

## Tracking the Rising Role of Organized Crime in Gold Mining

*Southwestern Pará, Brazil*

Many Amazon people depend on both urban and rural livelihoods, moving between two or more residences depending on the season and economic prospects (Hecht, 2005). During the first PT era (2003–2016), there was a lot of work in cities in construction, and minimum wages and social support were increased, including monetary perks for not deforesting. This lessened the deforesting activities undertaken by the working population. However, in 2013 the Brazilian economy started to decline from its boom years and the construction and oil sectors were mired in major corruption scandals, with many projects coming to a halt, which meant urban workers had to look for other opportunities. During the latter part of the 2010s many workers moved from northeastern cities and elsewhere to work as illegal gold miners, often under bosses who kept them in slavery-like conditions. Between 2008 and 2021, the authorities rescued 333 miners from Amazonian gold mines, mostly in Pará, who were working in conditions analogous to slavery (Senra et al., 2023). The owners of *garimpos* (originally meaning artisanal gold mining in Brazil, but currently, in practice, this is mostly medium-scale, illegal, violent, and crime-linked mining, as discussed herein) make their already highly profitable actions even more profitable by forcing the miners they bring into the operation to take on debt. The owners demand that the miners pay for basic goods, transport, and other services in gold, at a rate that is routinely five to ten times more than they would pay in the town (Senra et al., 2023). Most gold miners in Brazil seem to come from Maranhão, which shows how the supply of certain types of labor and entrepreneurs create path dependencies, as some who have gone to mine gold in the Amazon tell friends and relatives back home of the opportunities. Thus, through the translocal labor flows, RDPEs can have close ties with labor and capital dynamics in other areas.

An IBAMA officer, who had been active in curbing illegal gold mining around the Amazon for a long time, told me in an interview on November 23, 2023, that in Maranhão the daily worker salary is 50 reais (about USD 10), while in gold mining the same worker easily earns 8,000–9,000 reais (about USD 1,600–1,820)

per month. The work is hard, and the conditions are bad, but still, making so much more money, they do not return to their previous employment. I met and talked to these workers when I visited illegal gold mines in the Amazon, for example in the region around Castelo dos Sonhos in Pará (see Figure 7.1). Their accounts helped me to understand how the system of illegal gold mining works and gets boosted or changes its character due to major regime and economic shifts in the country. In 2019 at the bottom of a mining pit, a gold miner from Maranhão explained to me that he had previously worked in the construction sector, but as the sector descended into crisis, he switched to gold mining. This sector fluctuates often as the workers migrate. However, although there are these decentralized aspects of the system, the key gold buyers, machinery sellers, money launderers, and international traders, amass the most wealth and power.

In 2019, a gold shop operator in Itaituba, Pará, explained to me that “now a lot of people are coming from Venezuela,” which shows how Amazon gold digging is an international, cross-Amazonian process. Venezuela had started to create its own gold RDPE in the Orinoco Delta and had labor supply from other regions. After February 2023, when Lula cracked down on miners in Roraima, according to my informants, they went in large numbers to Suriname, with others returning to Yanomami lands after a while, as these areas are very hard to monitor.

In November 2019, I went to visit several illegal gold-mining sites in southwestern Pará with a reporter, a guide, and a former miner who also served as our driver. On one of those trips, we stayed at Castelo dos Sonhos, a real frontier town, which had even a hotel called *Fronteira* (frontier). The main street, on BR-163, had shops for buying gold-mining equipment, cowboy clothing from the United States, and others stocking items that deforesters might need, such as ranching equipment. There was also a supermarket owned by Castanha, who is considered to be the worst single deforesting person in the Amazon, with his operations responsible for between 10 and 20 percent of the yearly Amazon deforestation. Although condemned several times, he continues to run free in these frontier regions as he is waiting for the Supreme Court’s final decision. As he remains free, he continues to drive further devastation and accumulate capital as he owns much of the town. At the start of our trip, in Cuiabá, I witnessed a car protest where the expensive pickups were covered with pictures of Supreme Court judges. The protestors were calling them criminals and calling for the abolition of the Supreme Court. The people who can afford such expensive cars in these regions are also most likely related to all sorts of environmental and human rights crimes. Castanha was responsible for organizing the logging of tens of thousands of hectares inside conservation areas, which abound around the BR-163.

We went to a gold-mining shop to ask the price of a mining set. The whole package could be attained for 30,000 reais, and if we would top that with another 30,000, we would get the best Mercedes-Benz motor to power the crushing mill

and suction pipe. The salesman said we could earn back the price in just a few days if we were at a good spot. He did not ask us any questions about why we were interested in the set but was assuming we were going to go dig for gold as he showed the machinery parts, which seemed crude. He told us that 30,000 was the discount price coming directly from the boss.

Early the next morning we pointed our car eastwards on the small gravel road leading out of the town and saw the roadside brothels and bars already in full swing because the gold miners were spending their earnings in town. We asked people we met on the road where there are garimpos and used unreliable maps and satellite images to try to spot the mines. We stopped to listen to sounds of motors and were on the lookout for signs of garimpo. These are wholly illegal operations, as lands have been captured illegally and the operations break environmental laws, human rights, and labor laws. The driver, who had toiled in mines for years, told us that there were big criminals hiding here.

We first tried to enter a gold-mining site behind several fences, but a lady appeared telling us that it was not wise to continue further, as the mining boss operating at the end of the road welcomes everybody with a rifle. We turned and kept searching for a few hours. Finally, we found a gold mine whose boss was in town, as we found out after walking carefully deeper into the mine site, along the ridges of sand, between the holes. At the end, there was a group of seven men toiling at the bottom of a pit, working with a backhoe and a conveyor belt for washing the excavated ground. Powerful water hoses were used to wash the dirt sliding down a grid, with the rocks falling through and the gold staying in the grid. The scoop put more and more dirt on the grid. The men were barefoot on the mud and clay, with ragged shirts, working 7 days in 12-hour shifts, in slave-like working conditions. After filming and managing to talk for a while with one of the miners who was willing to talk, we quickly drove away as the boss had already been notified of the appearance of strangers and would most likely be heading back and arriving soon. We used a drone from further away to get an aerial view of the expanse of the destruction (see Figure 7.1).

