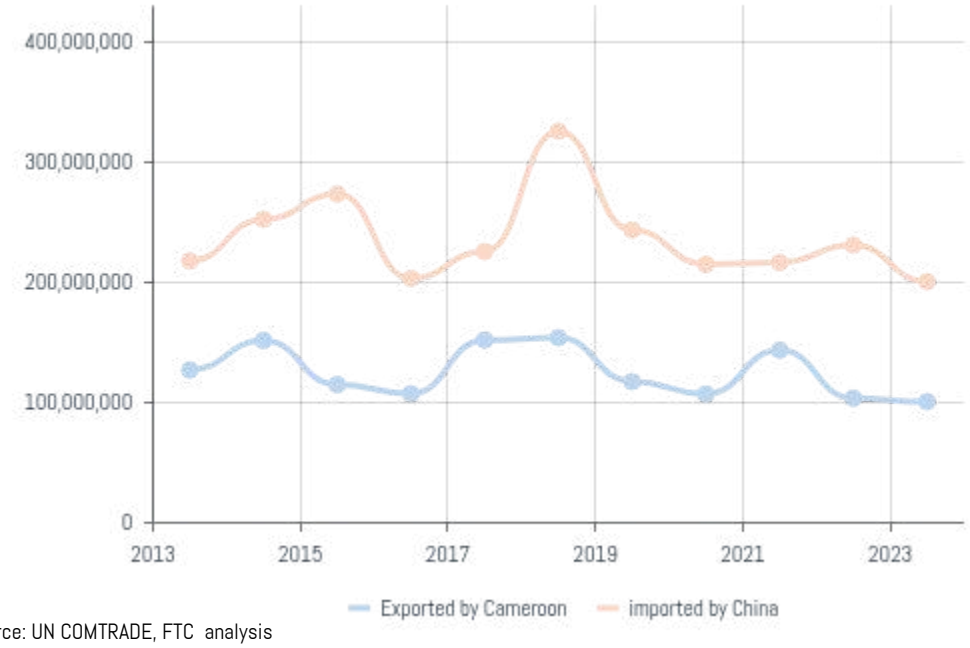
Table 5: Unexplained Trade Discrepancies in Cameroonian Wood Products, 2013–2024

Year	Exported by Cameroon (in US$ millions)	Imported by all trade partners (in US$ millions)	Trade Value Gap (%)	Unexplained discrepancy (in US$ millions)
2013	475	749	63	236
2014	525	770	68	203
2015	492	896	55	364
2016	480	810	59	292
2017	506	796	64	250
2018	553	909	61	311
2019	478	873	55	357
2020	441	709	62	232
2021	525	757	69	189
2022	508	967	53	418
2023	479	845	57	327
2024	5464	9,081	60	3,180
Average				289

Source: UN COMTRADE, FTC own analysis

Figures 4 and 5 below analyse trade discrepancies from 2013 to 2023 with the two main trading partners in this period. EU countries are grouped together due to a common custom union and a single market, while leading EU countries for imports for wood product trade from Cameroon are Belgium, France, Italy and Spain.

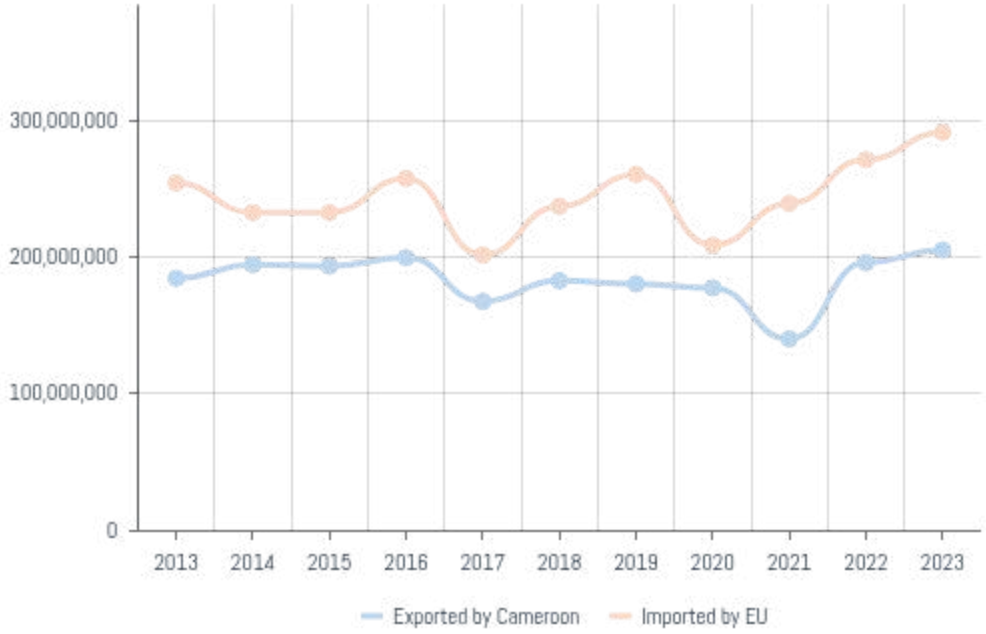
Figure 4: Import versus export prices in Cameroon–China wood product trade, expressed in trade value (US$)



Source: UN COMTRADE, FTC analysis

In the case of EU countries, we observe consistent discrepancies, with significant variations depending on the specific country. While there were hardly any unexplained discrepancies with Belgium, notable differences existed with France, Spain, and Italy. Additionally, recent years have seen a slight shift in trade away from both China and Vietnam, with these two countries no longer being the leading destinations. Instead, EU countries collectively have become larger destinations. This shift may be due to legislative changes imposing much higher taxes on the export of raw logs. European buyers are shifting to sawn wood, and some Asian buyers may be sourcing raw logs from other countries.

Figure 5: Imports versus exports in Cameroon – EU wood product trade, by trade value (US$)



Source: UN COMTRADE, FTC analysis

Cameroon's Forest and Timber Governance System

In Cameroon, the Ministry of Forests and Wildlife (MINFOF) is responsible for forest policy, the legislative framework, and the enforcement of forest laws. The most significant legislation relating to forest management is the 1994 Forest Law (Law No. 94/01), which permanently designates most of the country's forest areas for long-term production or conservation, while the remainder is allocated for community forestry.[88]

Cameroonian law also mandates that a percentage of the area-based Annual Forestry Royalty (RFA) paid by companies operating in both FMUs and SSVs be redistributed to local communities living near the forests to support their development. Additionally, for SSVs, a portion of the volume-based stumpage fees must also be allocated to local communities.

Logging in Cameroon takes place in forests classified as Permanent Forest Domains (PFD) and Non-Permanent Forest Domains (NPFD).[89] The PFD consists of Forest Management Units (FMUs), council forests, protected areas, and forest reserves. The NPFD includes community forests, Sales of Standing Volumes (SSV, "ventes de coupe"), as well as timber and recovery permits.

