

An aerial photograph showing a landscape of orange-brown soil, likely a deforested area. The soil is eroded into deep, winding channels. There are scattered pieces of driftwood and some sparse green vegetation. A small, irregular pool of muddy, orange-brown water is visible in the lower-left quadrant. The overall scene suggests environmental damage and deforestation.

GOLD LAUNDERING IN THE AMAZON: ANATOMY OF A FRAUD

GREENPEACE

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SUMMARY

In times of geopolitical and macroeconomic instability like the ones we are living today, gold resumes its historical role as a safe-haven asset, as wars, economic crises, shifts in the international order, and growing anxiety over global markets continue to drive the search for this precious metal.

Taking advantage of regulatory loopholes and the absence of a robust traceability system, illegal mining operations—known in Brazil as illegal *garimpo*¹—are spreading across the Amazon, driven by laundering schemes that give a legitimate front to gold stolen from Indigenous Lands and Conservation Units, where mining is banned by law.

It is not a coincidence that mining areas have continued to expand into the Amazon,² even after Brazil's Supreme Court (*Supremo Tribunal Federal*—STF) ruled that the presumption of legality and good faith of the first buyers of gold originating from areas granted for *garimpo* operations—a presumption that effectively helped shield longstanding laundering schemes—was unconstitutional.

This report by Greenpeace Brazil reveals that the fraud starts with the very instrument that certifies the origin of the gold: the *Garimpo Permit* (*Permissão de Lavra Garimpeira*—PLG). We show how PLGs are being used to launder illegally mined gold, exploiting serious gaps in oversight at Brazil's National Mining Agency (*Agência Nacional de Mineração*—ANM) and the waiver of prior mineral survey requirements.

Our assessment breaks down how this instrument works, the loopholes that allow for its misuse, and the routes used to put illegal gold into the global financial system as a “clean” asset. We hope this will help show the need to comply with the STF's ruling and underscore that the Brazilian government must adopt regulatory and/or administrative measures to prevent the mining and acquisition of gold from prohibited areas.

Greenpeace Brazil investigated 187 mining tenements between 2018 and March 2026 by analyzing historical data on the Financial Compensation for Mineral Resource Exploration (*Compensação Financeira pela Exploração de Recursos Minerais*—CFEM)³ and from the Brazilian National Mining Agency's mining tenement database, as well as satellite imagery and flyovers to validate data

on suspected fraud cases. Ninety-eight of these mining tenements are *Garimpo* Permits with irregularities, representing 97 percent of all declared gold in the 187 mining tenements analysed. Tenement holders of the ninety-eight *Garimpo* Permits add up to 20 across the states of Pará, Mato Grosso, and Rondônia. As of March 2026, their combined records included approximately 6,652 CFEM levy declarations, indicating the sale of 25.3 tons of gold, which, at current rates, yield R\$18.4 billion⁴.

By revealing the persistence of ghost *garimpo* mines and industrial-scale *garimpo* operations in the Amazon, Greenpeace Brazil highlights that establishing a traceability system based on precise geological data must become a priority.

The STF's decision to curb the advance of illegal mining in the Amazon will only be enforced once the Brazilian government establishes a robust traceability system, guided by production estimates informed by prior mineral survey.

HIGHLIGHTS

Garimpo Permits (PLGs) are being used to launder illegally mined gold.

The waiver of mineral surveys hinders a more accurate assessment of the environmental impacts inherent to gold mining and contributes to the use of *Garimpo* Permits (PLGs) as a tool for gold laundering.

A total of 187 mining tenements were analyzed. 98 of them were PLGs with irregularities. 94 percent of these PLGs with irregularities were classified as Ghost *Garimpo* Mines or Industrial-Scale *Garimpo* Operations and yielded 25.3 tons of gold, which, at current market values, would be worth R\$ 18.4 billion.

To end illegal *garimpo* as an economic activity in the Amazon, it is necessary to improve regulatory and administrative measures to prevent gold laundering, as well as make a robust effort to shift the economy in the region, promoting economic activities that can coexist with the forest, respect human rights, and overcome poverty.

THE NEVER-ENDING GOLD RUSH

The gold rush in the Amazon has never stopped and is the manifestation of a broader phenomenon, fueled by profound transformations in the global economy, structural inequalities, and the lack of public policies capable of addressing the underdevelopment imposed on the region.

The unremitting expansion of *garimpo* in the Amazon can be attributed not only to continuous gold price rises, but also to the fact that Brazil offers a particularly permissive institutional environment to it, where regulatory and enforcement weaknesses allow illegally mined gold to be incorporated into the global economy under the guise of legality.

Garimpo areas expanded by 1,100 percent from 1985 to 2022,⁵ 91 percent of it being in the Amazon. As two sides of the same coin, *garimpo* and poverty advance in tandem and reinforce each other, imposing a cycle of vulnerability that sustains a predatory and authoritarian development model.⁶

This is the context in which to analyze the encroachment of *garimpo* operations on Indigenous Lands and Conservation Units: as part of a global economic chain that connects geopolitical instability, international markets, and local logics of capital accumulation based on predatory exploitation dynamics.

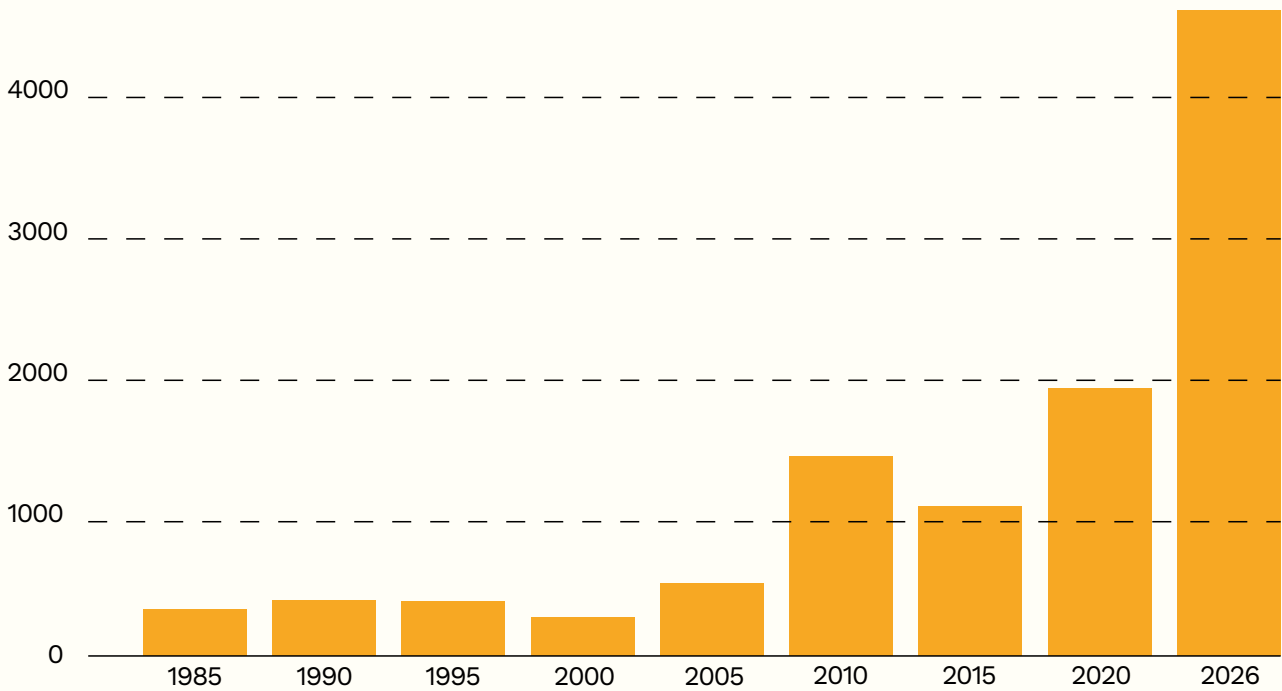
Gold Price History

Gold price

(US\$)

Source: macrotrends*

May 2026
(\$4,500.95)



Illegal garimpo

(Hectares)

Source: MapBiomass**

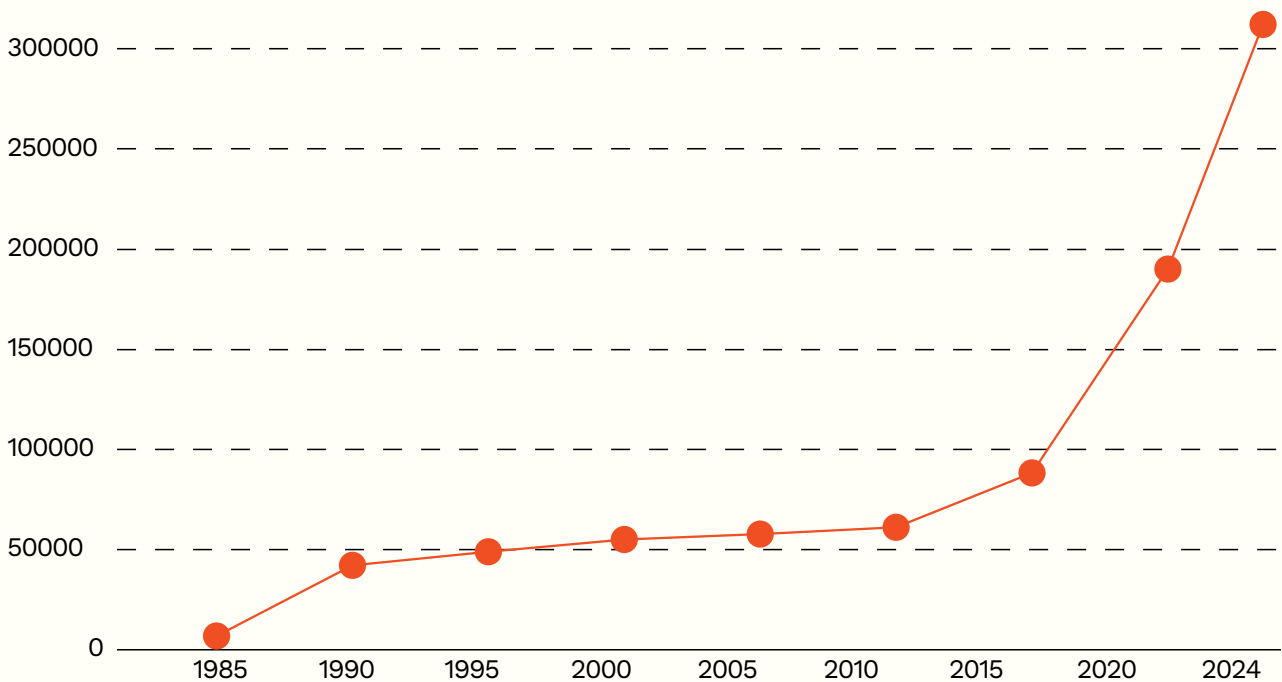


Figure 1: Comparison between gold prices and the area of illegal garimpo in the Amazon. Gold price rises are one of the factors driving the advance of illegal garimpo operations into the Amazon.