The 30-year-old miner I talked to there explained the work was hard and that he was working “from six to six,” 12 hours per day. He said the only way to really know where there is gold is “to take out that thing on top,” referring to the forest. Contrasting with what an IBAMA officer had said to me, the miner said a worker earns about 3,000 reais (about USD 600) per month, based on the percentage of the gold they find. He said they found about 50 grams of gold per day, varying by day. He said that he had been there just for a very short time, for two months, and did not know when the area was opened. He explained that each digging machine costs about 500,000 reais. I tried to inquire about land access, knowing of the illegality, “It is complicated” to get access to land, “we just work here,” the man



Figure 7.1 A gold-mining operation east from Castelo dos Sonhos, Pará, Brazil, November 2019. Photo taken by author.

replied. When asked about the job, he said, “It is not very good.” He then explained how workers end up in the mines, “[one] arrives there in the city, and the guy [gold mine owner] talk when they need workers, and they go to gold mines.” He was going to return to Maranhão at the end of the year. They were about to expand, as their area was already “weak,” mined-out.

We then tracked the route of gold to the towns and their gold shops. Itaituba is the key gold-mining hub in Pará, a gold town where most of the economy revolves around gold. Most *garimpeiro* donos live in town, although they are “passing most time in there [at mine sites], to administer,” as a gold shop operator in Itaituba told me. We were able to interview this gold shop owner only after many attempts to find someone in the gold shops willing to talk to us. Most would not talk to us, even anonymously, fearing that we might be environmental police, as they were engaged in illegal gold trading. In 2019, Itaituba was seeing a major mining expansion, but there has been gold mining in the area for a long time, explained the shop operator, “I had not even been born, there was a lot of *garimpo* here for many years, who made the city was the *garimpo* and therefore it [the city] keeps on growing all the time ... most of the *garimpos* are illegal.”

He explained that miners spend most of their money on liquor, women, and overpriced goods at mining site canteens and mostly stay in the forest. When I asked about who sells the gold to them, he explained, while casting a small gold bar worth about 500 euros, that the many small gold-buying shops in the town are mostly geared toward the smaller, individual miners and mine workers, while the big miners, *garimpeiro donos*, have their own direct sales channels:

It is individual sales and usually it is more the employee who comes since the patron already has a stronger contact ... what gives profit to us is the employee, not the *garimpeiro* [dono] himself. The dono gives little value to us. Typically, it is this guy [who does not have a dono] that does alone, that gives more profit for us.

Gold mining has become an RDPE around and in Itaituba. The gold shop owner feared that the economy would collapse if mining was forbidden, “if they shut down garimpo here that is the end of the city.” He argued that pollution could be controlled if mining was legalized. Such discourses are indicative of system-internal thinking, where no other options outside of the established trade are seen as possible and solutions are sought only within the system boundaries, even if those would be practically unfeasible (such as mining regularization). His view of the local society and the way development was going and should go was also indicative of system-internal thinking: “All are living well, but, as I told you, [state] inspection impedes a lot for us to grow.”

Just as in the Peruvian context, in the Brazilian Amazon there were also problems related to some Indigenous village chiefs, a minority, and other members of the aldeias participating in gold mining or allowing the entrance of gold miners to their land. In November 2019, I asked what the Sawré Muybu community members thought of these Munduruku, south of Itaituba in Pará, by the Tapajós River, whom I was visiting, who were allowing this. Aldira Munduruku responded:

They do not have any more consciousness, they just want to work with the business of *Pariuás* [white people, outsiders, as referred to by them] but on the other hand there are more people who want to help with the preservation of the forest ... the relatives who are in favor of mining are sick, they do not think about their children anymore, do not think of their ancestors, since the ancestors told us to preserve our forest ...

Similar dynamics were also taking place among the Kayapó, as Carlos, from the Kayapó Institute, explained to me in 2019. The push is very strong and violent, but most of those granting access are won by a cheap means of co-optation:

We have three aldeias of Kaiapó, with people and leaders involved, since the co-optation is very large on top of the Kaiapó ... [they] do not even ask the guy for money, bring a *compra* [some bought goods or food] to his house and try to create a certain kind of friendship, in the end, it is such a violent co-optation that they guys [*garimpeiros*] end up entering.



This proliferation of the gold RDPE is driven by its rapidly increasing links with drug and other organized crime, which I will analyze next.

### **The Rise of Narcogarimpo and Violence against Amazon Forest-Dwellers during the Bolsonaro Government**

The significant rise of narcogarimpo, which is the linking of organized drug traffickers and criminal networks with gold-mining activities, took place during the Bolsonaro regime. Bolsonaro himself is the son of a “wildcat” miner, who promulgated illegalities and deforestation in the Amazon. Bolsonaro, for example, issued Decree 10,966/2022, which promoted Amazon gold mining by “wildcat” prospectors, but which Lula revoked in 2023. Meanwhile, under the Temer and the Bolsonaro regime, and especially since 2016, established gangs, first the Comando Vermelho from Rio de Janeiro, and then the PCC from São Paulo, expanded their operations to the Amazon, which made the region far less governable (Resk, 2023). They, and other drug traffickers from neighboring countries, especially Peru, Colombia, and Venezuela, seek to control drug-trafficking routes in the Amazon border areas and hinterlands. Venezuela’s strongest organized crime group, Tren de Aragua, has allied and intersected with PCC, also expanding to the Yanomami lands in Brazil (Senra et al., 2023). A vast network of airstrips and logistical nodes are already established, both to operate new illegal gold-mining ventures deeper in Indigenous territories, but even more so to operate and control the drug and other illicit trafficking (see Figure 5.5). For example, this activity happens between Brazil’s Yanomami-area airstrips and Venezuela. Gold mining is especially useful to launder drug-trafficking money, but the gangs also spread their operations to other illicit operations, including grilagem of lands, land buying and speculation, ranching, and urban lotting of lands. All these activities increase deforestation, are based on the rapid rise of violence, and introduce the society and especially the youth to the ills of organized crime.

