



COMITÉ NACIONAL EM  
DEFESA DOS TERRITÓRIOS  
FRENTE À MINERAÇÃO

# ENCIRCLED BY GOLD

## illegal mining, destruction, and struggles on Munduruku land

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Coordinators: Luiz Jardim Wanderley and Luísa Molina

Authors: Ailén Vega, Laize S. C. Silva, Luísa Molina, and Rosamaria S. P. Loures

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## ABOUT THE AUTHORS

LUIZ JARDIM WANDERLEY (coordination) – Luiz holds a Ph.D. in Geography from the Federal University of Rio de Janeiro and is currently a professor in the Department of Geography at the Fluminense Federal University and the Graduate Program in Geography (State University of Rio de Janeiro – Teachers Training Faculty). He is also the coordinator of the PoEMAS (Politics, Economics, Mining, Environment, and Society) Research and Extension Group.

LUÍSA P. MOLINA (coordination, research, and writing) – Luísa is a Ph.D. student in Social Anthropology Post-Graduate Program at the University of Brasília (PPGAS / DAN / UnB). She holds both a master's degree (2017) and a B.A. (2010) from the same program. Luísa works alongside the Munduruku people in the Middle Tapajós (State of Pará) as a collaborator as well as a technical advisor to the Pariri Indigenous Association. Her research focuses on Munduruku relations to land and territory as a basis for anthropological reflection on the effects of extractive activities and the risks of what the indigenous people call “projects of death” within the Tapajós region. She is also a member of the Laboratory of Anthropologies of Land – CNPq (Brazilian National Council for Scientific and Technological Development).

AILÉN VEGA (research and writing) – Ailén is a Ph.D. student in Department of Geography at the University of California, Berkeley (US) with an emphasis in Science and Technology Studies (STS) and holds a B.A. in Geography and Political Economy from the same university (2012). She conducts research in the Tapajós Valley, with an interest in the impacts of mineral extraction on the health of indigenous and traditional communities in the region. Since 2016, she has collaborated with the beiradeiros (riverine people) of Montanha e Mangabal as well as their association, specifically on the auto-demarcation of their land – an action carried out by the beiradeiros themselves in partnership with the Munduruku of both middle and upper Tapajós River. She is also a collaborator for specific actions with the Munduruku people and their associations.

LAIZE S. C. SILVA (research and writing) – Laize is a Ph.D. student in the Environmental Science Graduate Program at the Institute of Energy and Environment of the University of São Paulo (PROCAM / IEE / USP). She holds a master's degree in Science from the University of São Paulo (2015) and a B.A. in Environmental Engineering from the State University of Pará (UEPA, 2010). In the past, she has conducted research on the impact of market integration on the use of non-timber products by indigenous people and traditional communities in the Brazilian and Bolivian Amazon. Laize has also collaborated on a research project analyzing both the pressures and resistance within the Sawre Muybu Indigenous Land of the Munduruku people (middle Tapajós). She currently investigates how mining transforms the livelihoods of the beiradieros (riverine people) of the upper Tapajós.

ROSAMARIA S. P. LOURES (research and writing) – Rosa is a Ph.D. student in the Social Anthropology Graduate Program at the University of Brasília (PPGAS / DAN / UnB). She holds a B.A. in Agronomy from UFVJM (2009) and Master's in Environmental Sciences from the Federal University of Western Para (UFOPA, 2017), where she conducted ethnographic research with the Munduruku Ipereğ Ayũ Movement. Rosa has worked alongside indigenous peoples and traditional communities in the Brazilian states of Minas Gerais, Bahia, and Pará and currently conducts research in the upper and middle Tapajós region. She has been working with the Munduruku Ipereğ Ayũ Movement and other Munduruku associations; Rosa has been the Technical Advisor for Munduruku Wakoborũn Women's Association since February 2018.

## Introduction

This executive summary is a short version of a longer report, developed over six months by four researchers with previous experience in the Tapajós Valley. This summary presents the emblematic case of the Munduruku Indigenous Territory (IT) within the scope of the complex and multifaceted problem of garimpagem, or illegal gold mining, carried out within lands traditionally inhabited by indigenous peoples.