* <https://www.macrotrends.net/1333/historical-gold-prices-100-year-chart>

**Projeto MapBiomass - Coleção 10 do Módulo de Mineração, acessado em 14/05/2026

THE EMPIRE OF GOOD FAITH: THE FALL OF A LEGAL FICTION

For ten years, Brazilian legislation offered a form of protection to broker-dealers (*Distribuidoras de Títulos e Valores Mobiliários*—DTVMS), which are the only financial institutions authorized by the country’s Central Bank to buy gold directly from *Garimpo* Permit (PLG) holders. This protection was grounded in paragraph 4 of Article 39 of Law No. 12,844/2013, which presumed the legality of any gold acquired by any DTVM and its good faith as long as they filed information provided by the seller, including mining area, state and municipality of origin of the gold, the number of the administrative proceeding with the mineral resources management agency, and the number of the PLG granted.

What that actually meant was that the rule exempted DTVMS from rigorously verifying whether the origin of the gold corresponded to the reported PLG, thereby making it easier to trade gold mined from illegal *garimpo* operations.

In light of the surge in illegal *garimpo* in the Amazon, two Direct Actions for the Declaration of Unconstitutionality (*Ações Diretas de Inconstitucionalidade*—ADI) were filed with the Supreme Court to challenge the presumption of legality of gold acquired and the good faith of legal entities that acquire it: ADI 7273, filed in 2022 by the Brazilian Socialist Party (*Partido Socialista Brasileiro*—PSB) and the Sustainability Network party; and ADI 7345, filed in 2023 by the Green Party (*Partido Verde*—PV).⁷ Civil society organizations, including Greenpeace Brazil, Instituto Escolhas, Observatório do Clima, WWF-Brazil, Socio-Environmental Institute (*Instituto Socioambiental*—ISA), and the Brazilian Association of Members of the Public Prosecutor’s Office for the Environment (*Associação Brasileira dos Membros do Ministério Público de Meio Ambiente*—ABRAMPA), contributed to the action as amici curiae.

The legal arguments presented to the Supreme Court were clear: the rule violated constitutional principles as it facilitated environmental destruction, human rights violations, and the exploitation of protected areas.

In April 2023, a preliminary injunction by the STF suspended this provision of the law. And in March 2025, the full court declared unconstitutional the presumption of good faith in gold trade.⁸

DTVMs are since then required to verify the lawful origin of the gold they acquire and cannot rely solely on the seller's declaration.⁹ The STF also ordered the adoption of regulatory and administrative measures to prevent the extraction and purchase of gold mined on Indigenous Lands and in other protected areas. This spurred the drafting of legislative and regulatory bills to correct other regulatory anomalies, such as a traceability system for the gold production and marketing chain, which is still under discussion in the Brazilian Congress.



A Greenpeace Brazil flyover recorded excavators used in illegal garimpo within the Kayapó and Munduruku Indigenous Lands in the southwest of Pará state. March 2023.

PLG: FROM SIMPLIFIED REGIME TO MAJOR GOLD LAUNDERING TOOL

While the *Garimpo* Permit (PLG), established in 1989, originally aimed to regulate and control artisanal mining, it ended up being co-opted by unlawful gold laundering schemes in the Amazon.

In practice, it is the prospectors themselves who declare the productive potential of an area they aim to explore. There are, therefore, no reliable technical parameters to assess the actual productive potential of areas granted under PLGs. This hinders gold traceability and creates an opening for gold mined from Indigenous Lands and other protected areas to be registered as if it had a legal origin.

While prior mineral survey requirements were waived as part of an effort to regularize thousands of *garimpo* operations scattered across Brazil, gold mining activities scaled up following the first wave of mechanization of gold mining in the 1980s and the introduction of hydraulic excavators in the early 2000s, thereby also multiplying their social and environmental impacts.

In this new context in which prior mineral survey was no longer a requirement, PLGs became one of the main tools for laundering illegally mined gold, especially in the Amazon.

The fraudulent use of PLGs became conspicuous in 2016. That year, the Federal Police launched an extensive investigation that exposed one of the oldest gold laundering schemes operating in the Amazon. For years, the scheme used PLGs to launder gold illegally mined from the Tapajós, Paru, and Jari river basins.¹⁰

A decade later, however, the mechanics of the scheme remain in place, and PLGs continue to play a significant role as an economic mainstay of illegal *garimpo*. Not only is there a lack of geological data to estimate the true productive potential of areas granted via PLGs, but also a lack of human and technological resources, undermining the effectiveness of the National Mining Agency's oversight efforts and contributing to the co-optation of PLGs for illegal gold laundering.



© Christian Braga / Greenpeace

Flyover records *garimpo* areas in the Yanomami Indigenous Land, in Roraima state. April 2021.

STRUCTURAL WEAKNESSES IN PLG MANAGEMENT

A 2025 audit by the Federal Court of Accounts (*Tribunal de Contas da União*—TCU) found that PLGs were being used to conceal the origin of illegal gold.¹¹ Among the main flaws identified by the audit, the weak performance of the National Mining Agency (ANM) stands out, as it does not exercise its authority¹² to require prior mineral surveys despite being responsible for granting PLGs.

The TCU also identified multiple PLGs irregularly granted to single holders, which allows a single actor to control contiguous or adjacent areas that, when combined, exceeded the established legal limit of 50 hectares (ha). This practice effectively enabled industrial-scale mining under a more permissive legal regime.

A 2022 audit by the Office of the Comptroller General (*Controladoria-Geral da União*—CGU) clearly demonstrated that the ANM has failed to properly enforce minimum PLG requirements, such as the requirement for complete documentation and standardized verification for the granting of mining concessions.¹³

The two federal agencies—the TCU and the CGU—warn about issues regarding the conduction of on-site inspections. Once a PLG is issued, there is little to no follow-up to verify compliance with regulations, actual mining activity, or the accuracy of reported production volumes.

“The continuation of the current situation violates provisions established in the 1988 Federal Constitution and Law No. 7,805/1989, hindering the proper exploration of mineable deposits and enabling the ‘laundering’ (legalization) of gold mined from Indigenous Lands and Conservation Units,” the TCU report warns.¹⁴



© Matizilda Cruppe / Greenpeace

Illegal *garimpo* advances on the Kayapó Indigenous Land, destroying waterways and impacting rivers and the ecosystem. March 2023

ANATOMY OF A FRAUD

The misuse of *Garimpo* Permits (PLGs) to cover up illegal gold mining operations is more than a simple administrative irregularity—it is actually fraud and criminal conduct.