In fact, gold is currently the best way to launder money according to the chief of Federal Prosecution in Brazil, which alone could be an explanation for why organized crime is interested in being involved, although the logistical networks are also crucial (Senra et al., 2023). Gold mines are typically deep in forests, and heavily guarded, and have traditionally offered a haven for escaped prisoners. The connections with the prison-originated PCC and Comando Vermelho narco-criminal organizations have since deepened as these organizations offer drugs to garimpos and then use their logistics for drug, gold, and laundered money trafficking. In 2022, the Federal Police arrested a large group of criminals involved in the laundering of over 1 billion reais in the garimpos of western Pará (Resk, 2023).

The merger of gold and drug criminals has resulted in a significant increase in casualties and losses of Indigenous and land defender rights. The effects are felt more strongly because these crime mergers took place at the same time as COVID-19 and its bad handling by the Bolsonaro regime. This resulted in a mix of a state power vacuum and purposeful participation of highest political powerholders in mining ventures and militia-type operations, to which the Bolsonaro family has had close ties according to several reports (Paes Manso, 2021). In this sense, a significant part of the state apparatus, and Amazonian territories, were captured by organized crime, which brought the Amazon closer to a situation of a failed state, with an increase in dangerous areas where it is not safe to enter and areas where the state does not have the monopoly of violence. In fact, the Bolsonaro Cabinet prohibited the state officials from executing their rights and duties with regard to policing environmental criminals, such as loggers and miners. In fact, Environmental Minister Salles several times personally (and illegally) stopped operations to bring gold miners and deforesters to justice.

The gold shop owner I visited confirmed that in Itaituba there is a lot of money laundering by drug traffickers, who “enter in contact with you and send the money saying that they want to buy gold. They give you a higher price, so the person gaining more [the gold shop owner] does not care, but washes the money.” This is one example of how narco and garimpo have come together, increasingly making a joint system or a narcogarimpo. This is quite similar to how ranching and land grabbing are deeply interlinked with the soybean frontier.

Gold mining is closely linked to illegalities and violence and these links have only deepened since the rise of the narcogarimpo. Statistics about the growing violence attest to the Amazon’s descent into an abyss of lawlessness. During the years of the Bolsonaro administration, the state’s connivance in the invasion of territories became evident in the conflict records of the entity that produces the most comprehensive statistics on rural violence, the Pastoral Land Commission (CPT). Between 2013 and 2022, 1,935 occurrences were recorded of invasions carried out by people and groups coming from outside of the communities. However, between 2019 and 2022, during the four years of the Bolsonaro government, there were 1,185 of these invasions, which represent 61.25 percent of the total. Furthermore, over 37 percent of these invasions occurred on Indigenous lands. Of the 661 invasions recorded in Indigenous lands in a decade, 441 occurred between 2019 and 2022, representing 66.71 percent of the total (Comissão Pastoral da Terra, 2023: 6).

Celinha, a long-term state employee of the ICMBio and other state organs, shared with me in Brasília in March 2022 her personal experience in working as a *fiscal*, federal environmental policewoman, which is an inspector and environmental policeperson. In this position she worked to create a RESEX and she targeted illegal gold-mining operations inside multiple-use conservation units.

ICMBio is responsible for conservation units with traditional peoples, while IBAMA is responsible for Indigenous territories and private lands. She stayed for about 40 days in Novo Progresso, working with IBAMA, the Federal Police, and other state actors to expose garimpo illegalities. The local secretary of the environment had invited them to stay at his house for four days while they were in the area, as no hotel would accept their credit cards. She shared with me what happened at night on the last day:

On the last day, around 23:30 hours ... the shootings started. There were other colleagues from IBAMA, ICMBio, the National Forces, and other localities, there at the house there were only two armed *fiscais* [inspectors, environmental police officers], but as [we were] caught by surprise ... it is not possible for you to use the gun. It took about 5 to 10 minutes them pushing, hitting, shooting ... the windows of the house broke ... they left a letter saying they had sliced into pieces a person with a knife, and put it to the secretary of environment this way: "This will be your destiny if you do not go away from here and stay at 2,000 km distance," a threat. We went to the civil police station but were attended only at 4pm. Then the deputy himself said to the secretary: "go away, since we cannot give you protection here."

The mayor advised the secretary of the environment to also leave his house and he traveled with the environmental inspectors to Itaituba. Celinha explained that that day she decided she would never again conduct inspections "since we do not have any security." At times, they had to stay for days camped next to riversides when they were creating RESEX. Sometimes, with enough pleading, they were able to get two police to accompany them, but even then, "what are 2 police in that region? Nothing!" She said that she had "already suffered many serious problems," as "these areas have a lot of mining, garimpo, madeiros, there is the question of cattle, and it is clear that ... all these people were against [us]." She said that some in the area do view the environmental protection in a positive light, "but for the majority, principally these large *latifundiários* [landholders], it is very 'frowned upon,' so they make it as difficult as possible, we're at risk all the time. But the inspection I think is worse [than the field trips needed in the creation of RESEX]."

I asked if she knows who was behind the violence in Novo Progresso, she replied, "It was a secretary there, one of the municipality secretaries, of the local government. He is a madeiro and he was part of garimpo yes, with certainty." There seems to be a growing tendency for the deforesters to become the political officeholders, as this way they can ensure that the people representing them will not threaten their illegal activities. Celinha explained that these people, *grileiros* and *garimpeiros*, typically make up part of the government. To get elected

[people] have to have money, and in many places, people sell their vote – and there are places where they [the deforesters] do not even offer it [the possibility of selling your vote].