Located on the upper course of the Tapajós River (southwest of the Brazilian State of Pará) and inhabited by both Munduruku and Apiaká communities as well as by indigenous people in voluntary isolation (uncontacted peoples), the Munduruku IT is located on the right bank of the Tapajós River. Its area comprises 2,382 thousand hectares. Together with the Sai Cinza IT (upper Tapajós) and the Kayabi IT (lower Teles Pires River), this Indigenous Territory is home to around 145 Munduruku villages. There are also Munduruku lands in the middle course of the Tapajós: the Sawre Muybu and Sawre Ba'pin ITs, and the indigenous reserves, Praia do Índio and Praia do Mangue. Currently, the Munduruku population is around 14,000.

**Warriors  
conducting an  
autonomous  
inspection of  
the Munduruku  
IT, 2018**



## Highlights

Below, we highlight some key points from the technical report:

### **1 The advancement of *garimpagem*, or illegal gold mining, in indigenous territories (IT) inhabited by the Munduruku people in the upper Tapajós is evident by the significant increase in deforestation.**

In 2020 alone, areas equivalent to more than two thousand football fields were deforested in the Munduruku and Sai Cinza ITs (upper Tapajós). According to the National Institute for Space Research (INPE), the Munduruku IT lost 2,052 ha of forest that same year. This is more than in 2019, when 1,835 ha of forest were lost and INPE identified the Munduruku IT as the sixth most deforested indigenous land in Brazil. There was an alarming increase in deforestation during the same period in the neighboring IT, Sai Cinza (also inhabited by Munduruku people): between 2019 and 2020, numbers went from 16 to 304 deforested hectares.

### **2 Research indicates worrying levels of mercury among the Munduruku of the Tapajós Valley. Exposure to this metal occurs mainly by eating fish, which is the basis of the indigenous diet. Contamination by methylmercury, the most dangerous form of this metal, is mainly attributed to mining. The damage from such contamination to human health is diverse (neurological, immunological, digestive) and possibly irreversible.**

In 2018, experts estimated that illegal gold mining dumps around seven million tons of tailings per year into the Tapajós River, with mercury being a large part of these materials (GEISER, 2018). Once released into the river, mercury is methylated by bacteria and transformed into methylmercury (MeHg). It then eventually enters the food chain. This process is one of the sources of contamination in the Amazonian context. MeHg has an exceptional capacity for bioaccumulation and biomagnification, in addition to its ability to cross the blood-brain barrier, the placenta, and the mammary gland, thus affecting the nervous system of adults and newborns alike.

In 2020, the Oswaldo Cruz Foundation (Fiocruz) and the World Wildlife Foundation (WWF) published the results of mercury exposure study conducted in the Sawre Muybu IT (middle Tapajós, municipality of Itaituba) with direction from the Munduruku. The study detected levels of mercury contamination among all tested indigenous people. Six out of ten participants (57.9%) had mercury levels above those deemed safe, according to Basta and Hacon (2020). In another study conducted in the Munduruku lands of the upper Tapajós, researchers noted that 99.09% of the 109 persons studied had mercury levels

in their blood that exceeded the acceptable exposure limit of 10µg / L according to WHO. 53.6% of the 109 people studied displayed levels between 50-100 µg / L (MENESES et al., forthcoming). In both studies, the people with the highest levels of methylmercury in their bodies were precisely those who lived in the areas most affected by mining.

### **3 The intensification of illegal mining has generated an alarming malaria outbreak among the Munduruku of the upper and middle Tapajós. Malaria is one of the comorbidities that can aggravate Covid-19.**

Data from the Ministry of Health indicate that, from 2018 to 2020, cases of the disease among indigenous people went up from 645 to 3,264. This period coincides with mining expansion and increased invasions of indigenous lands. It should also be noted that in 2019, Jacareacanga (where the Munduruku and Sai Cinza ITs are located) was among the Brazilian municipalities with the highest incidence of malaria, according to the IPA (Annual Parasitic Incidence) index, used by WHO and by the Ministry of Health. According to studies conducted in July 2020, malaria is a comorbidity that can worsen Covid-19 cases (NETWORK PRO-YANOMAMI AND YE'KWANA, 2020).

### **4 The spread of Covid-19 among the Munduruku of the upper Tapajós coincided with an increase in the presence of gold mining on their lands in 2020. In one year, 31 deaths were recorded as a result of this disease.**

In less than a year, the Munduruku lost 31 relatives, including men, women, and children, to the Covid-19 pandemic. The Munduruku believe that the disease's spread in the upper Tapajós is directly linked to the significant increase in mining invasions within the Munduruku and Sai Cinza ITs. The circulation of non-indigenous people within the area and the recruitment of Munduruku men and women for mining activities intensified the exposure of the Munduruku to the virus, both in areas of mining and in the cities of Jacareacanga and Itaituba.