The ‘Laundering’ Cycle: Fabricating Legality

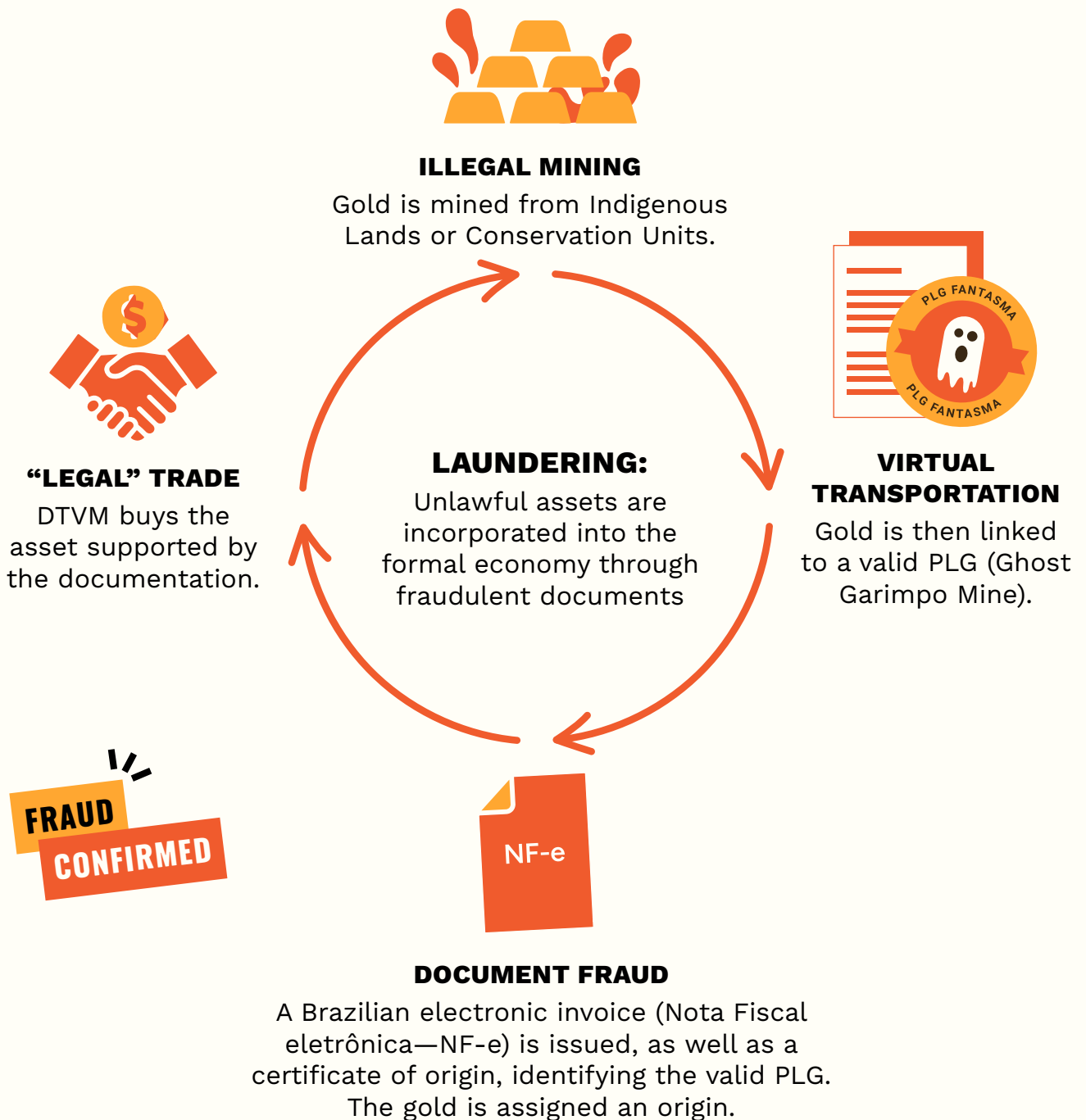


Figure 2. Ninety-eight of 187 mining tenements investigated are *Garimpo* Permits with irregularities, adding up to 25.3 tons of gold which, at current rates, yield R\$18.4 billion.

To identify patterns of irregular use of the *Garimpo* Permit (PLG) regime in gold mining in the Amazon, we looked into 187 mining tenements in Pará, Mato Grosso, and Rondônia—98 of which were PLGs that showed some type of irregularity. As of March 2026, these PLGs had 6,975 gold purchase declaration forms filed with the Declaration of Economic and Tax Information on Financial Compensation for the Exploration of Mineral Resources system (*Declaração de Informações Econômico-Fiscais da Compensação Financeira pela Exploração de Recursos Minerais*—DIEF-CFEM), managed by the National Mining Agency, adding up to a combined total of R\$95.6 million levied. Declared volumes reached 25.3 tons of gold, which represent R\$18.4 billion at current rates.

The key hypothesis here is that inconsistencies between declared volumes and the area covered by mining tenements, when analyzed in relation to spatial evidence of mining activities and environmental inspection records, are indicators of deviations from PLGs' intended purposes. These deviations include operations on a scale that is incompatible with *garimpo* as a small-scale mining regime and the introduction of gold from unauthorized sources into the formal supply chain.

We analyzed spatial data, records of permit freezes, fines, and administrative measures related to *garimpo* activities connected to each PLG, in addition to satellite imagery.

In the absence of prior mineral surveys providing reliable geological data on the estimated production of each of the analyzed PLGs, this report established a metric based on productivity analysis, defined as the ratio of the volume of gold declared to the CFEM (kg) to the area (ha) of different categories of mining titles.

Considering gold volumes originating from the Brazilian Amazon declared between 2003 and 2026, we obtained the average productivity for the main mining titles used for mineral exploration: Survey Permit (~0.45 kg/ha), Mining Concession (~4.4 kg/ha), and *Garimpo* Permit (~0.23 kg/ha). **That is, the weighted average productivity we found regarding *Garimpo* Permits was approximately 0.23 kg/ha.**

The following benchmarks were defined for PLGs: values above 0.3 kg/ha are considered high; values above 1 kg/ha are considered very high; and values above 5 kg/ha are considered extreme.

GHOST *GARIMPO* MINES

Ghost *garimpo* mines are PLG-based cases where there is no actual mining happening or any other activity compatible with the production declared for CFEM levy. These are cases in which the DTVM reports amounts subjected to CFEM levy to the National Mining Agency for a certain volume of gold as if it had been mined from the licensed area, making it possible to include illegally mined gold into the formal marketing chain.

Based on satellite imagery and validation flyovers, we were able to confirm that there was absolutely no *garimpo* activity happening or the activities effectively verified were not compatible with the declared volumes of gold connected to the analyzed PLGs, as no typical signs of mining scars—including pits, excavations, changes in terrain, operational structures, tailings, or any other evidence of extraction corresponding to the declared volumes of gold—were identified.

These are situations in which a PLG is exclusively used to provide a paper trail to cover for gold mined from unauthorized locations, including Indigenous Lands and Conservation Units.

Ghost *garimpo* mines represent 29.6 percent of the 98 PLGs with irregularities and represent 48.5 percent of the 25.3 tons of gold declared in them.

ILLUSTRATIVE CASE EXAMPLES:

COOPERATIVE OF GARIMPEIROS AND MINERS OF THE AMAZON (COOGAM)

Cumaru do Norte (PA)



PRODUCTIVITY KG/HA: 52.92 → EXTREME

PLG 850092/2020, in Cumaru do Norte (PA), is held by the Cooperative of *Garimpeiros* and Miners of the Amazon (*Cooperativa de Garimpeiros e Mineradores da Amazônia*—COOGAM) and generated 166 CFEM declarations between July 2021 and May 2023, adding to 2,288.91 kg, valued at R\$1.6 billion at current rates. Production was entirely concentrated in the 43.25-ha area, with a yield of 52.92 kg/ha. This rate is ten times higher than 5 kg/ha, the threshold above which a case is considered extreme.

While remote sensing analysis (Figure 3) indicated insufficient *garimpo* activities within the PLG area in 2021–2023, large areas of *garimpo* operations were detected within the Kayapó Indigenous Territory, which borders this PLG, during the same period.

The gold mined from this PLG was introduced into the formal Brazilian market through the following DTVMs: BAMC Laboratório de Análises de Solos e Minérios Ltda. (which purchased 907.18 kg of gold) and Fênix Distribuidora de Títulos e Valores Mobiliários Ltda. (1,381.73 kg).

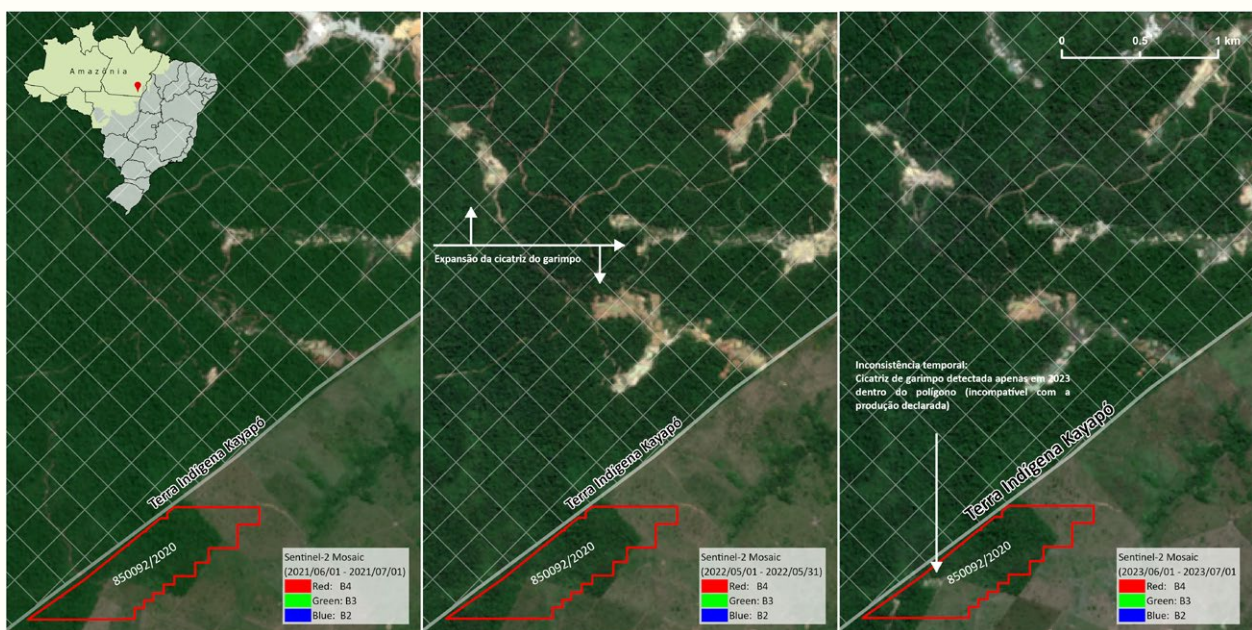


Figure 3. Time series of PLG 850092/2020 (Cumaru do Norte, Pará) between 2021 and 2023. The images do not show mining activities consistent with the high volumes reported to the CFEM system. However, the areas adjacent to the Kayapó Indigenous Territory indicate the occurrence of illegal mining activity.

ANTONIA DA SILVA SANTOS GALVÃO

Itaituba (PA)



PRODUCTIVITY KG/HA: 0.71 → HIGH

PLG 851347/2013, located in Itaituba (PA), is held by Antonia da Silva Santos Galvão. In 2025, this PLG was the source of 35.35 kg of gold reported to the CFEM system, valued at R\$25.7 million in May 2026, with a calculated productivity of 0.71 kg/ha.

Remote sensing analysis (Figure 4), however, revealed that there were absolutely no signs of *garimpo* activities within that area. As identified in its CFEM declarations, the gold was purchased by the DTVM OM Distribuidora de Títulos e Valores Mobiliários Ltda. Aerial images also indicate the absence of mining activities at the site. (Figure 5).