For example, they say: Markus is going to run [for office], if he doesn't win – I'm going to fire everyone [at the mine]." Often, they [garimpeiros, grileiros] support the [political] candidates, give them all the financial support and the person is elected, and stays [in office] working for them [the criminals]. But often [the elected] people change their minds, so they [the criminals] decide to be part of it [governments] themselves and this has been increasing a lot ... you see this agribusiness caucus ... it's gigantic.

Gold-mining schemes are often backed by even more violence, top-level power, and economic resources than ranching or logging. This is why intervention needs to be at the highest level, by professional forces that are well armed. In early 2023, in an intervention to drive the narcogarimpeiros out from Yanomami lands in Roraima, Lula ordered in the Army, Navy, and police. These drastic moves have led to a decrease in garimpo in several parts of Brazil's Amazon, which has resulted in an estimated 70 percent drop in garimpo in the Humaitá region, which is in the southern part of the Amazonas state (Lábrea, 2023).

However, many of the poor miners, whose barges and goods were destroyed during the intervention, seem to have moved to work as loggers and farmhands for ranchers in the deforesting frontier. This shows that the RDPEs are inter-linked, especially in many of the key deforesting regions. Thus, to combat only gold mining is ineffective because the power of all the RDPEs needs to be curbed more or less at the same time to avoid spillover effects, which might create an even worse situation; for example, turning the garimpeiros into ranching clearcutters.

Illegal Amazon gold mining has its closest links to Bolsonaro – whose father was an illegal gold miner – so it was politically an easy and visible target for the government to use in response to the January 8, 2023, invasion and destruction of the parliament by Bolsonaroistas in Brasília. According to Police Chief Conrado Wolfring in Novo Progresso, who has comparative experience of many forms of deforestation, it is most problematic and dangerous for police to try to affect mining. He had already been forced to move due to questioning the corruption perpetrated by politicians in Jacareacanga and illegal loggers in Placas: "I went on questioning corruptions. So, at times a simple arresting of a mayor's nephew can roll your head, to move your region ... imagine messing with a miner, where the scheme is large, where there is some politician participating in that, imagine if your head would not roll."

Wolfring also gave me insight into how he observed that drug trafficking feeds gold mining: "A guy makes an investment in garimpo and gets these airplanes that land in the forest and brings drugs to supply the garimpo and earns money to buy mining machinery – one thing leads to another." Wolfring had previously been involved in arresting large drug gangs, "I went to arrest a large gang in São Felix, they provide the supply and bring to other states, bringing drugs from Bolivia.

They land and transport the drugs. There needs to be a better control of aerial transport, they use small airplanes.”

Local police are often involved in gold mining by extortion and corruption. A gold shop owner in Itaituba explained to me that police “Are tranquil, but they all are wanting a part. There are some who prefer to go to the garimpo as there they can get more money” by extortion and bribes. In Peru, when I took the boat up the Madre de Dios River with Tres Islas Indigenous community members, we passed by many gold-digging barges. The locals explained that the police are often waiting at the roads leading from the river to the Interoceanic Highway, practically stealing the miner’s illegally mined gold. The miners cannot ask for help from anyone in these situations. Therefore, it was understandable that the miners were on the lookout also for our boat, as we could be police coming for money.

The executive power has many problems in policing RDPEs due to the corrupting power of money, but there are also problems with the judiciary. As the justice system is typically slow, those responsible are often not really formally punished by a court of law even when they are caught. The method adopted by environmental police has been to burn the mining equipment when it is found. This happens sometimes over and over to the same perpetrators. Wolfring explained about the justice system, “The judge has to judge small things (marital fights) instead of judging these serious crimes, devastation, and loses time.... So, things are not advancing in the judiciary, the sensation of impunity makes people to commit crime, it takes 10 years, 20 years.”

A court in the style of India’s Green Tribunal could be copied also elsewhere; for example, a special court of the Supreme Court, that could be accessed directly in cases of mining crimes. That judicial arrangement was highly useful and effective in curbing mining illegalities in India (Kröger, 2020a). In the absence of such a state channel for resistance, working closely with pro bono green-tribunal expert lawyers in India, illegal gold-mining resistance has used other means in the Amazon. There is civil society and state actor resistance.

A key moment for resistance came in early 2022, when Alter do Chão, a major tourist destination, called the Caribbean of the Amazon for its clear waters and sandy beaches, had its waters badly muddied for the first time. This created a major societal and state response that led to curbing illegal alluvial gold mining upriver on the Tapajós. A local man, Claudio, explained this to me in 2022:

[S]uddenly the water of Alter do Chão started to turn muddy. So the Sorará [a group of Indigenous feminist activists] and the community of Alter do Chão made a lot of pressure, as tourism ended, no one went there ... this did not affect just the natives, but all, businesses, culture, even me, as I did not have a job thus. And then this pressure went to social media and traveled the world and the federal government ordered to verify. The muddy

water was a result of garimpo ... but thankfully a work was done, and they discontinued with the garimpo upriver, and the water is good to take a bath in again. The resistance was large, involving also the city of Santarém, but the garimpo was very strong ... a lot of people are making a lot of illegal garimpo.

### **Consolidating Organized Crime in Amazon Gold Mining**

Profit making by environmental crimes is less observed and harder to detect than other forms of criminal profit making, with only a fraction of the money-laundering cases investigated in Latin America being directly related to environmental crimes (Risso et al., 2023). Instituto Igarapé, a Brazilian research NGO, found that illegally mined gold is laundered in various ways. The laundering happens by paying bribes and simulation of gold production using mining companies and inactive areas as the supposed official origins of the gold money. In comparative terms, Peru has a more robust legislative and regulatory system than Brazil for identifying money laundering linked to illegal gold mining and other forms of environmental crime (Risso et al., 2023: 23). In Brazil there is a greater sense of impunity. For example, there is no legal gold mining in the state of Roraima, yet the state capital, Boa Vista, has a whole “street of gold” with dozens of jewelry and gold shops and securities distributors (called DTVM) that openly buy the illegally mined gold, without state interference, but with Central Bank licensing. Only DTVMs and cooperatives, licensed by the Central Bank, can buy gold.