Table 6 on the next page outlines the different types of timber concessions, forests, and agro-industrial plots that publicly available data allow us to map. It is notable that most of Cameroon's forests are under government custodianship in various forms.[90]

Table 6: Types of Forests and Plantations in Cameroon, as Reflected in the Mapping

Logging titles and/or timber supply sources	Definition
Forest Management Unit (FMU)	Created under the 1994 Forestry Law, FMUs are designated areas within the Permanent Forest Domain – forests zoned for biodiversity conservation and sustainable management. FMUs are allocated through a competitive bidding process for a 15-year term and require a forest management plan approved by the relevant administrative authority, as stipulated in Article 46 Decree N° 95-53-PM dated 23 August 1995. An FMU may consist of one or several logging units.
Council Forests	Council Forests are zoned within the Permanent Forest Domain and managed according to an approved management plan. Once allocated, these forests become the private property of a council; however, the commune must comply with the management plan to retain ownership of the forest area (Articles 30-33 of the 1994 Forestry Law).
Communal Forests	Communal Forests are areas within the Non-Permanent Forest Domain, not exceeding 5,000 hectares, are designated for use by village communities. Proceeds from community forest management are allocated to community development projects (Articles 37-38 of the 1994 Forestry Law; Article 2, paragraphs 11 and 16; Art 27-34 of the N° 95-53-PM, 23 August 1995).
Sales of Standing Volumes (vente de coupe), SSVs	Zoned within the Non-Permanent Forest Domain (i.e., forests designated for timber extraction, agriculture, mining, and other uses), these areas can also be allocated to nationals within the Permanent Forest Domain. SSVs are allocated through a competitive bidding process for a maximum duration of three years, with a size limit of 2,500 hectares. They do not require a management plan (Articles 45, 55 of the 1994 Forestry Law).
Forest Reserves	An area of forest officially designated and managed by the government for conservation and sustainable resource management. These reserves may be allocated for various uses, including industrial logging, community forestry, and other forms of sustainable development.
Protected Areas of Fauna	Protected areas dedicated to fauna. These include national parks, wildlife sanctuaries, and faunal reserves.
Planted zones	Small agro-industrial land plots.
Hunting zones	A designated area, often leased from the government, where sport hunting is permitted. These zones are typically located near national parks and are managed specifically for hunting activities, with revenue potentially shared with local communities.
Agro-industrial plantations	Larger agro-industrial plots of land, which may include palm oil plantations.
Palm oil plantations	Palm oil plantations.

In practice, most of the declared timber harvested in Cameroon originates from either FMUs or SSVs, accounting for approximately 85% in 2019.[91] SSVs are considered short-term logging titles valid for up to three years, permitting the harvesting of forest areas of up to 2,500 hectares and do not require a forest management plan. In contrast, FMUs cover up to 200,000 hectares and are awarded through public calls for tender, with bids reviewed by an inter-ministerial committee. These concessions are granted for a duration of 15 years, with the possibility of one renewal for a further 15 years. Unlike SSVs, FMU logging agreements require companies to make specific investments to ensure sustainable operations by developing and implementing a forest management plan.

Earlier, in 2018, the government banned the export of raw logs from 31 tree species. This list was further expanded in 2023 to include an additional 45 timber species, such as moabi (Baillonella toxisperma) and okoume (Aucoumea klaineana), both highly valued. However, some of the bans are complicated by exceptions or quotas, making compliance difficult to ascertain.[92] The restrictions were further extended in 2025 to a complete ban on all exports – not just CITES-listed species – by 2026, as Cameroon's timber exports are considered to be at high risk of illegality.[93] The aim is to combat illicit timber trade, add greater domestic value to wood products, and create jobs within the timber processing industry.

To combat illegal logging, the Cameroonian government negotiated and signed a Voluntary Partnership Agreement (VPA) with the European Union, which came into force in 2011. The VPA aims to verify that timber exported to the EU is legally harvested, although progress in implementing the agreement has been slow. However, in practice, such verification is challenging if the production of timber-exporting companies cannot be publicly traced to specific forestry concessions.

There have also been initiatives to improve transparency in the forestry sector, led by both the government and civil society. For example, the Cameroon Forest Atlas is regarded as a key reference tool for monitoring activities within the sector.[94] This interactive platform is managed and regularly updated by the Ministry of Forests and Wildlife, with support from the World Resources Institute (WRI). It provides data on forest cover extent and changes, sourced from the Global Forest Watch's near real-time monitoring system.

Multiple initiatives have been launched to enhance transparency. Notably, the Transparency Enhancement Project and the Communication Enhancement Project, both led by the Technical Secretariat of the Cameroonian Coalition Publish What You Pay (CCPWYP), aim to improve transparency and combat environmental fraud in the mining and forestry sectors.

Financial opacity prevents tracing illicit timber in Cameroon

Despite numerous laws and regulations, the lack of transparency concerning land ownership, as well as legal and beneficial ownership in Cameroon, remains a significant challenge. This undermines the country's forestry sector and enables sanctioned timber companies to conceal the identities of the individuals who ultimately benefit from these activities.

Despite multiple laws and regulations, the lack of transparency regarding land ownership and legal and beneficial ownership in Cameroon remains a significant challenge.

The 2023 Budget Law and its reforms to the General Tax Code require companies to disclose their beneficial ownership information to the Tax Department (Direction Générale des Impôts). In Cameroon, the threshold for identifying a beneficial owner of a legal entity is 20% or more of the share capital or voting rights. On 27 September 2023, the Cameroonian Prime Minister issued Decree 2023/06801/CAB/PM to implement the provisions of this law.[95]

In accordance with Article 2 of Decree No. 2023/06801/CAB/PM dated 27 September 2023, beneficial owners must now be declared, implementing Section M 8d of the General Tax Code. Subsection 2 establishes a centralised registry at the tax authority, replacing the previous requirement to maintain records solely at the legal entity level.

"The persons referred to in subsection 1 above, or, where applicable, their legal representatives, shall be required to declare to the taxation administration the information relating to their beneficial owners, under penalty of the fine provided for in Section M 99 of the Manual of Tax Procedures." [96]

However, this registry is not public. The Cameroon Forest Code requires foreign entrepreneurs to register their companies in Cameroon and obtain official accreditation to operate in the logging sector. This accreditation, issued by MINEF (Ministry of Environment, Forestry and Wildlife), is a mandatory step for any logging operation, regardless of ownership. Foreign entrepreneurs, like Cameroonian nationals, must register with the forestry exploitation sector to be eligible for sales or exploitation permits. These permits should include publicly accessible details of the legal and beneficial owners.

Greenpeace highlighted the ongoing lack of transparency regarding logging permits, including, for example, the absence of publicly accessible maps showing the operational areas of some SSVs.[97] This lack of information complicates the satellite tracking of illegal logging. Based on our mapping exercise, we are unable to overlay timber logging titles with areas of forest loss. To make matters worse, some major timber companies holding permits in other forest types indirectly acquire a portion of their logs from SSVs.[98]

A land title registry exists, and the land rights of indigenous peoples, tribes, and farmers are recognised in the Constitution. However, land tenure legislation dates back to 1974, and the reform initiated in 2011 is still pending. Records from the Ministry of State Property and Land Tenure indicate that land registration rates have not significantly increased since independence. Between 1884 and 2005, only 125,000 title deeds were issued. On average, this represents approximately 1,000 titles per year, covering less than two per cent of the land in Cameroon.[99] However, it is inconceivable for bank financing, insurance, and investment purposes that large landowners and commercial farmers do not know their land boundaries. Therefore, these boundaries should first be registered to help prevent illicit practices.