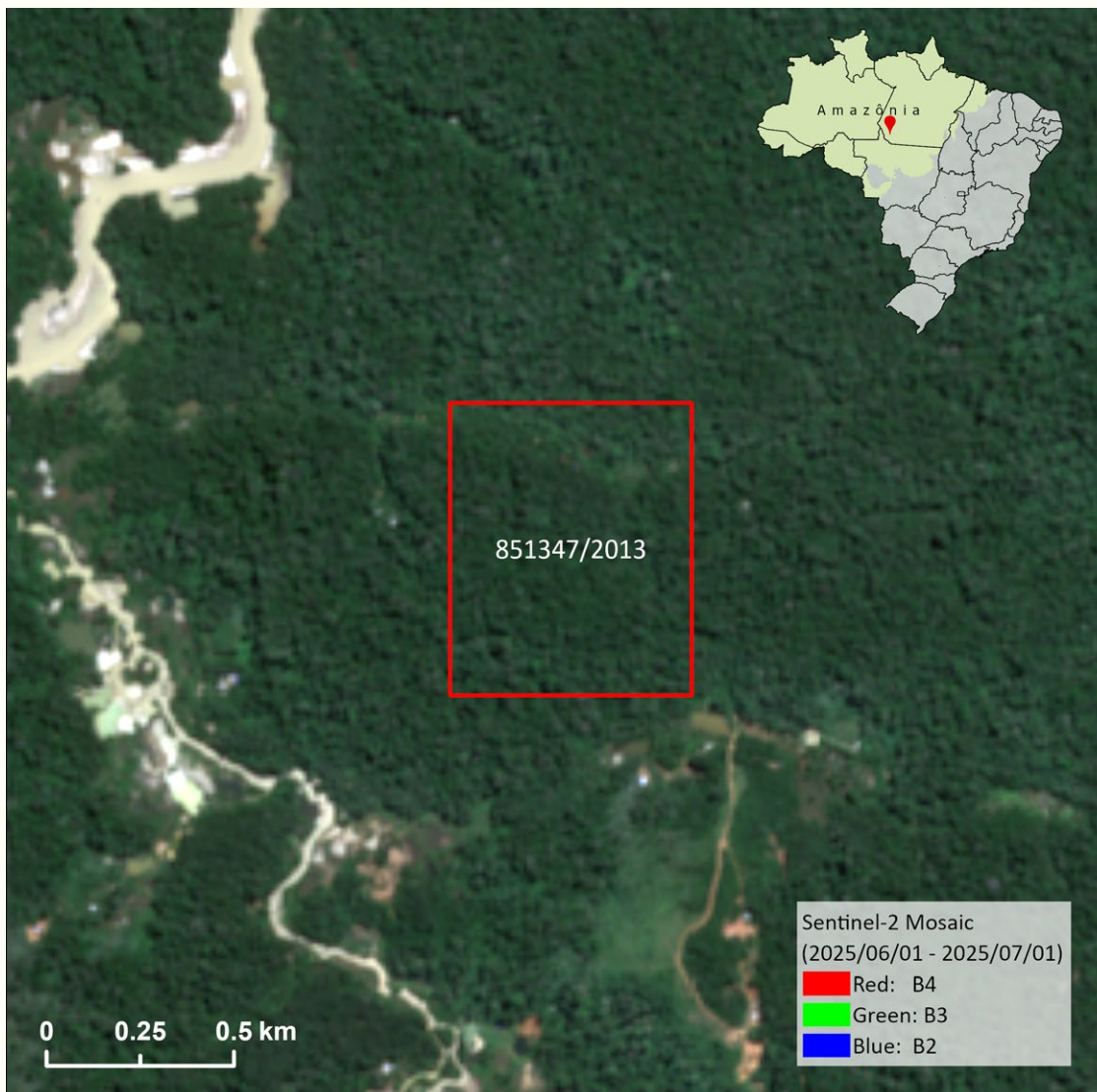


Figure 4. Image of PLG 851347/2013 (Itaituba, Pará) in 2025. The image shows forested areas with no evidence of *garimpo* activities.



Figure 5. Aerial view of PLG 851347/2013 on 17 Mar 2026. There is no evidence of mining activities that would be consistent with the PLG's declared volumes.

TAPAJÓS COOPERATIVE OF GOLD GARIMPEIRO MINERS AND PRODUCERS

Itaituba (PA)



PRODUCTIVITY KG/HA: 719.15 KG/HA → EXTREME

PLG 850638/2013, located in Itaituba, Pará, is held by the Tapajós Cooperative of Gold *Garimpeiro* Miners and Producers (*Cooperativa dos Garimpeiros Mineradores e Produtores de Ouro do Tapajós*) and covers an area as small as 1,08 ha. Nevertheless, it filed 102 CFEM declarations between March 2018 and August 2021, totaling 776.68 kg of gold, valued at R\$570 million at current rates, and a calculated productivity of 719.15 kg/ha—exceeding the threshold considered extreme by more than 140 times.

Remote sensing analysis (Figure 6) indicated no evidence of *garimpo* activities within the PLG area. Its polygon remained predominantly covered by intact forest throughout the period analyzed.

Gold mined by this PLG entered the formal Brazilian gold market through the following DTVMs: OM Distribuidora de Títulos e Valores Mobiliários Ltda. (370.03 kg), F.D'Gold Distribuidora de Títulos e Valores Mobiliários Ltda. (178.95 kg), Cooperativa dos Garimpeiros Mineradores e Produtores de Ouro do Tapajós - COOPOURO (122.80 kg), RBM- Recuperadora Brasileira de Metais S/A (52.47 kg), Coluna S.A. Distribuidora de Títulos e Valores Mobiliários (46.57 kg) e Carol Distribuidora de Títulos e Valores Mobiliários Ltda. (5.86 kg).

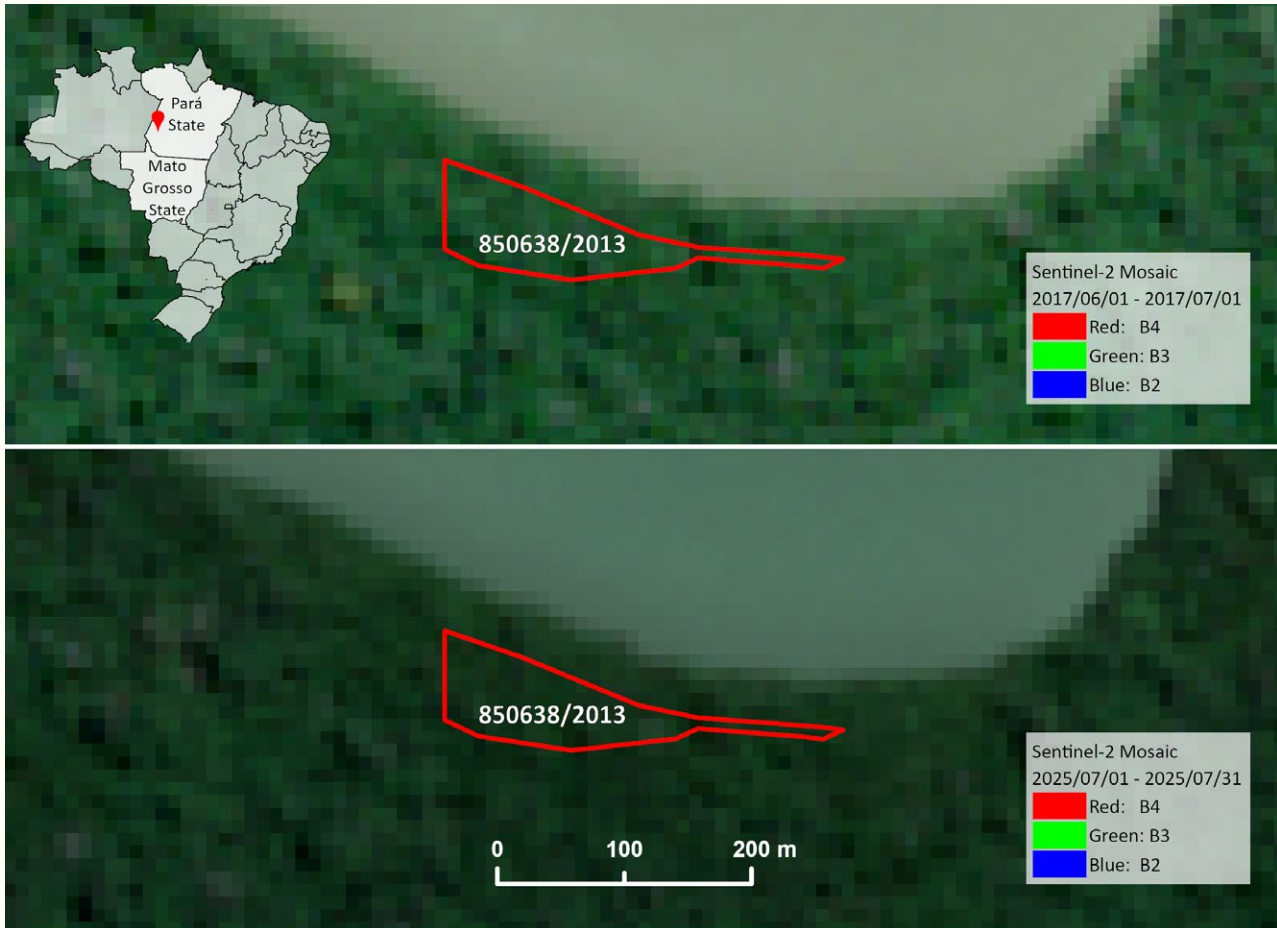


Figure 6. Time series of PLG 850638/2013 (Itaituba, Pará) including 2017 and 2025. The images show a predominantly forested area throughout the period, with no evidence of *garimpo* activities compatible with the PLG’s declared volumes.

CREPURIZÃO MIXED ECONOMIC AND SOCIAL DEVELOPMENT COOPERATIVE

Itaituba (PA)

PRODUCTIVITY KG/HA: 51.1 KG/HA → EXTREME



PLG 850230/2017, held by the Crepurizão Mixed Economic and Social Development Cooperative (*Cooperativa Mista de Desenvolvimento Econômico e Social do Crepurizão*), is located on the banks of the Tapajós River in Itaituba, Pará (Figure 7). Between March 2018 and November 2022, 67 CFEM declarations were submitted. Volumes declared added up to 109.9 kg of gold, valued at R\$80,7 million at current rates, within a 2.15-ha area, which means its productivity rate is 51.1 kg/ha—above the extreme threshold.