In 2013, a year after Brazil’s environmental and forest protections were generally watered down by the new Forest Code in 2012, a new mining bill (Bill 12.844) made it the seller’s responsibility to testify that the gold is legal. The requirement is routinely circumvented by falsifying the origin documents so on paper the gold is coming from legal mines (McDermott et al., 2023: 27). In 2023 the Supreme Court reconsidered this lack of regulation and Lula made a new Resolution (ANM No. 129) that obliges the gold buyers to prove the legality of gold they purchase (Doherty, 2023). This might make it easier for the state to intervene in the crucial role of securities distributors. The three biggest distributors in Brazil, FD’Gold, Carol DTVM, and OM DTVM, were sued in 2021 by the MPF for socioenvironmental damages worth over 10 billion reais. The Igarapé Report sees these distributors as key in organizing and running large gold-mining operations and organizing and laundering the illegal gold. However, an ICMBio official (interview in December 2023) was unsure that the 2023 Lula decree would substantially change anything. For more substantive changes, policy recommendations are needed, including the immediate recognition and approval of Indigenous territories being studied by FUNAI, putting a feasible upper limit to theoretical mining maximum in a concession, digitizing DTVM receipts, and putting national and international pressure

on the Central Bank and Securities and Exchange Commission to demand proof of origin (Risso et al., 2021). For example, in September 2020, FD'Gold bought about 2 kilograms of gold from Grota, who is the key suspected narcogarimpo organizer in southwestern Pará (Piran, 2023). Grota is linked to PCC and, since 2018, his actions have focused on laundering drug money from the Itaituba region (Senra et al., 2023). Unlike in Roraima, in this region there are gold-mining concessions and legalized shops that will buy the gold. Itaituba has 772 issued titles for gold mining (41 percent of Brazil's total). The titles under 500 hectare are issued by a municipality in Pará (which is an unconstitutional decision as deforesting activities should be licensed on the state level) and are frequently used to launder the gold from the Yanomami lands (Senra et al., 2023: 84).

In December 2023, Igor Silva, an ICMBio officer responsible for carrying out the inspection and policing of gold-mining intrusions inside conservation areas in the southwestern parts of Pará, explained to me that it would be essential to first update the registry of gold mines that are active and legal. Currently, the key practice for gold sellers to "prove" the origin of their gold is to fill in a paper document needed at the buying gold shop, where the seller declares the origin. Approximately 70 percent of the gold in the region is illegal according to Silva's estimate. There are also legal (yet equally deforesting and destructive) informal gold-mining concessions given by municipalities in that region, which increased dramatically during the Bolsonaro government, as the Itaituba mayor and environmental secretary permitted a huge number of new permits, causing a boom in gold mining around the Tapajós Basin. Despite this high boom in municipal mining area titling, 92 percent of gold-mining sites in the Tapajós Basin are illegal, as was explained to me in December 2023 by Rodrigo Oliveira from the MPF, an analyst specializing in gold mining. There are legal concession areas, but looking at the satellite imagery, one can see that these legal mines have never been opened as there is not yet any evidence of mining there. Yet, these unopened legal mine sites are marked as the origin of the illegal gold. These redundant mines should be removed from the list of applicable mines for origin statement and the list should be digitized and put online. Igor argued that the decree during Lula government in 2023, which ordered the buyer to prove the origins, did not change anything, as the same shadow mine names are just used on the papers. The real focus should be on the higher levels, for example the banks and Internal Revenue Service, to whom taxes are paid when gold is sold in the shops. Thus, these institutions should have the best data on the flows of gold. However, governments are not very eager to touch the gold trade, even if illegal, because this gold export enriches the bank coffers and state export figures. The banks and governments argue that providing the required data would require breaking bank secrecy, but this is exactly what should be done in order to track the illegal gold.

The corruption extends also to Indigenous lands and within the upper echelons of the states. A part of the Indigenous community is participating in the mining sector by collecting fees from miners, getting other perks, or by mining themselves. In southwestern Pará, this rift between the mining and anti-extractivist Munduruku has led to attacks by garimpeiros and their Indigenous supporters against the Indigenous resistance and the state officials. This happened in 2021 after the Federal Police, IBAMA, and Armed Forces expedition to remove illegal miners from Munduruku lands (Limão, 2021). At the request of the majority of the 14,000 Munduruku, IBAMA had tried to intervene in 2020 to reduce the drastically expanding violent gold mining on their lands. Unfortunately, the Minister of Environment, Ricardo Salles, interrupted the operation, not surprisingly, as he was suspected of transporting the garimpeiros by Airforce planes and leaking confidential state information to them, which only led to escalating conflict and destruction (Limão, 2021).

Igor Silva from ICMBio said he had not found evidence in his garimpo visits in southwestern Pará on the narcos operating the mines. Rather, what he did find in the mining sites was an omnipresent trade and use of drugs, especially cocaine and marijuana. In addition, there was evidence of money laundering and investment in gold mining by drug criminals and the narcos were definitely using the gold mines' airstrips as a key logistical network. However, in 2023, the idea that the drug traders were creating a greater presence and stronger links was still so new that more investigation was needed in order to establish that this was in fact the case. That gold mining and airstrip owners were linked to the drug-trafficking business was already well known to the regulators. Igor explained that the drug traffickers coming from Bolivia, Colombia, and Peru use "always small planes, because they have to fly lower to escape radars, and as they have a low range, they have to make sporadic landings in some locations. So, in the Amazon, the easiest way to make these landings is where there are these runways." There are a lot of airstrips in southwestern Pará and they are mostly located in Indigenous lands or next to mining sites. Silva explained, "These airstrips have owners, or they belong to the [Indigenous] community." In the case of mining, the airstrips "belong to the owner of the mine" and anyone landing who is not delivering mining goods "has to pay a percentage to the owner of the airstrip. Thus, it is very likely that there is a connection between trafficking and mining owners, so that they at least allow the passage of these aircraft that are loaded with toxic substances, to reach a capital destination, or Santarém, Manaus, or even Belém."