Legal ownership data, on the other hand, is recorded in the Trade and Personal Property Credit Register (Registre du commerce et du crédit mobilier – RCCM) or the Register of Co-operative Societies. When registering, companies must provide their articles of association, which include details of their founding members. They are also required to maintain a register of their members or shareholders, which must be updated whenever changes occur. However, a shareholder register is not the same as a beneficial ownership register, as shareholders can be nominees or other legal entities.

These transparency challenges became evident in March 2024 when Cameroon was suspended from the Extractive Industries Transparency Initiative (EITI) for the second time in five years. The EITI focuses exclusively on the mineral extractive sectors and fossil fuels, excluding forestry and fisheries, indicating that transparency issues are also present in other sectors. Additionally, Cameroon's most recent evaluation by the Financial Action Task Force (FATF), conducted under the Central African Action Group Against Money Laundering (GABAC) and completed in March 2022, identified significant deficiencies in the country's regulatory framework.[100]

This lack of transparency regarding public ownership allows foreign companies, including those associated with illegal logging, to use Cameroonian front or shell companies to gain access to timber concessions in the country. These arrangements are employed to circumvent regulations or facilitate illegal logging. While some foreign companies operate directly or in partnership, many rely on such structures to manage timber operations.

This lack of public ownership transparency enables foreign companies, including those linked to illegal logging, to use Cameroonian front or shell companies to gain access to timber concessions in the country.

This was exemplified by the case of Herakles Farms, a U.S. company developing palm oil plantations in Cameroon's Southwest region, an area renowned for its rich biodiversity. According to an investigation by Greenpeace, aware that it could not legally sell wood because it was not registered as a timber company in Cameroon, the company purchased a timber firm called Uniprovince in 2013 to commercialise tropical timber previously illegally harvested within its concession.[101]

The purchase of this front company was made by Herakles Farms' local subsidiary, SG Sustainable Oils Cameroon (SGSOC), which is registered in the Cayman Islands, a well-known secrecy jurisdiction. In January 2014, the Cameroonian Minister of Forests unlawfully granted a Sale of Standing Volume permit to Uniprovince (UP), located within the Herakles Farms concession.[102]

Very few companies have been sanctioned under supply chain or money laundering legislation in destination countries. One notable example occurred in 2023, when Dutch authorities sanctioned the company FIBOIS for breaching the EU Timber Regulation and failing to conduct proper due diligence to prevent illegally harvested timber from entering the EU market. Authorities were not convinced that the Dutch importer – and, by extension, the Cameroonian timber trader involved with timber from the disputed Cameroonian company Compagnie de Commerce et de Transport (CCT) – had taken sufficient steps to ensure the timber was not illegally harvested.[103]

In another case, French importers Angot Bois, Abex Bois Exotiques, F. Jammes, and Tropical Wood Trading (TWT), ultimately a UK-owned company, were all identified by Earthsight as sourcing timber from the Congo Basin or Liberia. Angot Bois and TWT were purchasing wood from Congolese companies linked to illegal deforestation.[104] Overall, sanctions issued across Europe have been minimal, and the continued approval of exporters such as those named above demonstrates that high-risk timber still slips through the net. However, French authorities did not sanction these companies.

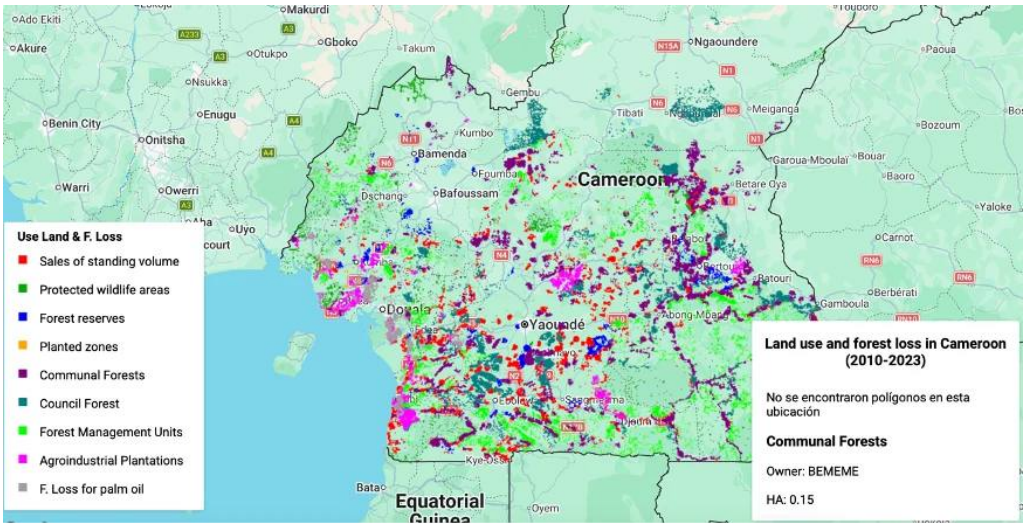
According to the Environmental Investigation Agency, a UK-based NGO, many companies use timber titles to launder timber sourced from other regions, particularly when dealing with high-value timber species. This practice involves using a legitimate timber title to conceal the origin of timber that may have been illegally harvested elsewhere. Misdeclaration and widespread violations of Cameroonian tax, export, and labour laws[105] contribute to some of the timber mispricing evident in the UN COMTRADE data, as shown earlier in this case study. In such cases, the quantity and quality of timber are often incorrectly reported at the source, while at the destination they are declared more accurately to the customs authorities.

Many companies use timber titles to launder timber sourced from other regions, particularly when dealing with high-value timber species.

Visualising the lack of transparency in ownership

To address the lack of transparency concerning land and beneficial ownership in Cameroon, we utilised the most comprehensive Geographic Information System (GIS) data available.

Figure 6: Deforestation associated with forestry concessions and palm oil plantations in Cameroon



Source: FTC, analysed by Brian Corvaro [106], showing ownership data for a Communal Forest mapped,

Our analysis reveals that it is only possible to identify land plots overlapping with recently deforested areas (from 2010 to 2023) and the companies that own these plots—not their beneficial owners. The mapped plots include Forest Management Units and Sales of Standing Volumes (vente de coupe), which account for the vast majority of declared timber harvested in Cameroon, as noted earlier in this section, and, to a lesser extent, agro-industrial plantations (see figure below).

Our analysis reveals that it is only possible to identify land plots overlapping with recently deforested areas (from 2010 to 2023) and the companies that own these plots – not their beneficial owners.