No evidence of dredging operations or signs of any *garimpo* activity was identified within the licensed area in the three months before the CFEM declarations.

Gold from this PLG entered the formal Brazilian gold market through the following broker-dealers: F.D'Gold Distribuidora de Títulos e Valores Mobiliários Ltda. (86 kg), OM Distribuidora de Títulos e Valores Mobiliários Ltda (3 kg) e Fênix Distribuidora de Títulos e Valores Mobiliários Ltda. (22 kg).

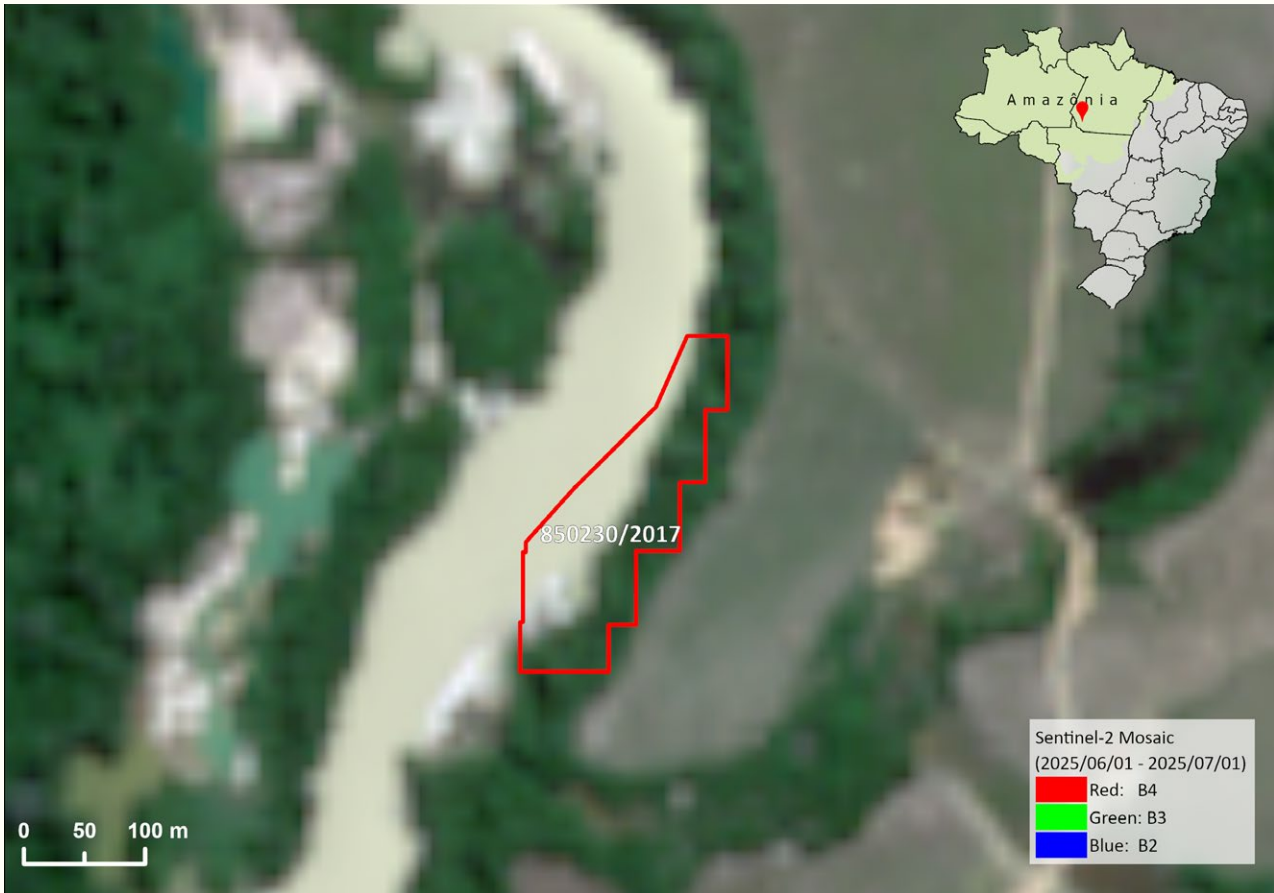


Figure 7. Polygon of PLG 850230/2017 (Itaituba, Pará) on the banks of the Tapajós River.

COOPERATIVE OF MINERS AND PRODUCERS FROM ITAITUBA AND SURROUNDING AREAS (COOMPITAR)

Itaituba (PA)

PRODUCTIVITY KG/HA: 5.7 KG/HA → EXTREME



The Cooperative of Miners and Producers from Itaituba and Surrounding Areas (*Cooperativa de Mineradores e Produtores de Itaituba e Região—COOMPITAR*) holds three PLGs of 50 ha each in Itaituba, Pará: PLGs 851281/2011, 851282/2011, and 851283/2011. Between 2021 and 2022, 77 CFEM declarations were registered, totaling 855.65 kg of gold, valued at R\$628 million at current rates. The calculated productivity is 5.7 kg/ha, a level considered extreme. All permits were requested in 2011, and none had any previous production history.

Production was concentrated in PLG 851283/2011, which alone accounted for 86 percent of the total declared production. This single PLG declared 733.72 kg, valued at R\$539 million at current rates, during the analyzed period. Considering only this tenement, the declared productivity would reach 14.67 kg/ha.

Remote sensing analysis (Figure 9) with flyover confirmation (Figure 8) indicated the absence of any evidence of *garimpo* activities within these areas.

Gold from these PLGs entered the formal Brazilian gold market through the following DTVMs: Fênix Distribuidora de Títulos e Valores Mobiliários Ltda. (424.1 kg), Unida Distribuidora de Títulos e Valores Mobiliários Ltda. (254.76 kg), Carol Distribuidora de Títulos e Valores Mobiliários Ltda. (102.38 kg), GADE Gold Laboratório de Análise de Solo e Minérios Ltda. (36.67 kg) e OM Distribuidora de Títulos e Valores Mobiliários Ltda. (37.74 kg).



Figure 8. Aerial view of the PLGs registered under COOMPITAR (Itaituba, Pará). Flyover conducted on 17 April 2026 showed no evidence of mining activities compatible with the declared production volumes.

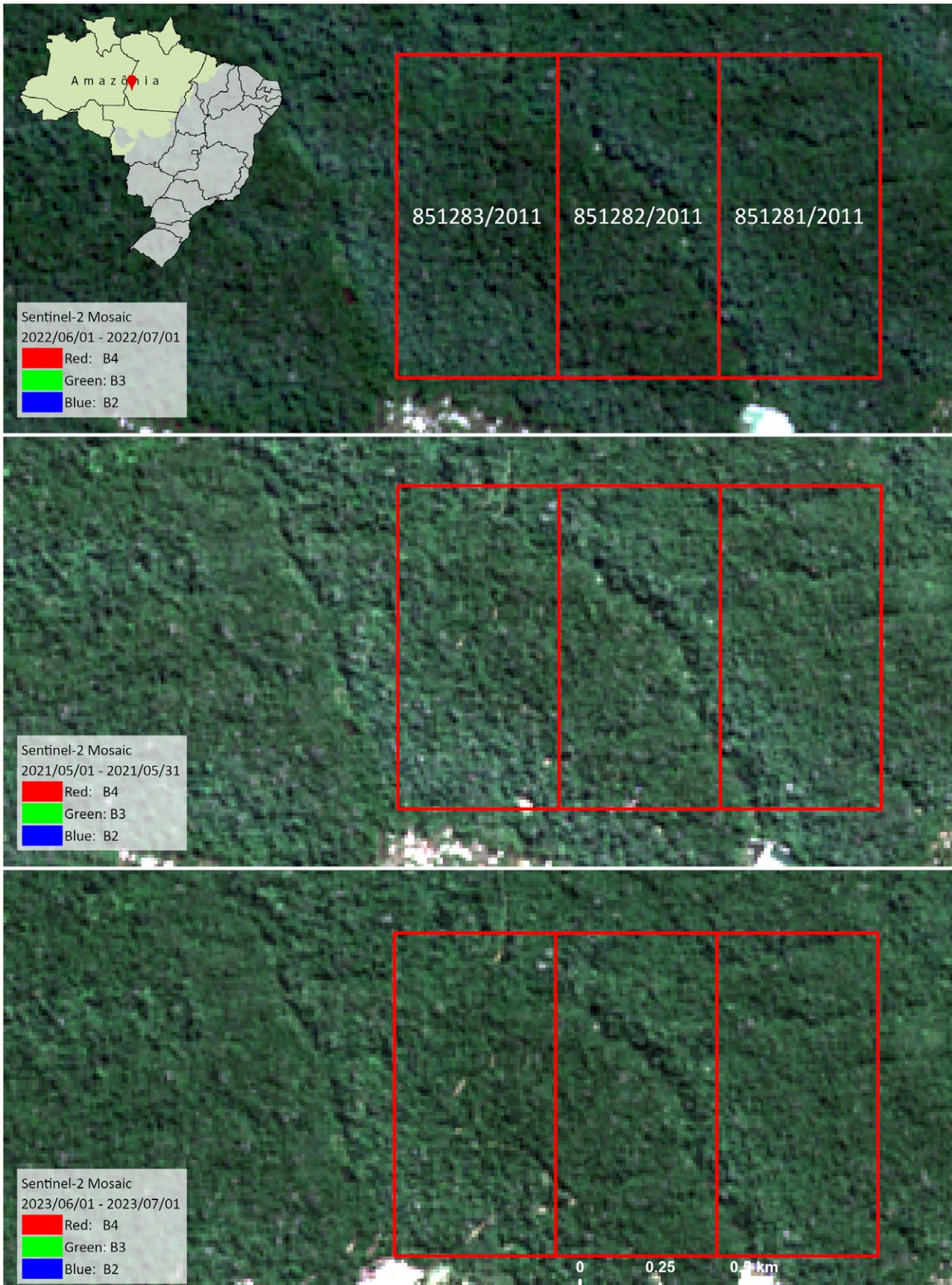


Figure 9. Time series of COOMPITAR's PLGs (Itaituba, Pará) between 2021 and 2023. The areas remain forested, with no evidence of *garimpo* operations.