The most notable and visible narco-gold miner in Pará is Heverton Soares, known as O Grota, The cave friend, and Garimpeiro. In 2021 he faced charges in three states for drug, gold and arms trafficking, criminal organization of a militia of military police, bank robberies, money laundering, and homicide. Despite these

activities, he was still applauded by some for being a large and successful businessman in the Itaituba region (O Globo, 2021). According to a 2021 news report on the Federal Police Narcos Gold Operation, Soares' business was to connect the criminal factions in the southeast to several other regions. He used a series of businesses, including illegal gold mines, ranches, stud farms, airstrips, and mining machinery and car parts selling companies to launder 30 million reais of drug-trafficking money. He and his pilot friend had been on the police radar since 2004, when he was suspected of owning tens of airstrips used to transport illegal gold and cocaine in the Amazon (Potter, 2023). After nine months of hiding, Soares managed to win a legal claim in the absence of solid proof, reclaim his confiscated aircraft, and walk freely. However, the Federal Police consider that he is a leader of the narcogarimpo, organizing them and illegally moving about 1 billion reais between 2017 and 2020 in Pará (Potter, 2023).

In fall 2023 Grota was operating ranches in Itaituba, passing thousands of heads of cattle, which Federal Police also suspected of being used for money laundering. He was free at the time as the Brazilian courts had not been able to decide since 2021 which of them should judge the case. This shows clearly how the complex and slow legal system allows for environmental crime to flourish and extend to several other illegal spheres.

The key thing denoting the term narcogarimpo seems to be the trafficking of gold and drugs by the same logistics, laundering drug money with the purchase of illegal gold via the regional gold shops and by expanding the gold-mining and related operations. There are many such narcogarimpeiros in the Amazon, who make use of the large number of clandestine airstrips for gold operations and drug trafficking. By September 2023, the police had arrested 225 people suspected of narcogarimpo and confiscated 235 aircraft. It is especially the ease by which money can be laundered in the illegal gold-mining value web that attracts these narcotraffickers. This extends to foreign machinery companies that seemingly do not worry that they are making money by selling their machines to whomever and for whatever purpose. For example, according to the Federal Police, Grota paid in cash at the Hyundai offices in São Paulo to purchase heavy machinery destined for use by illegal gold miners. This was in addition to paying the BMG Hyundai company 300 million reais for an aircraft (Piran, 2023). Another reason for the marriage of the illegal gold and drug businesses is the flexibility to invest the drug money in gold when cocaine prices go down. This happened in 2020 due to overproduction, which led to a major push toward narcogarimpo according to experts (Potter, 2023).

A senior IBAMA officer operating in Yanomami lands said that in November 2023 they were just starting to explore how narcos are connected to gold mining and why it is hard to study this shift:



Besides being something new, it is very difficult for you to get information because you would need to have people infiltrated in the middle of things to know what the connection is between the PCC and [gold mining]. Yesterday we saw some rafts inside the Indigenous land written PCC. We now found two guys who had PCC tattoos, but the guys were drunk, they were nothing. PCC tattoo, skull, I don't know what [should be deducted from that]. But it is difficult to know [for sure] whether they finance it [gold mining].

However, Igor, the environmental policeperson from ICMBio, argued that there is a marked difference between the southwest of Pará and Roraima, in terms of the use of heavy guns by miners against Federal Police and IBAMA officers. This difference made him suspect that the garimpeiros in Roraima might be linked to organized crime, as “this type of weaponry is generally with criminal factions.” The presence of what he called “narcoterrorists” in nearby Colombia might be a spillover effect of more civil war-type resource conflicts, with use of heavy arms and warlike conflicts. He shared that in Tapajós, he had not personally experienced miners shooting back but explained that the likelihood of this had been growing in the past years: “What called my attention was that some were with many guns, guns that we do not see in the garimpos of Tapajós.... This caught my attention due to the caliber of the weapons, the carrying of the weapons and this attitude of [gold miners] offering resistance [by shooting] to the activities we [environmental police] carry out in the field.”

Based on these accounts it is clear that much more research is needed on the intersectorial consolidation of a narco-gold mining in the Amazon, the changing characters of both gold mining and the drug trade, and the efforts to curb this process. Many solutions have been tried and suggested to curb gold and other linked varieties of Amazon deforestation; the next section discusses these in more detail.

## Solutions

Many solutions for curtailing deforestation have been suggested and in fact some have been implemented since 2023, which is significant because this is a crucial moment for the survival of the forest. Apart from resistance, other measures are also being taken by the government and state actors. I will discuss in this section the politics of these proposed and ongoing attempts at finding a solution to these complex problems.

Earlier, I discussed how rural and environmental registration are key tools for land grabbers, as their misuse of these allows them to proceed with deforestation as their illegal system is not curbed. To overcome the rampant illegalities caused by CAR misuse, the Lula government announced in April 2023 that it will try to designate the nondesignated public lands (*terras devolutas*) as soon as possible, as this is the category of lands most readily available for land grabbers.

According to Moraes and Alves (2023), the federal government sought to advance quickly in their allocation of vacant lands, especially public forests that are not yet designated. The lack of inspection or insufficient inspection, combined with the unclear or nonexistent allocation of these public lands to different user groups, creates an environment conducive to land grabbing, as the invaders hope that the public authorities will grant amnesty for their crimes and legalize the properties that they are using. In April 2023, the Lula government explained that the land allocation process would consider different social demands, such as Indigenous territories, Quilombola territories, and areas of high biodiversity or exceptional landscapes, while the remaining areas could be transformed into national forests for sustainable forest management, including timber and nontimber products, or used to implement land reform based on agroforestry systems (Moraes & Alves, 2023). However, in practice, the heavily rural caucus and Bolsonaro-supporting Congress has made achieving these progressive aims much more difficult. For example, the Marco Temporal legislation would seriously hinder the possibilities to recognize and create Indigenous territories.