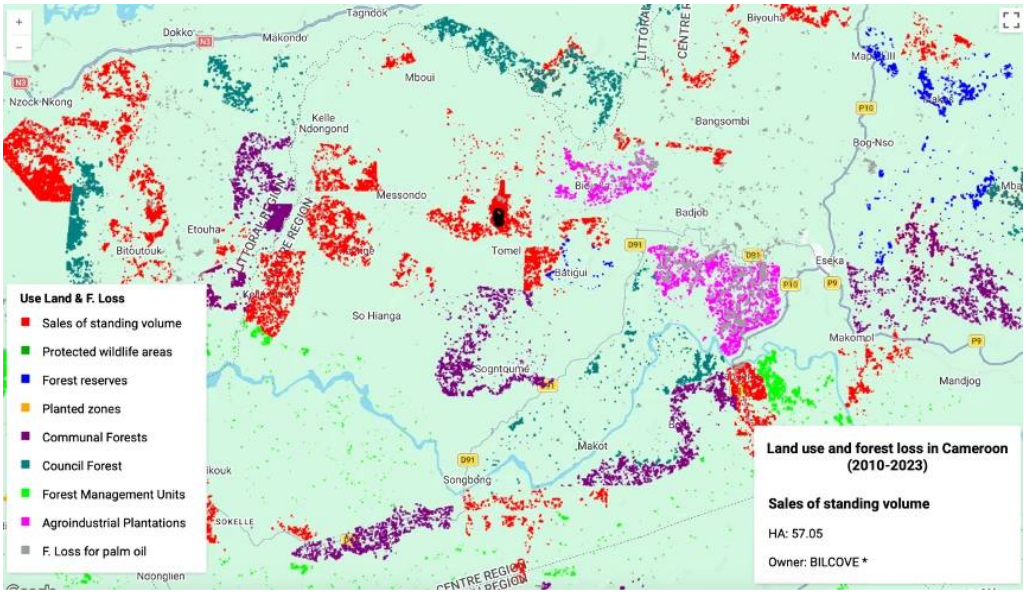
Opacity in forest management and limited access to forest information are major challenges, as demonstrated by the fact that Cameroon's Ministry of Forestry and Wildlife (MINFOF) did not respond to our information request. Specifically, despite repeated phone calls and direct contact through the ministry's website, we were unable to access the latest and historical sanctions data, as well as the list of current and past large forestry concessions (FMUs and SSVs, or "vente de coupes") and their legal and beneficial owners.

Opacity in forest management and limited access to forest information are major challenges, as evidenced by the fact that Cameroon's Ministry of Forestry and Wildlife (MINFOF) did not respond to our information request.

This, in turn, allows illicit activities to continue unhindered, as it becomes impossible to identify those ultimately responsible. For example, illegal logging in SSVs, or "vente de coupe," has been reported by independent observers. The most frequently cited offences include logging outside designated boundaries and laundering timber into the supply chain by falsely declaring that the wood originated within the SSV.[107] Greenpeace has also reported that SSVs are typically used as "cut and run" titles, with timber exploited very rapidly.[108]

An investigation conducted in 2023 by the Pulitzer Center found that MINFOF allocated at least 548 logging titles and SSVs between 2013 and 2022.[109] Sanctions range from formal notices to temporary suspensions of forestry licences. However, worryingly, even when companies are sanctioned by the Cameroonian government, this does not necessarily affect their ability to secure timber concessions.

Figure 7: Deforestation linked to forestry concessions and palm oil plantations in Cameroon



Source: FTC, analysed by Brian Corvaro [110], https://bcovaro.users.earthengine.app/view/mtparcelas showing ownership data for the sale of standing volume by BILCOVE, a company fined in Cameroon for illicit deforestation.

The Pulitzer investigation revealed that the ministry continued to allocate land plots for logging to multi-sectoral companies. Specifically, it identified four authorised companies that benefited from the largest number of sales allocations: Société Commerciale Industrielle et Forestière (SCIFO), Huguette Forestière, Société Bois Africains du Cameroun (SBAC), and Agence Forestière Camerounaise (AFC). Between 2013 and 2022, these four companies obtained 59 timber sales licences covering more than 80,000 hectares of forest.

In this report, we found that some of these sanctioned companies were granted SSV concessions as late as July 2015, allowing them to operate normally, as shown in Table 7 below. For instance, Société Commerciale Industrielle et Forestière (SCIFO) held a total of 8,955 hectares in SSV concessions that year, representing 3.92% of the country's total SSVs. Five previously sanctioned companies identified in the Pulitzer investigation held a combined total of 20,710 hectares in SSV concessions, representing 9% of the total. However, we were unable to update the list of sanctioned companies based on data from the Pulitzer investigation, as the ministry did not respond to our information requests, and the sanctions data available online was insufficient in terms of coverage.

We found that some of these sanctioned companies were granted SSV concessions as late as July 2015, allowing them to operate normally,

Table 7: List of top sanctioned forestry companies with active small-scale logging concessions (as of July 10, 2025)

Company	Total Sales of Standing Volumes (in ha.)	Year of sanction	Years they got logging titles after being sanctioned	% total Sales of Standing Volume concessions (in ha.)
Société Commerciale Industrielle et Forestière (SCIFO)	8955	2015	2016, 2017, 2018, 2020, 2022	3.92%
Huguette Forestière (HF)	3344	2018	2021, 2022	146%
Feemam	2499	2020	2021	1.09%
BILCOVE Cameroon Sarl	4989	2015	2021, 2022	2.18%
Amougou Amougou Jules (AAJ)	923	2016	2021, 2022	040%
Total	20710			9.07%

Source: Kouagheu, J., Mgeunga, M. 2023 [111] and Ministry of Forestry of Cameroon Data via Cameroon Forest Atlas

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CONCLUSION AND RECOMMENDATIONS

This report highlights that environmental crimes and abuses thrive in environments of financial secrecy—whether in source, transit, or destination countries of illicit financial flows. Using publicly accessible satellite data from both Brazil and Cameroon, we were able to link information on deforested areas and the crops cultivated there with land records and forestry concession data, achieving a high level of detail down to the legal ownership of companies.

Beneficial owners are registered in both countries, as centralised beneficial ownership registries were established in Brazil in 2016 and Cameroon in 2023. However, the ability to publicly trace those benefiting from illicit deforestation is limited due to the lack of public access to beneficial ownership data. Additionally, identifying the commodity buyers of cattle, palm oil, and soya may be difficult due to a lack of supply chain transparency.

Compounding the issue, if companies that own land or forestry concessions, as well as commodity trading companies, have complex multi-jurisdictional ownership structures, we would need to rely on the legal and beneficial ownership data disclosed by those jurisdictions to identify the real owners benefiting from illicit deforestation.

We outline the following five key recommendations to enable the tracing of illicit deforestation and to restrict the ability of actors engaged in it from accessing markets.

- **Beneficial Ownership Transparency:** Centralised and public beneficial ownership registries should be established, with public access granted to these registries. A mandatory public declaration of beneficial owners should be required for all companies and significant assets, including when acquiring forestry concessions, logging licences, or logging concessions in the forestry sector, as well as in government notices concerning environmental and human rights violations.

- **Tax transparency:** Public country-by-country reporting for large multinational companies and disclosure of taxes paid and tax incentives received by all companies, is essential for tackling tax abuses, harmful tax incentives, and applying corporate surtaxes in the timber, commodity agriculture, and wood processing sectors. This would help to mobilise greater financing for forestry, biodiversity, and climate initiatives, including under the UN Framework Convention on International Tax Co-operation (UN FCITC).

- **Supply chain transparency:** The cultivation of agricultural crops on land illicitly deforested should be incorporated within broader due diligence obligations, with the declaration of the legal and beneficial owners of companies throughout the entire supply chain made publicly available. This approach would enable the exclusion of companies and beneficial owners involved in illicit deforestation and the production of agricultural commodities associated with deforestation risks from export markets.