INDUSTRIAL-SCALE *GARIMPO* OPERATIONS

Industrial-scale *garimpo* operations are arrangements in which multiple independent mining tenements—mainly *Garimpo* Permits (PLGs)—granted within the same territorial area are exploited in a way that suggests a single operation

These arrangements not only seek to evade stricter environmental licensing and the rules enforced to industrial mining operations, but also may make it easier to launder illegally mined gold.

A total of 66.3 percent of the 98 PLGs with irregularities fall into this category, which accounts for 49.2 percent of the 25.3 tons of gold declared in them.

ILLUSTRATIVE CASE EXAMPLES:

RIO PEIXOTO VALLEY *GARIMPEIROS*' COOPERATIVE (COOGAVEPE) (1)

Peixoto de Azevedo and Matupá (MT)

PRODUCTIVITY KG/HA: 0.94 → HIGH



On the border between the municipalities of Peixoto de Azevedo and Matupá, state of Mato Grosso, there are three neighboring PLGs held by the Rio Peixoto Valley *Garimpeiros*' Cooperative (*Cooperativa dos Garimpeiros do Vale do Rio Peixoto*—COOGAVEPE), all currently in the *garimpo* phase: PLGs 867136/2014, 866103/2015, and 866301/2016.

Between March 2018 and April 2026, 1,607 CFEM declarations were filed, totaling 5,080.43 kg of gold, value at R\$3.7 billion at current rates. The calculated productivity was 0.94 kg/ha, considered high. Together, the three PLGs cover an area of 5,421.18 ha.

Satellite image analysis (Figure 10) shows an expansion of *garimpo* activities between July 2017 and April 2026. Excavation pits, settling ponds, and exposed soil areas spread across the three PLG areas in an integrated manner, without any clear boundaries between each PLG, suggesting a single integrated mining operation.

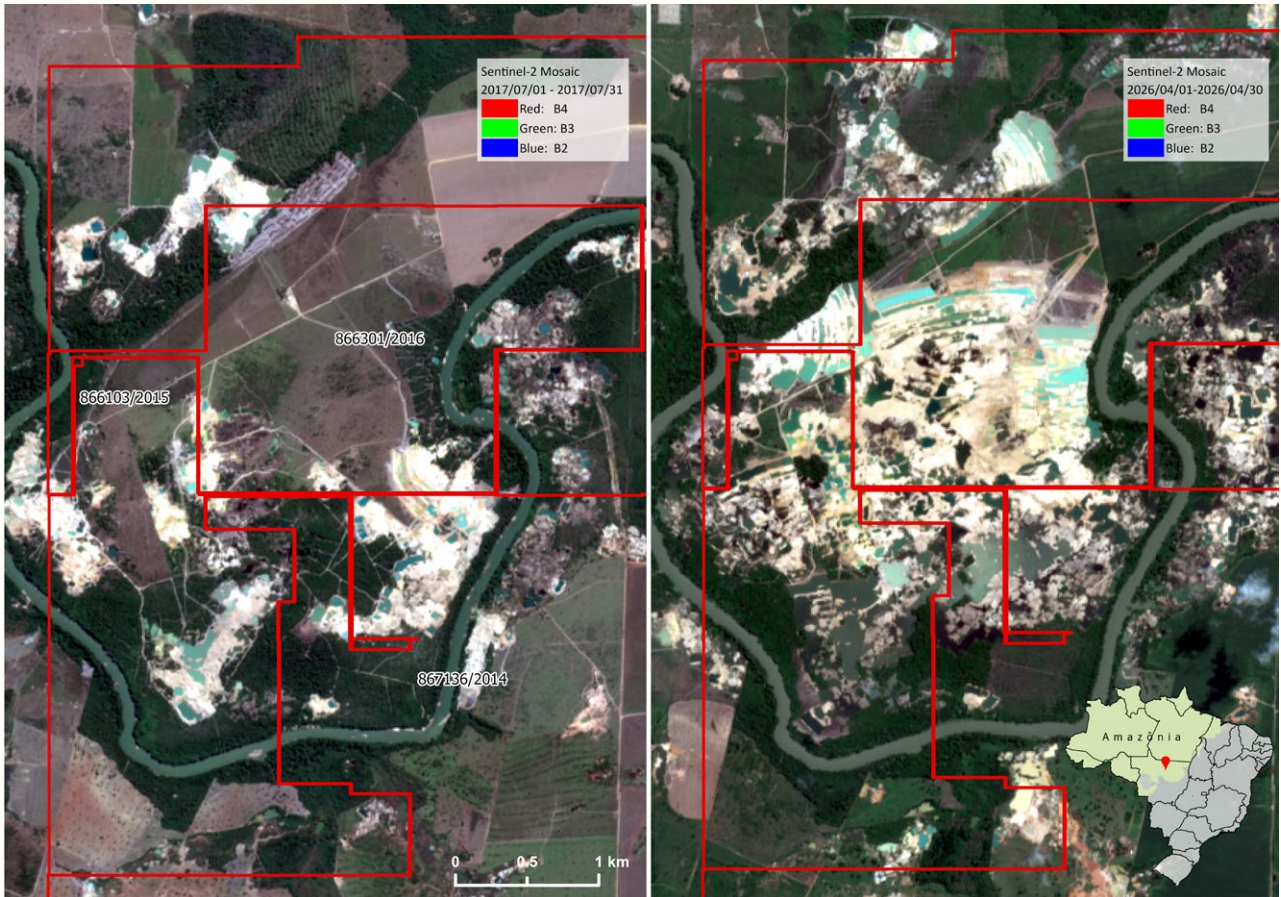


Figure 10. Satellite images of COOGAVEPE (1)'s tenements (Peixoto de Azevedo and Matupá, Mato Grosso) in July 2017 (left) and April 2026 (right). The significant expansion of mining activities between the two periods indicates continuous operations, with no clear boundaries separating each tenement.

RIO PEIXOTO VALLEY GARIMPEIROS' COOPERATIVE (COOGAVEPE) (2) –

Peixoto de Azevedo, Matupá, and Terra Nova do Norte (MT)

PRODUCTIVITY KG/HA: 0.31 → HIGH



The Rio Peixoto Valley *Garimpeiros'* Cooperative (*Cooperativa dos Garimpeiros do Vale do Rio Peixoto*—COOGAVEPE) holds other 10 contiguous PLGs on the border between the municipalities of Peixoto de Azevedo and Terra Nova do Norte, Mato Grosso. The cluster extends across 8,139.85 ha and comprises PLGs 866430/2011, 867065/2012, 866612/2012, 867144/2014, 867069/2014, 867070/2014, 867071/2014, 867073/2014, 866179/2014, and 866298/2016.

These PLGs combined filed 1,284 CFEM declarations between March 2018 and March 2026, totaling 2,557.37 kg of gold, valued at R\$1,8 billion at current rates. Their calculated productivity is 0.31 kg/ha—which is a high level.

Satellite image analysis (Figure 11) shows a significant expansion of mining activities between July 2019 and July 2025 in the area, with an integration between the different tenements.

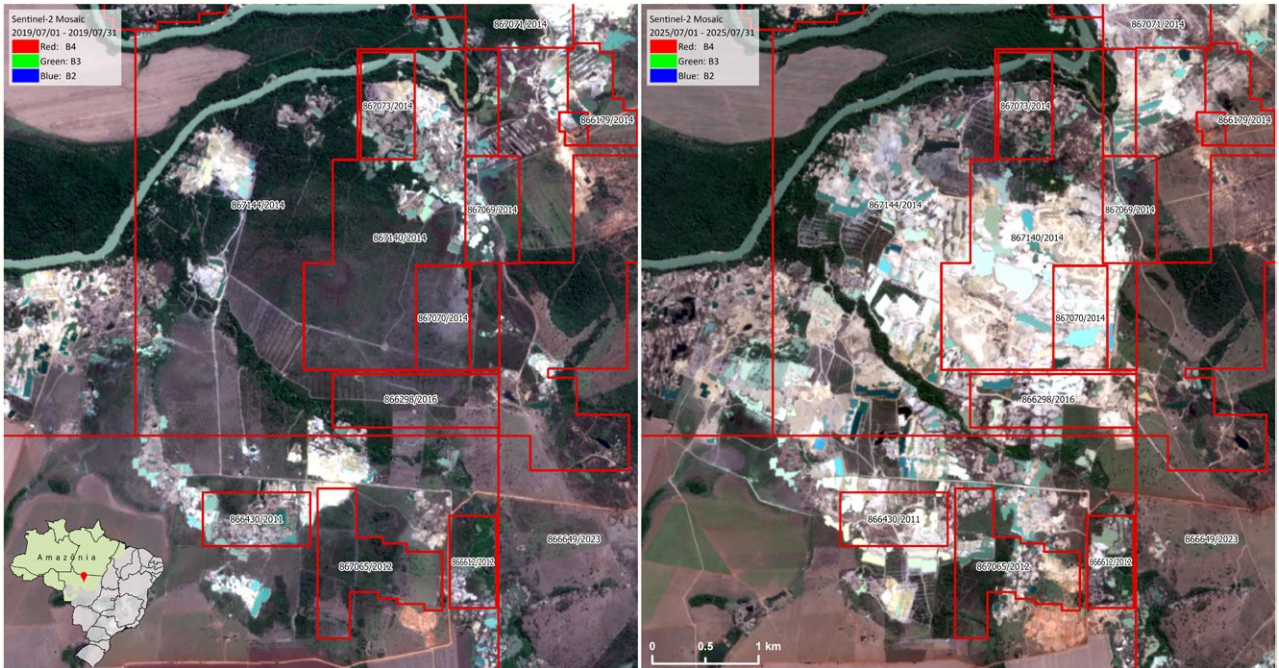


Figure 11. Satellite images of COOGAVEPE (2)'s mining tenements (Peixoto de Azevedo, Matupá, and Terra Nova do Norte, Mato Grosso) in July 2019 (left) and April 2026 (right). The expansion of mining activities between the two periods indicates continuous operations, with no clear boundaries between each tenement.