To combat organized crime, Brazil's justice and prison system structure should be urgently changed to allow the prosecutors and judges to uphold the rule of law in Brazil. A key problem in the justice system, argued Federal Prosecutor Felício Pontes, is that all the judges he works with have a caseload of approximately 12,000 cases. This is due to the justice being "very cheap" to access in Brazil, "so there are a lot of cases for few judges, and this makes the cases advancing very slowly, not in the speed they should run." This has had extremely serious consequences, as people are left in the prisons for years to wait for trial, based on feeble charges. While in prisons, which are basically recruitment and training grounds for the powerful organized crime groups, principally PCC and Comando Vermelho, the inmates become part of these shadow state groups whose actions are now challenging the whole state apparatus, including in environmental protection.

Meanwhile, as justice is slow, the police have adopted other measures. Geisel, a member of the Federal Police specializing in deforestation forensics, explained to me in 2019 that police burning the illegal deforestation equipment works because it increases the risks and costs of the illegal business. The people behind criminal activities also use business logic, he argued. Geisel reasoned that, for them, losing machines worth 200,000 euros or more is a more important motivation to think twice about their activities than the actual laws or other punishments. Brazil's jails are largely full of favela-living young Afro-Brazilian and Nordesteño-origin men charged for petty crimes. But jailing rural *pistoleiros*, *grileiros*, and environmental criminals is very difficult in Brazil, Geisel shared. Therefore, he saw that increasing the costs of criminal deforesting operations is most effective in this setting, because it makes the business more costly, less profitable, and riskier. A key policy

measure to achieve this would be to increase the available budget and police personnel for inspections.

However, the causes of Amazon deforestation cannot be attributed primarily to the lack of inspection and policing, but to the simultaneous passing of laws that drive, open loopholes, and institutionalize deforesting land theft, argue Torres, M. et al. (2017), based on their extensive study of southwestern Pará. In their book titled *Dono é quem desmatama (Dono Is Who Deforests)*, the title referring to the words of an illegal land grabber, Torres, M. et al. (2017) argue that some of the laws served deforesting land theft, for example Laws number 11.952/2009 (Tenure Regularization in the Legal Amazon by the Terra Legal Program) and nº 12.641/2012 (the New Forest Code). The 2009 Terra Legal program reversed the goal of the federal prosecutors, who, since 2006, had been trying to retake the illegally grabbed lands in the Amazon, but whose work was reversed by the parliament and the PT-led regime in 2009. Through the Terra Legal program the government enabled deforestation by legalizing the land claims of even those who had used extreme violence, slave labor, and implemented large-scale environmental devastation. M. Torres et al. (2017: xix) point out that in the area impacted by the program 6 percent of the beneficiaries held over 63 percent of the land. In addition, M. Torres et al. (2017) argue that due to the chaotic and incompetent manner in which the program was extended and applied it ended up benefiting the largest land robbers. Impunity is the key here, because deforesting land theft is one of the key ways of de facto becoming a landholder, “Even if the State may emit millionaire fines (very rarely paid) and, more rarely, order imprisonments, the retaking of illegally appropriated public lands is never discussed” (Torres, M. et al., 2017: xvi).<sup>1</sup> Thus, the decades by the PT governments were a mixed bag and there is still too little focus on the systemic quality of illegal land grabbing, as driven and enabled by the dominant regional and national political economy.

The command-and-control structure and operations created during Lula’s reign in the 2000s have often been framed as key explanations for diminished Amazon deforestation. Geisel disagreed with this claim, arguing that most important was the political decision to create large new conservation areas and units. This significantly raised the costs and barriers of accessing new protected forest areas and made it less feasible for the land grabbers to think that they could eventually legalize the grabbed land. However, as M. Torres et al. (2017: 185) note, while the creation of many large conservation units along the BR-163 during the PT terms did

<sup>1</sup> For sake of comparison, illegal clearcutting practices in Finland, and logging decisions not respecting safety margins and recommendations, are widespread and the norm, and are not punished by the state, showing how the problem of impunity explains clearcutting to large extent across the Global North–South divide, and even across supposed rule of law and “Third World” contexts. This supports the argument on the explanatory importance of RDPEs in theorizing how and why territories are used.

make it unviable to legalize the stolen land, and therefore decreased the expanse of this activity, which is the key deforesting RDPE in southwest Pará, after this the conservation areas were targeted more vehemently by illegal loggers, miners, and other forms of degradation. Therefore, degradation by logging increased, while deforestation in the area decreased, giving a wrong impression that the issue was resolved. Deforestation started to increase again earnestly when the Temer and especially Bolsonaro government declared that they would degazette conservation and relax their access rules, which in practice meant legalizing burned and grabbed deforested pasture areas for the benefit of land grabbers. Bolsonaro made the actions of IBAMA, ICMBio, and other environmental policing forces practically impossible, for example by constantly changing IBAMA's director of inspections (19 times), which in effect created a chaotic setting without regulation, which amounted to an attack on the good parts of the state (Gonçalves Pereira, 2022). However, Bolsonaro could not dismantle the created conservation areas so easily, although he stopped the creation of new ones. The key is therefore to create more socioenvironmental set-aside zones by bottom-up political processes and decisions.

Upholding the rule of law is also important. In November 2023, I interviewed a senior IBAMA officer involved in environmental policing and heavy crackdowns on environmental criminals all over Brazil, including the Yanomami lands dotted with gold miners in Roraima. He told me that the key reason why during 2023 deforestation rates started going down was the increased inspections. He did not think that any of Lula's actions were particularly effective. He also offered a very important comparative note on where most attention needs to be placed:

A thing that cannot be confused – which the first Lula government confused a lot – is thinking that you could encourage community life and improve sustainable community development, that this would reduce deforestation. They are parallel things that work in different worlds. Social projects, these things, are interesting, but it's a parallel world. The world of agribusiness does not touch this world. There is no point in thinking that by doing social projects, giving money for community investments, you will be reducing deforestation. "Ah, let's do agroforestry with community X, let's encourage the use of cocoa." All of this will reach a certain audience, it will have a certain impact, but it doesn't affect this other area that is cattle, soy, it doesn't even affect the deforestation of Cerrado, or the Amazon.