### **5 The National Indian Foundation (FUNAI) itself contributed to the insertion of *garimpeiros*, or miners, into the Munduruku IT in the 1980s. In the 1990s, FUNAI technicians recorded an illegal gold mine in this IT, still active today. Its owner led the Tapajós gold-digging movement in the 1990s. He has a connection with a Federal Police chief who, in his turn, was arrested in 2020 on charges of selling information to owners of gold mines in the Tapajós region.**

In 1986 with the beginning of the famous Amazonian “gold rush”, FUNAI sent a technician to study the possibilities of installing a mining machine called “*chupadeira*” (“sucker”, or a metal extractor) in the Munduruku IT (FUNAI, 1986). In addition, there are records that a FUNAI Indigenous Post (IP) acted as one of the main points for the sale of gold along the upper Tapajós (BURKHAL TER, 1982). In 1993, studies from FUNAI revealed the existence of the *Nova Esperança* mining operation – installed, according to FUNAI itself, after the establishment of the Munduruku IT. Its owner was Luís Barbudo (RODRIGUES, 1994, p. 112). This mining operation is still active. Barbudo, leader of the Movement in Defense of Regional Mining Legalization, has continued with his mining activity within indigenous lands in the Tapajós Valley, and in 2017 had one of his rafts destroyed in an operation against illegal gold mining within an area protected by the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA). The action was followed by retaliation against a *Folha de São Paulo* newspaper reporter who had accompanied IBAMA at the time. An investigation against him was opened by a Barbudo ally, Federal Police chief Alexandro Cristian dos Santos Dutra who was arrested in 2020 over accusations of selling information to owners of gold mines in the Tapajós region.

**6 Those behind illegal mining activities in the Tapajós Valley indigenous lands are businesspeople. There, mining activity is supported by a network of actors with significant purchasing power and political capital. From local businesspeople to federal deputies and senators, these actors have been gaining space on the agenda of the upper echelon of the Executive branch and the federal legislature since 2019. In September of the same year, one of their main demands was met: an end to the practice of destroying illegal mining machinery seized during government-led operations.**

Today’s gold mining owners are entrepreneurs, a class quite different from traditional gold miners. For example, they were able to replace, in a matter of days, backhoes destroyed during operations in the Munduruku and Sai Cinza ITs in both 2018 and 2020. This fact was witnessed and reported by the Munduruku, who have also shown how the leading group responsible for illegal exploitation in these ITs has articulated an aggressive scheme to recruit indigenous people into their operations through cash payments, donation of mining equipment, and the delivery of essential food packages, among other things. This leading group is known as *Boi na Brasa* (“Roasting bull” or “Ox on the coals”). Local informants also suspect that this group is behind several protests favoring the regularization of mining within indigenous lands. This group of businesspeople was the target of the *Bezerro de Ouro I* (Golden Calf

l) operation in August 2020, aimed at dismantling this criminal organization. In addition to these actors, there are lawyers and councilors connected to illegal mining activities and the lobbying carried out in its favor. Historical figures within the gold miners' movement in Brazil also participate in this lobbying group, including José Altino Machado and Antonio Feijão, as well as federal deputies Joaquim Passarinho (PSD party – state of Pará) and José Medeiros (PODE party – state of Mato Grosso), and federal senators Zequinha Marinho (PSC – state of Pará) and Wellington Fagundes (PL – state of Mato Grosso). These parliamentarians have been articulating agendas with representatives of the upper echelon of the Executive branch (including several initiatives with the Vice-President of the Republic) since September 2019. They also ensured several meetings between the gold mining lobby and the presidents of the Senate and of the Federal Chamber in 2020.