MINERADORA SAO MATHEUS LTDA AND COOGAVEPE

Matupá (MT)



PRODUCTIVITY KG/HA: 0.73 → HIGH

A cluster of PLGs in Matupá, Mato Grosso, is registered under two different titleholders: Mineradora São Matheus Ltda. and Rio Peixoto Valley *Garimpeiros'* Cooperative (COOGAVEPE). The areas are interspersed and form a single continuous mining operation.

Mineradora São Matheus Ltda. holds seven tenements, six of which are currently in the *garimpo* phase (866263/2012, 866890/2005, 866891/2005, 866892/2005, 867004/2005, and 867010/2005), while one remains under survey application status (866922/2025). Between March 2018 and April 2026, 215 CFEM declarations were filed, totaling 435.84 kg of gold, valued at R\$317 million at current rates, distributed across approximately 291.49 ha. The calculated productivity is 1.50 kg/ha, considered very high.

Within the same area, COOGAVEPE holds six PLGs. Between March 2018 and April 2026, 439 CFEM declarations were filed, totaling 418.34 kg of gold, valued at R\$304 million at current rates, distributed across approximately 862.45 ha. The calculated productivity is 0.49 kg/ha—high level.

Together, the two titleholders account for 654 CFEM declarations, totaling 854.18 kg of gold, valued at R\$622 million at current rates, and a combined area of approximately 1,153.94 ha. Their combined calculated productivity is 0.74 kg/ha, considered high.

Satellite image analysis (Figure 12) indicates that the tenements held by these two titleholders form a single continuous mining cluster. Mining structures, including excavation pits and settling ponds, spread in an integrated manner across the areas, with no clear boundaries between different tenements or between each titleholder's formal borders.

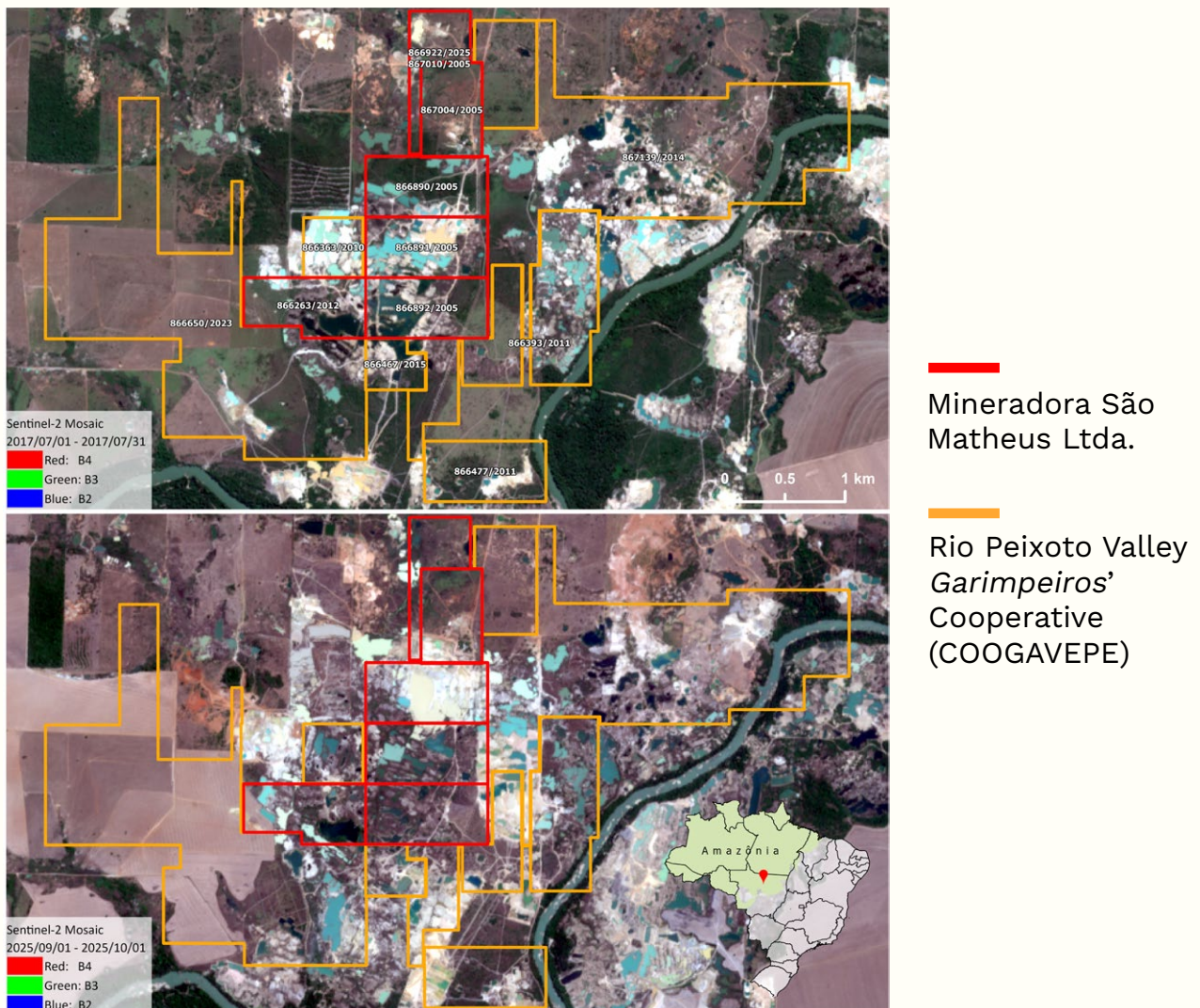


Figure 12. Satellite images of the mining tenements held by COOGAVEPE and Mineradora São Matheus Ltda (Peixoto de Azevedo and Matupá, Mato Grosso) in July 2017 (top) and October 2025 (bottom). The expansion of mining activities in the area indicates a continuous growth of operations, with no clear boundaries between each tenement.

THE VICTIMS OF THE FRAUD: RIVERS, FORESTS, AND INDIGENOUS PEOPLES

Gold laundering through *Garimpo* Permits (PLGs) creates pathways for the encroachment on Indigenous Lands and other protected areas, causing the destruction of forests and rivers.

In addition to altering water turbidity and riverbeds, *garimpo* contaminates rivers with mercury, a highly toxic metal both to the environment and human health. An analysis conducted by WWF¹⁵ revealed an alarming scenario: more than half (51.7 percent) of the rivers in the Tapajós sub-basin had mercury levels above the limits established under Brazilian legislation.



Cluster of garimpo dredges on the Madeira River. November 2021



At the 2022 Free Land Camp, Indigenous leaders protest against *garimpo* on Indigenous Lands, denouncing the violence and destruction caused by the activity. April 2022.



At the 2026 Free Land Camp, under the theme 'Our future is not for sale: the answer is us', Indigenous people carried banners denouncing the impact of gold on their territories. April 2026.

Another victim of the encroachment of *garimpo* is the forest. More than 99,000 ha of forests in protected areas across the Amazon had been destroyed by criminal mining activity by September 2025—an area 25 times larger than the Tijuca National Park in Rio de Janeiro.¹⁶

Garimpo operations leave a trail of destruction wherever they advance, but their impacts are particularly devastating in Indigenous Lands, where *garimpo* drives territorial and social disintegration on a profound scale.

The expansion of *garimpo* operations undermines Indigenous peoples' living conditions: they contaminate rivers, drive away wildlife, degrade hunting and fishing areas, make traditional agricultural practices unviable, and threaten food security. They also fuel diseases, violence, sexual exploitation, human trafficking, and other human rights violations.

The impact on Indigenous youth is severe. Drawn by the prospect of immediate income, many are recruited into *garimpo* operations or their logistical supply chains and become alienated from community-based education, cultural transmission, and traditional and sustainable economies.

The impact on Indigenous women is particularly harsh. In territories devastated by *garimpo* activities, they face increased sexual violence, economic exploitation, harassment, and an overburden of community care work.

Mercury contamination directly affects women's reproductive health, with consequences that remain insufficiently understood. A study conducted by the Oswaldo Cruz Foundation (*Fundação Oswaldo Cruz—Fiocruz*)¹⁷ in the Munduruku Indigenous Land showed that, 98.5 percent of 133 pregnant women examined had mercury levels above the safe threshold.¹⁸

The impacts of *garimpo* activities demonstrate that their expansion cannot be seen solely as an environmental issue, but rather as a driving force behind widespread and systematic human rights violations.



In protest against illegal *garimpo* on Indigenous Lands during the 2022 Free Land Camp, Indigenous leaders and activists marched covered in mud and fake blood. April 2022.

***GARIMPO*, EXPLOITATION, AND STRUCTURAL POVERTY**

Garimpo thrives because it finds fertile ground in the Amazon's social conditions, marked by intergenerational poverty, precarious public services, low economic integration, and repeated failures of regional development policies. These are structural factors that help explain the dynamics of mining activities in the region.

Amid this context, *garimpo* emerges as one of the few concrete opportunities for immediate income generation for workers without access to formal employment, credit, professional training, or structured production chains.

It is under these conditions that *garimpo* becomes consolidated not only as an unlawful activity, but also as an economic survival strategy for thousands of people from different social groups.

The Amazon accounts for more than 90 percent of Brazil's *garimpo* operations.¹⁹ This is not an outcome of geographical misfortune, but rather of political decisions. It stems from a historical development model that has integrated the Amazon into the national economy through predatory extractive cycles while simultaneously marginalizing it as a territory that was not fully entitled to citizenship rights.

90 percent of *garimpo* operations recorded in Brazil are in the Amazon, a region marked by the absence of public and economic policies capable of providing real alternatives to illegal mining.



© Fabio Bispo / Greenpeace

Flyover of the Sararé Indigenous Land, which faces pressure from illegal mining encroaching on the territory and threatening the way of life of Indigenous communities. August 2025.