- **Global Asset Registry:** Governments should publish up-to-date registries of the legal and beneficial owners of assets, including holders of forestry concessions, agricultural land, and crops cultivated. This initiative would contribute to the development of a Global Asset Registry (GAR), an international standard proposed as part of the UN Framework Convention on International Tax Co-operation (UN FCITC) and recognised by forestry governance bodies.

- **Public data on environmental crimes:** Governments should publish data on fines and sanctions related to environmental offences, including illegal logging and breaches of environmental permits. Importing countries should, in turn, recognise these sanctions as violations under their illicit timber regulations and halt the flow of illicit timber based on sanctions and fines imposed in source countries.

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ANNEX I

Land use methodology for Mato Grosso 2010 -2023

The first stage involved analysing recent forest loss and its association with soy cultivation and intensive grazing in Mato Grosso, which are the primary drivers of deforestation in the state. This analysis utilised Global Forest Watch data from January 2010 to December 2023. We adopted the definition of deforestation from the FAO's Global Forest Resources Assessment (FRA), which defines it as "the conversion of forest to other land use, regardless of whether it is human-induced or not".[112] This aligns with the EUDR definition of forest loss, which considers the conversion of forests to agriculture in these countries, whether caused by human activity or not, during the period from 2010 to the most recently available data.

We then overlaid the layers of soybean cultivation and intensive grazing production onto deforested areas between 2010 and 2022, the most recent year for which data was available at the time of producing this report. Importantly, publicly available data only allows us to map plots of land where soybean cultivation and/or intensive pasture occurred on recently deforested land, but not the precise overlap of these two practices. In other words, we were able to identify that these activities took place within plots containing recently deforested land, but not necessarily that soybean cultivation and/or intensive pasture occurred exactly on the recently deforested sections—only that they happened within the same plot.

The data on land modification files (forest loss, soybean cultivation, and intensive grazing) were vectorised and linked to polygons representing land plots obtained from SIMCAR, the rural environmental registry. Surface measurements (in hectares) were calculated for each indicator annually throughout the study period.

The classification of each plot was as follows: FL (forest loss), soybean, intensive grazing, FL-Pasture (forest loss overlapping with intensive grazing), FL-Soya (forest loss overlapping with soybean production), Forest Loss-Soy-Pasture (plots of land exhibiting all three indicators: forest loss overlapping with intensive grazing and soybean production), and ND (No Data – plots where no indicator was found).

We then overlaid the geospatial data with a third layer to identify the owners of land plots used for soy cultivation and pasture that experienced deforestation in the state during that period, assigning an ID to each plot. For this, we used the Environmental Registry for Rural Properties (CAR, Cadastro Ambiental Rural). There are strong incentives to register in the CAR database, as it is a prerequisite for accessing credit. However, as this database relies on voluntary reporting, it may contain overlapping claims.

Using a geospatial analysis technique known as Vector Overlay, we mapped all rural land plots (165,153 plots) across the entire state of Mato Grosso. This allowed us to identify, for each land plot, the presence or absence of each indicator detailed above, along with its start and end years, the duration of each indicator's presence in years, and the net hectares. This was achieved using the Cut Overlay geospatial analysis tool. This algorithm cuts a vector layer by employing the spatial objects from an additional polygon layer. Only the portions of the input layer's features that fall within the polygons of the overlay layer are included in the final output layer.

Once the plots had been classified according to the land modification indicators, this information was georeferenced onto the map of proprietary plots from the Rural Environment Registry (CAR) of the State of Mato Grosso. Each plot is georeferenced with its land modification status, years since modification, area in hectares, and other attributes.

Deforestation permit analysis

The process of legally logging under Brazil's Land Code requires the following steps: (i) registration with the rural property registration system known as CAR; (ii) obtaining a deforestation licence before any deforestation takes place on the property – in the state of Mato Grosso, this licence is issued by the State Secretariat for the Environment; (iii) compliance with embargoes issued by state or federal authorities; and (iv) implementation of environmental recovery plans (PRA) for properties, as issued by the State Secretariat for the Environment (SEMA), especially if land clearance or logging was conducted without authorisation.

To determine whether the identified land plots had deforestation permits, we downloaded agricultural land boundaries from the transparency portal of SEMA Mato Grosso, analysing data from January 2010 through to December 2023.[113] We then intersected the coordinates of these farms with Mato Grosso's database of Authorisations for the Suppression of Native Vegetation (ASV), which is legally required for deforestation in any biome, whether on public or private land.

This complies with Article 26 of the Brazilian Forestry Code. The article also states that, in order to obtain an ASV, the property must be registered in the Environmental Rural Registry (CAR), as mentioned in Article 29 of the Forestry Code, and must receive prior authorisation from the competent state authority. In the case of Mato Grosso, this authority is SEMA. Unauthorised suppression of native vegetation is considered an infraction under Article 43 of the Federal Decree of Infractions.

Using SEMA's online database, we can determine whether they initially held a deforestation licence. In the first instance, to regularise deforestation, an environmental recovery plan must be in place.

We found the following data in the permits:

- CAR ID of the rural property
- Date the permit was issued
- Boundaries within which deforestation was permitted

One of the results was a table and a map displaying plots owned without authorisation for deforestation, each with more than 1,000 hectares of land modification and exhibiting at least one of the following indicators: loss of forest, soy cultivation, or intensive grazing. These plots were identifiable both in a matrix and on a digital map, as illustrated in Figure 3 above, in the section concerning Mato Grosso.

ANNEX II

Land use methodology for Cameroon 2010 -2023

For Cameroon, following a similar approach to that used in Mato Grosso, we first analysed recent deforestation from January 2010 to December 2023 using data from Global Forest Watch.[114] We then overlaid layers of various types of forestry concessions and palm oil plantations from 2010 to 2023 onto the identified land plots with georeferenced boundaries,[115] utilising data from the Cameroonian Ministry of Forestry and Wildlife, which was provided to us by Global Forest Watch in Cameroon.

The land modification files (forest and palm loss) were vectorised and linked to the polygons representing typified areas. For each overlapping area, the surface area measurements (in hectares) were calculated annually throughout the study period. This distribution was quantified in terms of both surface area and temporal measures (intervals).

Once these indicators had been processed using various geospatial analysis techniques, the resulting indicator surfaces were overlaid onto different areas within the country's territory, which had already been classified according to various types of forestry concessions, agro-industrial production zones, communal forests, and hunting grounds (see Table 6 for definitions).

The analysis concentrated on areas where forest loss from 2010 to 2023 overlapped with previously classified regions. These areas were identified as sites of deforestation resulting from various activities within those territories. A total of 154,392 plots of land, each with a unique ID, were identified. Finally, concerning forestry concessions, we were able to map the companies that owned these concessions, but not their beneficial owners.