**7 The Munduruku people have been denouncing invasions on their lands to public authorities since 1987. Since 2010, successive attempts have been made to reach out to the responsible government agencies to remove invaders by filing complaints against them through the Federal Public Prosecutor's Office. Only in 2018 were inspections and anti-illegal mining operations carried out in the Munduruku and Sai Cinza ITs. These operations, however, were insufficient and failed to guarantee the protection of indigenous leaders against ongoing threats made by miners. This problem resurged in 2020.**

In 2010, the Munduruku started filing complaints with the Federal Public Prosecutor's Office, detailing the activities of illegal gold miners on their land. In 2017, based on a new complaint filed by the indigenous people, the Federal Public Prosecutor's Office questioned the responsible enforcement agencies (IBAMA, for instance) who had acted only after the Federal Justice was brought in to inspect and combat illegal mining in the Munduruku lands of the upper Tapajós in April 2018. The operation, called *Pajé Brabo I* (Angry Shaman Operation I), did not prevent illegal gold mining within the territory. A week later, the Munduruku reported that owners of mining operations had already sent new machines to replace those destroyed by IBAMA. There were also no measures taken to protect indigenous leaders from retaliation. Death threats against the Munduruku opposed to illegal mining grew immediately after *Pajé Brabo I*. This problem arose again in 2020, with new operations in the region signaling the need to re-qualify and reinforce operations to guarantee efficacy and reduce the effects of such operations on the indigenous people protecting their territories.

**8** **Illegal mining in the Tapajós Valley has caused a troublesome escalation of conflicts in the region and heightened insecurity for indigenous people. Illegal mining within indigenous lands puts weapons, drugs, and alcoholic beverages in intense circulation and promotes sexual exploitation of women. Since 2018, prominent Munduruku leaders opposed to mining have faced numerous death threats. However, the government's program to protect human rights defenders has been ineffective in helping these leaders. In addition, indigenous associations that oppose the illegal extraction of gold have also suffered retaliation. In 2021, miners in Jacareacanga destroyed one of these organizations' headquarters.**

The Munduruku have been denouncing the existence of brothels next to the illegal gold mining operations on their lands, the presence of heavily armed indigenous persons recruited by gold miners, and the impact of drugs and alcoholic beverages on their territories. Escalating conflicts involving miners and indigenous people led anti-mining leaders facing death threats to seek the Protection of the Human Rights Defenders Program (PPDDH), a federal program linked to the Secretariat of Citizenship of the Ministry of Human Rights. Nevertheless, the program's response fell far short of the indigenous people's reality and needs. Their complaints did not receive any follow-up, and over a year later, they chose to leave the PPDDH program. In 2020, one of these leaders had to go into exile with their family because the threats against their life had intensified. In 2021, non-indigenous miners and a minority of indigenous supporters attacked the headquarters of Munduruku organizations opposed to mining. They destroyed furniture and documents and plundered the building's facade (MPF, 2021d). The Munduruku told the researchers that tension in the region had reached unprecedented levels, with a notable escalation of access to weapons amongst miners, coupled with an increase in hate speech against Munduruku organizations that opposed invasions within their ITs.

**9** **The Munduruku have been fighting against the illegal extraction of gold on their land since 1987. Without the assistance of governmental authorities, and despite the various risks involved, they started to carry out autonomous territorial inspections, also called auto-demarcations, in 2014 and again in 2018 and 2021. In addition, they have addressed several open letters to the public authorities and to Brazilian society (28 of which are analyzed in this report). They have carried out actions in Brasília (Federal District) and the municipalities of Jacareacanga and Itaituba.**

There are various fronts of Munduruku resistance against the devastation brought forth by gold mining in the upper Tapajós: complaints to the public authorities, to civil society, and international bodies; organization of acts, meetings, and gatherings on the topic; and autonomous surveillance expeditions, or auto-demarcations, within their territories. As for the first, one should note that the complaints date back to, at least, 1987, when the Munduruku people sent a letter to then-President José Sarney. Regarding Munduruku acts, gatherings, and meetings positioned against mining, it is worth mentioning that in 2018, a meeting was called forth in the village of *Praia do Índio* by Munduruku people's grassroots organizations and neighbors bordering the middle Tapajós (especially from the riverine communities of *Montanha and Mangabal*). The meeting took the form of a public hearing on gold mining and its impacts in the Tapajós area. It had about 300 participants, including indigenous people, *beiradeiros* (riverine peoples), researchers, the Public Prosecutor's Office, the Chico Mendes Institute for Biodiversity Conservation (ICMbio), FUNAI, and partner organizations. It is also important to note the series of protests and demonstrations against the proposal to regulate mining within ITs, carried out by the Munduruku people in Jacareacanga, Itaituba and Brasília, between September and December 2019 (ANGELO, 2019; CIMI, 2019a, 2019b, 2019c).