This is a key point to be considered when looking at the political strategies to curb deforestation and where to place resources. Of course, the creation of conservation areas also helps, but as my comparative research shows, if those conservation areas are next to new infrastructure (like the BR-163 and Interoceanic Highway, Belo Monte), and the areas do not have very active and nonmodernist resistance organizations, the pressure of expanding existing RDPEs is too strong to retain the forest cover. Thus, the first order should be the resistance to key investment

and infrastructure projects, and deforesting RDPEs, by cutting their subsidies, and enabling legal frameworks and incomes based on allowing exports of commodities. However, there are many signals that the message about avoiding (neo)developmentalism and extractivism had not been fully integrated by the PT and its allies by 2023 (Fernandes et al., 2023). For example, there is new infrastructure funding from the BRICs bank, whose president is Dilma Rousseff, the continued financing of deforesting projects by Banco do Brasil and BNDES, and Lula's support of dam building and amnesty for illegal land grabbers in the Amazon public forests. There should be active resistance to further expansion of the clout and extension of these systems on top of forests. A key is to avoid large infrastructural and extractive investment projects, such as dams, highways, ports, railroads, open-pit mines, and mining concession areas. According to Federal Prosecutor Felício Pontes (interview, December 2023), large projects, especially the Belo Monte Dam, are the key causes that explain why the municipalities next to them have the highest rates of deforestation. According to Pontes, who is specialized in protecting the rule of law regarding large investment projects in the Amazon, the deforestation and other negative impacts continue for a long time after the projects have been concluded, sometimes even for decades; for example, opening huge swathes of forests for ranching and land grabbing.

Farm expansion is logistically enabled and pushed by illegal logging as it creates access roads and diminishes the amount of wood, making further forest cutting and burning for pasture less costly and easier. Open-pit mining destroys the forest and rivers for a much longer time than pastures or logging: The forest will not grow back in open-pit mining areas and the river will be destroyed. Therefore, open-pit mining deforestation is qualitatively very bad, among the worst. Fresh pasture with trees is comparatively not as bad as mining, because these lands can be reforested with natural trees more easily, or they grow back by themselves if there is another forest area within 500 meters. However, if an area has been used for nonforest activities, especially extensive soybean plantations, for a long time it can be very difficult for the forest to naturally regrow.

To quell the power of deforestation RDPEs, a key focus should be on curbing the international trade of deforesting commodities. The senior IBAMA officer I interviewed in November 2023 told me that boycotts deeply confound the logic of commodity production. The boycott would need to be "serious," meaning that production could not be hidden by cheating maneuvers, as has happened with Amazon beef restrictions:

They started to circumvent this, they started saying that they were producing on other farms that are not embargoed. They produce in an embargoed area and transfer the cattle to a non-embargoed area and sell them, and then this passage "launders the cattle." So, this would have to be more serious, requiring traceability from where the ox was born, to

the farm where the ox was born, how long ago. So, tracking the herds would be important so that a boycott can be efficient. Because without livestock traceability, the boycott is not efficient because you will accept things without knowing that the thing is wrong. It's the same thing in wood, just requiring the Forestry document today is very little, because all exported wood ends up being "laundered." So, you also need to have traceability of the wood to be able to actually buy with this document, to make sure that it is not just being laundered. Gold too, you see some small gold industries that are legal, you see their production is absurd [too high volume], that doesn't exist. The cattle too, if you take a 100-hectare farm, close to Marabá, which has sold 1 million head of cattle, you say: "No, it's not possible," this is laundering. There is a lot of crime like that. Criminalization [of these illegalities, leading to punishments] is low, so when I find something like this, we find out, we carry out a whole operation, sometimes we even arrest some people, but within a week everyone is free and there are processes that will be carried out.

The points raised by the IBAMA officer suggest that if a serious boycott is to be considered, then a whole country, or a trade zone, including countries and areas where the commodities can be leaked, should be banned from exporting the potentially deforesting product. Otherwise, new methods will be found by the RDPE to circumvent and launder the origins of the commodities.

In sum, it is essential to curb the power of deforesting RDPEs in fragile forest areas that are approaching their tipping points, such as the Amazon. In these areas, deforesting commodities, such as soy and gold, or their transport, should simply not be allowed. While unlikely at the highest political levels, this does not mean that in the real world of policymaking different and smaller steps in that direction could not begin to help the situation.

From the viewpoint of the RDPE theory, the formalization and certification attempts to deal with illegal deforesting activities are futile if the power of the RDPE as the deeper cause of deforestation is not also tackled. This should happen at the regional, national, and international levels – targeting both political and economic power. Regarding the economy, a way to approach this would be to curb the financing and export possibilities, infrastructure, and machinery and technology availability, while providing alternative sustainable economic activities to locals. To take an example from gold, it would be especially impactful to ban United States-based and other gold refineries from buying gold from Latin American and other drug-traffic-infused gold production and trade settings (see Netflix, 2020).

On the political side, effective ways to curtail power, in the light of the RDPE theory, would be to provide more power for prosecutors and autonomous police forces to tackle the widespread corruption. Some strategic approaches could be making it impossible and illegal, or at least more challenging, to finance political campaigns with the proceeds of illegal deforestation. Additionally, the key political culprits could be imprisoned. Lastly, it is important in the anti-extractivist sense that effective localized resistance to deforestation should be built. This can



be done by bottom-up organizing, politicizing, protesting, networking, and state coproduction and embedding while retaining autonomy. These actions are what foster the crucial contentious agency and consolidate democracy for grassroots economic and territorial decision-making (Kröger, 2013a; 2020a).

Chapters 8–10 will discuss the role of industrial forestry – the pulp, paper, and energywood sectors – in driving clearcutting in Finland. This allows a deeper comparative analysis of extractivist RDPEs to be made globally, across varying contexts and polities.