END NOTES

Introduction

[1] Goldman, E, Sims, M., Carter, S, Potapov, P. Tropical Rainforest Loss Slowed in 2025, but Fire is a Growing Threat to Forests Worldwide. World Resources Institute (April 29, 2026). https://gfr.wri.org/latest-analysis-deforestation-trends
[2] Ibid.
[3] Global Forest Watch. Mato Grosso. https://www.globalforestwatch.org/dashboards/country/BRA/12/?map=eyJjYW5Cb3VuZCI6dHJ1ZX0%3D
[4] Global Forest Watch. Brazil. https://www.globalforestwatch.org/dashboards/country/BRA/?map=eyJjYW5Cb3VuZCI6dHJ1ZX0%3D
[5] Global Forest Watch. Cameroon. https://www.globalforestwatch.org/dashboards/country/CMR/?location=WyJjb3VudHJ5IiwiQ01SII0%3D&map=eyJjYW5Cb3VuZCI6dHJ1ZX0%3D
[6] UN-REDD 'State of Finance for Forests 2025' https://www.un-redd.org/document-library/state-finance-forests-2025
[7] UNEP-FI 'Governments adopt first global strategy to finance biodiversity: Implications for financial institutions' https://www.unepfi.org/themes/ecosystems/governments-adopt-first-global-strategy-to-finance-biodiversity-implications-for-financial-institutions/
[8] UNFCCC 'Baku to Belém Roadmap to 1.3T' https://unfccc.int/documents/650953

Illicit Financial Flows and Deforestation

[9] United Nations. Tackling Illicit Financial Flows in Africa Arising from Taxation and Illegal Commercial Practices (November 2022). https://www.un.org/osaa/sites/www.un.org.osaa/files/tackling_iffs_in_tax_reform_and_illegal_commercial_practices_-_nov_2022.pdf
[10] UNCTAD. Tackling Illicit Financial Flows for Sustainable Development in Africa (2020). https://unctad.org/system/files/official-document/aldcafrica2020_en.pdf
[11] Chowla, P., Ann Brown, P. UN DESA Policy Brief No. 148: Beneficial ownership information: Supporting fair taxation and financial integrity (January 6, 2023). https://desapublications.un.org/policy-briefs/un-desa-policy-brief-no-148-beneficial-ownership-information-supporting-fair-taxation
[12] INTERPOL. Forestry Crime https://www.interpol.int/en/Crimes/Environmental-crime/Forestry-crime
[13] Bousfield, C., Lindenmayer, D., Edward, D. Substantial and increasing global losses of timber-producing forest due to wildfires. Nature (November 13, 2023). https://www.nature.com/articles/s41561-023-01323-y
[14] Galaz, V., Crona, B., Dauriach, A., Jouffray, JB., Osterblom, H., Fichtner, J. Tax havens and global environmental degradation. Nature Ecology & Evolution (September 2018). https://www.nature.com/articles/s41559-018-0497-3
[15] Coelho, F., Amaral, L., Barcarolo, L. Fighting illicit financial flows: Brazilian Customs' approach. WCO News (June 6, 2019). https://mag.wcoomd.org/magazine/wco-news-89/fighting-illicit-financial-flows-brazilian-customs-approach/
[16] COP26. Glasgow Leaders' Declaration on Forests and Land Use. (November 2, 2021). https://webarchive.nationalarchives.gov.uk/ukgwa/20230418175226/https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/
[17] FATF. Money laundering from environmental crime (July 2021). https://www.fatf-gafi.org/content/dam/fatf-gafi/reports/Money-Laundering-from-Environmental-Crime.pdf.coredownload.pdf
[18] Ibid.
[19] S.2950 – Forest Act of 2021. US Congress. https://www.congress.gov/bill/117th-congress/senate-bill/2950
[20] Regulation (EU) 2023/1115 of the European Parliament and of the Council (May 31, 2023). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R1115
[21] Zadeh, J. US Role in Combating Illicit Gold Trade in the Americas. Discovery Alert (August 20, 2025). https://discoveryalert.com.au/news/illicit-gold-trade-2025-us-role-responsibilities/
[22] Gonzalez, S., Cole, S., Gary, I. Dirty Money and the Destruction of the Amazon. FACT Coalition (October 2023). https://thefactcoalition.org/wp-content/uploads/2023/10/Feb-08_English-Full_FACT-Report.pdf

[23] Brazil government. President Lula highlights Brazil's commitment to zero deforestation and calls for action by developed countries during climate energy forum. (April 21, 2023). https://www.gov.br/planalto/en/latest-news/2023/04/president-lula-highlights-brazil2019s-commitment-to-zero-deforestation-and-calls-for-action-by-developed-countries-during-climate-and-energy-forum
[24] Article 45. Environmental Crimes Law. https://jus.com.br/artigos/81115/defesa-art-45-da-lei-de-crimes-ambientais-lei-9605-98
[25] UNCTAD. Methodological Guidelines to Measure Tax and Commercial Illicit Financial Flows. V2.16 (July 19, 2021). https://unctad.org/system/files/non-official-document/20210917_IFFsGuidelinesForPilots_en_0.pdf
[26] ibid.
[27] Imaflora https://imaflora.org/biblioteca?page=1&pesquisa=timberflow&categorias%5B%5D=publicacao&categorias%5B%5D=relatorio
[28] Wenzel, F. Fake documents, real deforestation drive global trade in illegal Amazon timber. Mongabay (April 16, 2025). https://news.mongabay.com/2025/04/fake-documents-real-deforestation-drive-global-trade-in-illegal-amazon-timber/#:~:text=No%20punishment%20or%20traceability,harvest%20area%20was%20illegally%20logged
[29] Brazil's Legal Amazon, also known as "Amazônia Legal", covers over five million square kilometres and represents 59% of the country's total territory. More information available at: https://plenamata.eco/en/verbete/amazonia-legal/
[30] Sparovek, G., Reydon, B., Pinto, L., Faria, V., Mazzaro de Freitas, F., Azevedo-Ramos, C., Hamamura, C., Rajao, R., Cerignoni, F., Siquiera, G., Carvalho, T., Alencar, A., Ribeiro, V., Who owns Brazilian Lands? ScienceDirect (September 2019). https://www.sciencedirect.com/science/article/abs/pii/S0264837719304077
[31] Ibid.
[32] Land Archives (Acervo Fundiário). https://acervofundiario.incra.gov.br/acervo/login.php
[33] Land Management System (Sistema de Gestão Fundiária, SIGEF). https://sigef.incra.gov.br/
[34] Service of Information to Citizens (e-SIC). https://www.gov.br/acessoainformacao/pt-br
[35] Fernandes, B., Welsch, C., Goncalves, E. Land governance in Brazil: A geo-historial review of land governance in Brazil. International Land Coalition (2012). https://docs.fct.unesp.br/grupos/nera/ltd/land_governance_brazill-bmf_caw_ecg.pdf
[36] Sparovek, G., Reydon, B., Pinto, L., Faria, V., Mazzaro de Freitas, F., Azevedo-Ramos, C., Hamamura, C., Rajao, R., Cerignoni, F., Siquiera, G., Carvalho, T., Alencar, A., Ribeiro, V., Who owns Brazilian Lands? ScienceDirect (September 2019). https://www.sciencedirect.com/science/article/abs/pii/S0264837719304077?via%3Dihub
[37] Rural Environmental Registry (CAR). https://www.car.gov.br/#/
[38] Observatorio do Codigo Forestal. Uso ilegal do CAR tem estiluado a violencia no campo (February 18, 2022). https://observatorioflorestal.org.br/uso-ilegal-do-car-tem-estimulado-a-violencia-no-campo/
[39] Azevedo, A. Limit of Brazil's Forest Code as a means to end illegal deforestation. PNAS (May 24, 2017). https://www.pnas.org/doi/pdf/10.1073/pnas.1604768114
[40] Brazil government. https://www.gov.br/en/categories/finance-taxes-and-public-management/cpf-cnpj-and-other-records
[41] World Bank. Beneficial Ownership Guide for Brazil. https://star.worldbank.org/sites/default/files/2024-04/Beneficial%20Ownership%20Guide_Brazil%202024.pdf
[42] Brazil Presidency of the Republic. Law NO. 13,709 of August 14, 2018. https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/lei/l13709.htm
[43] Siqueira, B. In 2023, cattle slaughter grows and slaughter of hogs, pigs and chicken hits record. Agencia IBGE (March 15, 2024). https://agenciadenoticias.ibge.gov.br/en/agencia-news/2184-news-agency/news/39461-em-2023-abate-de-bovinos-cresce-e-o-de-frangos-e-suinos-atingem-recordes-2
[44] Pereira, O., Vasconcelos, A. Mato Grosso's path to net-zero: Tackling pasture degradation for enhanced beef exports. Trase (August 6, 2024). https://trase.earth/insights/mato-grosso-s-path-to-net-zero-tackling-pasture-degradation-for-enhanced-beef-exports
[45] Embrapa. https://www.embrapa.br/soja/cultivos/soja1/dados-economicos
[46] Global Forest Watch. Mato Grosso. https://www.globalforestwatch.org/dashboards/country/BRA/12/?map=eyJjYW5Cb3VuZCI6dHJ1ZX0%3D
[47] Ibid.
[48] Kuschnig, N., Cuaresma, J.C., Krisztin, T., Giljum, S. Spatial spillover effects from agriculture drive deforestation in Mato Grosso. Nature (2021). https://www.nature.com/articles/s41598-021-00861-y.pdf