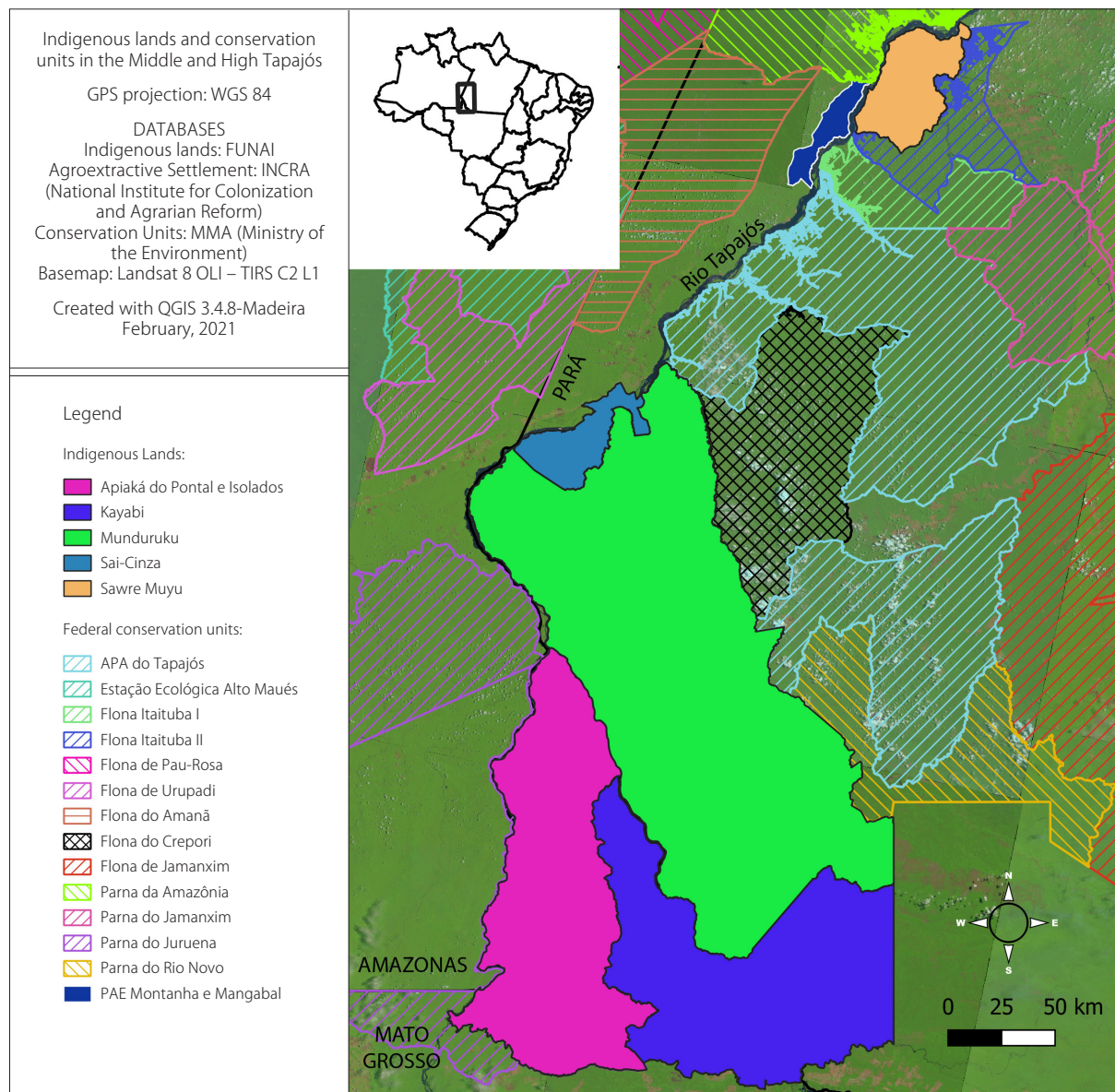
**10 In 2014, the Munduruku created their own consultation protocol, a document which indicates how, where and with whom hearings must be conducted regarding any bill-related initiatives, “ventures,” or development projects, and any measures affecting Munduruku communities. It is this document, and no other, that should govern any initiative of this nature.**

Contrary to what is said by a minority of indigenous persons recruited by illegal miners, only the larger collective of the Munduruku people can respond to proposals and projects that impact their communities. The Munduruku Consultation Protocol clearly indicates how, where, and with whom free, prior, and informed consultation (following ILO Convention 169) should happen. This protocol is a legitimate expression of Munduruku's self-determination. Both initial consultation processes and the assessment of the effects and impacts of illegal mining should follow the Munduruku's determinations, expressed in their consultation protocol (MUNDURUKU, 2014a).