PATHWAYS TOWARD A TRANSPARENT GOLD SUPPLY CHAIN

The Brazilian Supreme Court’s decision to overturn the “presumption of good faith” in gold purchases and require oversight mechanisms for this trade was a key step toward building a resilient gold traceability system. However, this report exposes a fundamental regulatory loophole that can—and should—be addressed to strengthen *garimpo* oversight and monitoring mechanisms.

In 2026, Brazil’s Chamber of Deputies passed Bill 3,025/2023,²⁰ establishing the foundations for a gold traceability system. The bill includes measures such as mandatory Gold Transport and Custody Documentation for moving gold across the Brazilian territory and the use of electronic invoicing.

Nevertheless, closing the loopholes that allow fraud at the point of origin remains a pressing matter. These measures must include mechanisms to prevent the continued use of PLGs to launder illegally mined gold.

No matter how sophisticated, a traceability system risks merely tracking and legitimizing false information if the integrity of the first link in the supply chain is not secured.

The next challenge lies in dismantling the “second presumption of good faith”: the unfounded acceptance of self-declared production volumes originating from PLGs, a regime that operates within a vacuum of reliable geological data.

To comply with the Supreme Court’s ruling and ensure effective traceability across the gold supply chain, reforms must change the very nature of the PLG regime and adopt innovative oversight instruments.

TO THIS END, THIS STUDY PROPOSES THE FOLLOWING RECOMMENDATIONS TO THE NATIONAL MINING AGENCY:

1. Exercise the authority to require prior mineral surveys before granting PLGs, based on Article 6 of Law 7,805/89;
2. Identify and immediately cancel PLGs that have paid Financial Compensations for Mineral Resource Exploration (CFEM) but show no clear evidence of mining operations.



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Aerial view of the Watoriki Village in the Demini region, in the Yanomami territory, showing the preserved forest around it. October 2022.

OVERCOMING GARIMPO AS A POSSIBLE HORIZON

Beyond regulatory and administrative improvements to the PLG regime, overcoming *garimpo* as an economic model in the Amazon must become part of the region's long-term development horizon.

Across the Amazon, urban and rural populations have shown for decades that it is possible to generate wealth, create income, and build reliable economic supply chains without destroying the forest.

The struggle against the expansion of garimpo is therefore also a struggle between economic models.

On one side stands a predatory system that concentrates wealth, destroys territories, fuels violence, and leaves behind an irreversible socio-environmental legacy. On the other side, territorial economies distribute income locally, strengthen community autonomy, keep the forest standing, and preserve the ecological conditions that sustain life on the planet itself.



Brazil nut and chocolate production by Instituto Kabu, led by the Kayapó people, is an example of a project that combines environmental conservation and sustainable development.

ENDNOTES

- 1 While garimpo in Brazil originally meant small-scale or artisanal mining activities, over time it became associated with illegal and often times large-scale mining activities. Brazilian legislation acknowledges legal garimpo only as activities performed by individuals or cooperatives using light machinery or rudimentary tools - which nowadays hardly reflects the reality on the ground.
- 2 «GREENPEACE BRAZIL. Por que o garimpo ainda continua sendo uma ameaça para a Amazônia? 10 Sep 2025. Available at: <https://www.greenpeace.org/brasil/blog/porque-o-garimpo-ainda-continua-sendo-uma-ameaca-para-a-amazonia/>
- 3 CFEM is financial compensation paid to the government by those who explore mineral resources, whether individuals or legal entities - National Mining Agency. CFEM. Brasília, DF: ANM, [n.d.]. Available at: <https://www.gov.br/anm/pt-br/assuntos/arrecadacao/cfem>
- 4 The calculation of the updated values for May 2026 was based on 24K gold, using the average price for the first half of May 2026—R\$728.17/kg. The calculation of CFEM values, however, is determined based on the price on the day the gold is sold.
- 5 CORTINHAS FERREIRA NETO, Luiz; DINIZ, Cesar Guerreiro; MARETTO, Raian Vargas et al. Uncontrolled illegal mining and Garimpo in the Brazilian Amazon. Nature Communications, vol. 15, n. 1, art. 9847, 2024. Available at: <https://www.nature.com/articles/s41467-024-54220-2>
- 6 SOCIO-ENVIRONMENTAL INSTITUTE. ISA study proves that mining impedes social progress in the Amazon | Socioenvironmental Institute <https://www.socioambiental.org/en/noticias-socioambientais/estudo-do-isa-comprova-que-garimpo-impede-progresso-social-da-amazonia>
- 7 STF. ADI 7273. Reporting Justice Gilmar Mendes, Full Court, ruling 14 Mar 2025, Electronic Justice Gazette (Diário de Justiça Eletrônico—DJe) 28 Mar 2025. ADI 7273 - <https://portal.stf.jus.br/processos/downloadPeca.asp?id=15375277159&ext=.pdf>
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- 10 Federal Police execute search and seizure warrants to combat illegal gold trade in Pará – G1 Santarém – PA, May 10, 2018. Available at: <https://g1.globo.com/pa/santarem-regiao/noticia/pf-cumpre-mandados-de-busca-e-apreensao-no-combate-ao-comercio-ilegal-de-ouro-no-para.ghtml>
- 11 TCU. Judgment No. 1469/2025 (Case No. 025.941/2024-0). Reporting Judge Benjamin Zymler. Plenary Session: 2 July 2025. https://pesquisa.apps.tcu.gov.br/documento/acordao-completo/*/NUMACORDAO%253A1469%2520ANOACORDAO%253A2025/DTRELEVANCIA%2520desc%252C%2520NUMACORDAOINT%2520desc/0
- 12 Law 7,805/89 - Art. 6 – “If the National Department of Mineral Production (Departamento Nacional de Produção Mineral—DNPM) deems it necessary to conduct survey, either on its own initiative or at the request of the permit holder, it shall summon the permit holder to submit survey proposals within ninety (90) days from the date of publication of the summons in the Federal Official Gazette. Paragraph One. In the event of failure by the interested party to comply with the deadline referred to in the main provision of this article, the National Department of Mineral Production (DNPM) shall cancel the permit or reduce the area included in it.”
- 13 Office of the Comptroller General (CGU). Audito Report No. 905627 - National Mining Agency - Transparência e Objetividade do Processo Decisório da ANM. Publication: 17 Aug 2022. <https://eaud.cgu.gov.br/relatorio/1274960#cabecalho>
- 14 Federal Court of Accounts. Judgment No. 1469/2025 – Plenary Session. Brasília, Federal District, 2025. Available at: https://pesquisa.apps.tcu.gov.br/documento/acordao-completo/*/NUMACORDAO%253A1469%2520ANOACORDAO%253A2025/DTRELEVANCIA%2520desc%252C%2520NUMACORDAOINT%2520desc/0
- 15 Groundbreaking study highlights mercury contamination potential in four Amazon basins: WWF-Brazil, 19 december 2024. Available at: <https://www.wwf.org.br/?90682/Groundbreaking-Study-Highlights-Mercury-Contamination-Potential-in-Four-Amazon-Basins>
- 16 GREENPEACE BRAZIL. Por que o garimpo ainda continua sendo uma ameaça para a Amazônia? 10 Sep 2025. Available at: <https://www.greenpeace.org/brasil/blog/porque-o-garimpo-ainda-continua-sendo-uma-ameaca-para-a-amazonia/>
- 17 REVISTA CENARIUM. Mercúrio do garimpo contamina gestantes e bebês Munduruku no PA. 23 Jun 2025. Available at: <https://revistacenarium.com.br/mercurio-do-garimpo-contamina-gestantes-e-bebes-munduruku-no-pa/>

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- 19** MAPBIOMAS. The Amazon concentrates more than 90% of Brazil's gold mining. Available at: <https://brasil.mapbiomas.org/en/2023/09/22/amazonia-concentra-mais-de-90-do-garimpo-no-brasil/>
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ANNEX 1: SUMMARY OF ILLUSTRATIVE CASE EXAMPLES

CASE	LOCATION	PLGS	PRODUCTIVITY (KG/HA)	VOLUME OF GOLD EXTRACTED (KG)	CFEM LEVY AMOUNT
COOGAM	Cumaru do Norte (PA)	850092/2020	52,92	2288,91	R\$9.475.973,07
Antonia da Silva Santos Galvão	Itaituba (PA)	851347/2013	0,71	35,35	R\$268.630,21
Tapajós Cooperative of Gold Garimpeiro Miners and Producers	Itaituba (PA)	850638/2013	719,15	776,68	R\$1.684.459,59
Crepurizão Mixed Economic and Social Development Cooperative	Itaituba (PA)	850230/2017	51,13	109,94	R\$317.656,57
COOMPITAR	Itaituba (PA)	851281/2011, 851282/2011, 851283/2011	5,70	855,65	R\$3.327.397,69
COOGAVEPE (1)	Peixoto de Azevedo and Matupá (MT)	866103/2015, 866301/2016, 867136/2014	0,94	5080,43	R\$19.164.861,57
COOGAVEPE (2)	Peixoto de Azevedo, Matupá and Terra Nova do Norte (MT)	866179/2014, 866298/2016, 866430/2011, 866612/2012, 867065/2012, 867069/2014, 867070/2014, 867071/2014, 867073/2014, 867144/2014	0,31	2557,37	R\$9.388.376,17
Mineradora São Matheus Ltda. and COOGAVEPE (3)	Matupá (MT)	866263/2012, 866363/2010, 866393/2011, 866467/2015, 866477/2011, 866650/2023, 866890/2005, 866891/2005, 866892/2005, 866922/2025, 867004/2005, 867010/2005, 867139/2014	0,74	854,18	R\$3.463.063,57



“

I have always fought deforestation, mining, and the exploitation of nature's resources, because, in the future, we will suffer the consequences of this exploitation. We are already suffering today.”

CACIQUE RAONI METUKTIRE

In 2023, Greenpeace Brazil in partnership with Instituto Raoni conducted a flyover to document the destruction and damage caused by illegal *garimpo* operations in the Kayapó Indigenous Land.

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GOLD LAUNDERING IN THE AMAZON: ANATOMY OF A FRAUD
June/2026

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