[49] Grupo Roncador Landscape Protection Plan (April 17, 2020). https://www.andgreen.fund/wp-content/uploads/2021/12/Roncador-Landscape-Protection-Plan_2020.pdf
[50] Prizibiscszki, C. Ilegalidade atinge 91% do dematamento na Amazonia e 51% no Cerrado. Instituto Centro de Vida (13 February 2025) https://oeco.org.br/noticias/ilegalidade-atinge-91-do-desmatamento-na-amazonia-e-51-no-cerrado/
[51] Singh, C., Persson, M. Global patters of commodity-driven deforestation and associated carbon emissions. Nature (February 23, 2026) https://www.nature.com/articles/s43016-026-01305-4, and personal communication with Chandrakant Singh, March 9, 2026.
[52] Carbon in Context. https://www.carbonincontext.com/
[53] Transport for London. https://content.tfl.gov.uk/technical-note-12-how-many-cars-are-there-in-london.pdf
[54] This is assuming that the rate of CO2 emissions is similar throughout the period of deforestation as in the year 2023-2024, and that you can use a per hectare rate of CO2 emissions from the year 2023-2024 as a benchmark. This benchmark is 492.6 tonnes of CO2 emissions per logged hectare of land.
[55] Mapbiomas https://brasil.mapbiomas.org/en/2021/10/13/pastagens-brasileiras-ocupam-area-equivalente-a-todo-o-estado-do-amazonas/
[56] Mato Grosso Agricultural state agency IMEA. https://www.imea.com.br/imea-site/indicador-boi
[57] Mato Grosso Agricultural state agency IMEA. https://www.imea.com.br/imea-site/dashboards?c=2&d=1136865063632576512
[58] SEMADESC Brazil. https://www.semadesc.ms.gov.br/imea-divulga-projecoes-para-o-agronegocio-em-mato-grosso-ate-2025/
[59] 1 arroba (@) = 15 kg in Brazil.
[60] Mato Grosso Agricultural state agency IMEA. Value in July 2022 https://www.imea.com.br/imea-site/indicador-boi
[61] Mato Grosso Agricultural state agency IMEA. Period 2022/2023. https://www.imea.com.br/imea-site/dashboards?c=4&d=1136863500319006720
[62] Mato Grosso Agricultural state agency IMEA. Period 2022/2023. https://www.imea.com.br/imea-site/indicador-soja
[63] Mato Grosso Agricultural state agency IMEA. Price in July 2022. https://www.imea.com.br/imea-site/dashboards?c=4&d=1136863295934767104
[64] https://imazon.org.br/boletins/sistema-de-monitoramento-da-exploracao-madeireira-simex-mapeamento-da-exploracao-madeireira-no-mato-grosso-agosto-2023-a-julho-2024
[65] Ibid.
[66] Simex data on unpermitted logging is for August 2023 to July 2024. They measure 190,044 ha of logging in total, of which 74% was permitted, and 26% (48,926 ha) was not permitted. Global Forest Watch analyses a tree cover loss of 220,000 ha in 2023 and 580,000 ha in 2024. We can take the average of these two to arrive at 400,000 ha for the period of August 2023-July 2024. We can then conclude that 47.5% of primary tree cover loss in Mato Grosso was accounted to have happened due to logging. The total carbon emissions related to primary tree cover loss in Mato Grosso in 2023 was 150 MtCO2 and in 2024 it was 240 MtCO2, totalling to 390 MtCO2 and we can use the figure 195 MtCO2 for the period of August 2023 to July 2024. Of this figure, logging related tree cover loss would amount to 92.6 MtCO2, while illicit logging related CO2 emissions would relate to 24.1 MtCO2 in this period. We derive a benchmark of 492.6 tonnes of CO2 per logged land in the Brazilian Amazon.
[67] Brazil government. Law No. 12,527 of November 18, 2011. https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/l12527.htm
[68] American Political Science Association. https://preprints.apsanet.org/engage/api-gateway/apsa/assets/orp/resource/item/6119500e4cb47982992fcfec/original/access-to-information-law-in-brazil-what-the-implementation-data-reveal.pdf
[69] Registro rural. https://www.registrorural.com.br/car/item/MT-5103106-9DAED4B195D84154AD6845E2D8C818ED/
[70] Aidenvironment RDM 15 (August 2023). https://aidenvironment.org/wp-content/uploads/2023/10/LIFE_RDM_Report_15_August_2023_UPDATED_Oct23.pdf
[71] Ibid.
[72] https://empresas.serasaexperian.com.br/consulta-gratis/CASA-5-INVESTIMENTOS-E-PARTICIPACOES-LTDA-29350664000162
[73] Aidenvironment RDM 15 (August 2023). https://aidenvironment.org/wp-content/uploads/2023/10/LIFE_RDM_Report_15_August_2023_UPDATED_Oct23.pdf
[74] Ibid.
[75] GTA. https://sistemas.indea.mt.gov.br/SIA/form.jsp?sys=SCA&action=openform&formID=467&align=0&mode=-1&goto=-1&filter=&scrolling=no

[76] Aidenvironment RDM 15 (August 2023). https://aidenvironment.org/wp-content/uploads/2023/10/LIFE_RDM_Report_15_August_2023_UPDATED_Oct23.pdf
[77] Ibid.
[78] Brazil Justice Ministry. https://www.gov.br/cade/en/matters/news/cade-suggests-clearance-of-acquisition-of-marfrig2019s-assets-by-minerva

Cameroon

[79] EUREDD Facility. https://euredd.efi.int/countries/cameroon/#:~:text=Cameroon%20has%20some%2019%20million%20hectares%20of,below%2040%25%20of%20the%20total%20land%20area
[80] Goldman, E, Sims, M., Carter, S, Potapov, P. Tropical Rainforest Loss Slowed in 2025, but Fire is a Growing Threat to Forests Worldwide. World Resources Institute (April 29, 2026). https://gfr.wri.org/latest-analysis-deforestation-trends
[81] Global Forest Watch. Cameroon. https://www.globalforestwatch.org/dashboards/country/CMR/?map=eyJjYW5Cb3VuZCI6dHJ1ZX0%3D
[82] Global Forest Watch. Cameroon. https://www.globalforestwatch.org/dashboards/country/CMR/
[83] The Farmer's Journal Africa. Cameroon's Timber Revolution: A 345% Surge in Log Export Taxes to Ignite Local Wood Processing (September 21, 2023). https://thefarmersjournal.com/cameroons-timber-revolution-a-345-surge-in-log-export-taxes-to-ignite-local-wood-processing/
[84] Cameroon National Shippers' Council. Cameroon bans export of 76 log species to boost local processing. https://www.cncc.cm/en/article/cameron-bans-export-of-76-log-species-to-boost-local-processing-701
[85] Business in Cameroon. Cameroon's Log Exports Drop 20% in 2023 Due to Increased Tariffs (May 21, 2024). https://www.businessincameroon.com/public-management/2105-13857-cameroons-log-exports-drop-20-in-2023-due-to-increased-tariffs
[86] Ministry of Finance of Cameroon (2021). https://minfi.gov.cm/wp-content/uploads/2021/01/rapport_finanl_enr_cameroun.pdf
[87] UNCTAD. Methodological Guidelines to Measure Tax and Commercial Illicit Financial Flows. V2.16 (July 19, 2021). https://unctad.org/system/files/non-official-document/20210917_IFFsGuidelinesForPilots_en_0.pdf
[88] Law No. 94/01 https://faolex.fao.org/docs/pdf/cmr4845.pdf
[89] Timber Legality Risk Dashboard: Cameroon (August 2024). https://www.forest-trends.org/wp-content/uploads/2022/01/Dashboard-Cameroon_Aug-2024-1-1.pdf
[90] Assembe-Mvondo, S., Colfer, C. Brockhaus, M., Tsanga, R. Review of the legal ownership status of national lands in Cameroon : A more nuanced view. CIFOR (September 11, 2014). https://www.cifor-icraf.org/publications/pdf_files/articles/AAssembe-Mvondo1401.pdf
[91] Environmental Investigation Agency. Tarnished timber, tarnished temples: How the Cameroon-Vietnam Timber Trade Hurts the Cameroonian People and Forests (10 November 2020). https://static.us.eia.org/pdfs/EIA_CED_report_tainted_timber_tarnished_temples.pdf
[92] Timber Legality Risk Dashboard: Cameroon (August 2024). https://www.forest-trends.org/wp-content/uploads/2022/01/Dashboard-Cameroon_Aug-2024-1-1.pdf
[93] Forest Governance and Policy. Cameroon. https://forestpolicy.org/risk-tool/country/cameroon
[94] Forest Atlas of Cameroon https://cmr.forest-atlas.org
[95] OECD. Global Forum on Transparency and Exchange of Information for Tax Purposes: Cameroon 2024. https://www.oecd.org/en/publications/2024/03/global-forum-on-transparency-and-exchange-of-information-for-tax-purposes-cameroon-2024-second-round_0e17266b.html
[96] https://www.impots.cm/sites/default/files/documents/CGI%202024%20version%20anglaise.pdf
[97] Greenpeace. CCT's Timber Trade from Cameroon to Europe: A test case for EUTR's due diligence requirement. Greenpeace (September 2015). https://www.greenpeace.org/static/planet4-africa-stateless/2018/10/65f329b9-65f329b9-greenpeace-nederland-2015-cct-timber-trade-from-cameroon-to-europe.pdf
[98] International Tropical Timber Organization (ITTO). Tropical Timber Market Report (15 January 2024). https://www.lecommercedubois.org/files/upload/actualites/ITTO/MIS_1-15_Jan2024.pdf
[99] US State Department. 2024 Investment Climate Statements : Cameroon. https://www.state.gov/reports/2024-investment-climate-statements/cameroon/

[100] Central African Action Group Against Money Laundering (GABAC). Anti-money laundering and counter-terrorist financing measures Republic of Cameroon (March 2022). https://www.fatf-gafi.org/content/dam/fatf-gafi/fsrb-mer/GABAC-Mutual-Evaluation-Report-Cameroon-2022.pdf.coredownload.inline.pdf
[101] Greenpeace. License to Launder: How Herakles Farms' illegal timber trade threatens Cameroon's forests and VPA (May 2014). https://www.greenpeace.org/static/planet4-international-stateless/2018/02/7cc3637d-licence-to-launder.pdf
[102] Ibid.
[103] Greenpeace Africa. UK sanctions Cameroon timber traders for EU violations (June 30, 2016). https://www.greenpeace.org/africa/en/press/1951/uk-sanctions-cameroon-timber-traders-for-eu-violations/#Note1
[104] Earthsite. African timber from firms linked to bribery , conflict and illegal logging floods into France (July 5, 2019). https://www.earthsight.org.uk/news/timberleaks/african-timber-firms-linked-bribery-conflict-illegal-logging-eu-france
[105] Environmental Investigation Agency. Tainted Timber, Tarnished Temples: How the Cameroon-Vietnam timber trade hurts the Cameroonian people and forests (November 2020). https://eia.org/report/20201110-tainted-timber-tarnished-temples/
[106] https://bcovaro.users.earthengine.app/view/use-land-cameroon
[107] Timber Legality Risk Dashboard: Cameroon (August 2024). https://www.forest-trends.org/wp-content/uploads/2022/01/Dashboard-Cameroon_Aug-2024-1-1.pdf
[108] Greenpeace. CCT's Timber Trade from Cameroon to Europe: A test case for EUTR's due diligence requirement. Greenpeace (September 2015). https://www.greenpeace.org/static/planet4-africa-stateless/2018/10/65f329b9-65f329b9-greenpeace-nederland-2015-cct-timber-trade-from-cameroon-to-europe.pdf
[109] Kouagheu, J., Mgeunga, M. Cameroon´s Undeterred Illegal Loggers. Pulitzer Center (June 8, 2023). https://pulitzercenter.org/stories/cameroons-undeterred-illegal-loggers
[110] https://bcovaro.users.earthengine.app/view/use-land-cameroon
[111] Kouagheu, J., Mgeunga, M. Cameroon´s Undeterred Illegal Loggers. Pulitzer Center (June 8, 2023). https://pulitzercenter.org/stories/cameroons-undeterred-illegal-loggers

Annex I

[112] FAO. Global Forest Resources Assessment 2020. Terms and Definitions FRA 2020. https://openknowledge.fao.org/server/api/core/bitstreams/531a9e1b-596d-4b07-b9fd-3103fb4d0e72/content
[113] SEMA. https://geoportal.sema.mt.gov.br/#/

Annex II

[114] For forest loss, a mask with >30% tree cover loss was applied, as recommended by Global Forest Watch
[115] Country vector boundaries available at https://gadm.org/download_country.html

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