**Mundurucu warrior women place boundary plates on the borders of their Indigenous Land**

## Munduruku Indigenous Lands (study area)





**Above: backhoe (PC) illegally entering the Rio das Tropas region, 2018.**  
**Below: autonomous inspection of the territory (Igarapé Mapari, Munduruku IT, 2018)**



## The Munduruku people and the encircling of gold

For centuries, the Munduruku people have traditionally inhabited the Tapajós Valley in southwestern Pará (and other areas). Over 14 thousand individuals inhabit two indigenous reserves and four indigenous lands (ITs) between Itaituba, Trairão, and Jacareacanga. The Munduruku and Sai Cinza ITs are next to Jacareacanga, in the upper course of the Tapajós River. In both lands, there are Munduruku communities and voluntarily isolated (uncontacted) people (within the Munduruku IT, there are also Apiaká families). These territories also have archaeological sites – recognized as such by experts – and places considered sacred by the indigenous people.

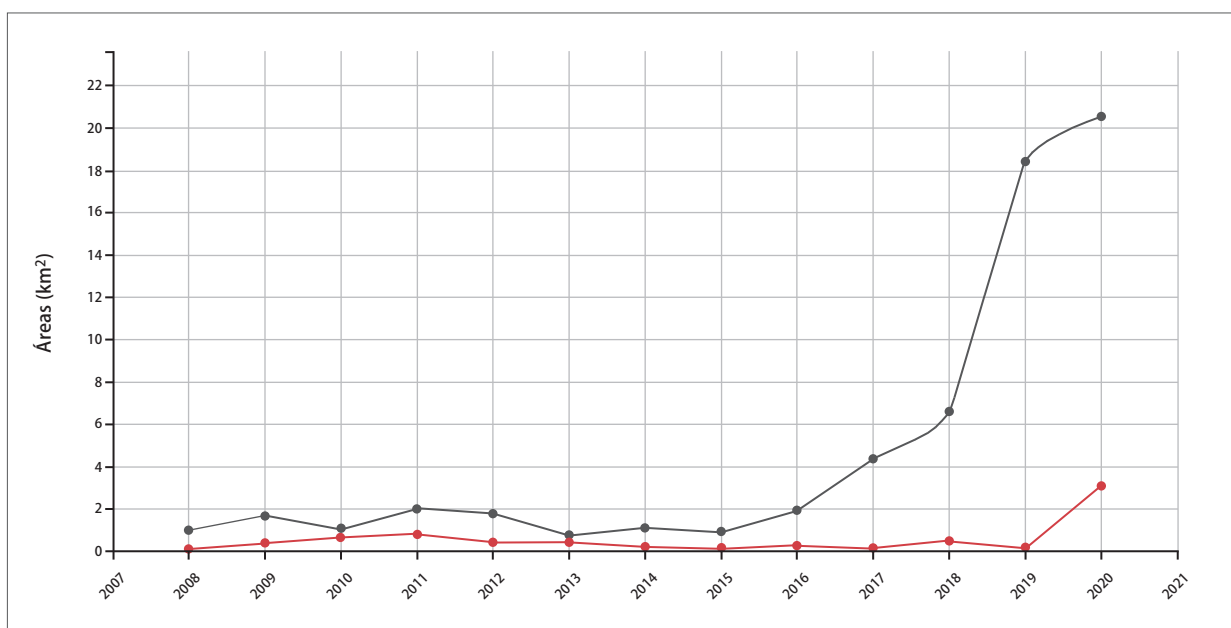
Munduruku and Sai Cinza ITs neighbor each other. Both ITs have broken deforestation records in recent years due to mining, an illegal activity within indigenous lands. The Federal Constitution protects these areas, demanding that mineral mining within them be subject to specific regulation, according to paragraph 3 of article 231 –not observed within the current administration. In 2019, The National Institute for Space Research (INPE) considered the Munduruku IT (comprising 2,382,000 ha) the indigenous land with the 6th highest level of accumulated deforestation, having lost 1,835 ha of its forest area to mining activities. According to the same institute, in 2020, deforestation in this IT reached 2,052 ha. As for Sai Cinza (comprising 126 thousand ha), INPE indicates that between 2019 and 2020, the IT underwent a massive increase in deforestation – numbers went from 16 to 304 deforested

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“Gold mining is dividing our people and bringing new diseases. It is contaminating our people with mercury, bringing drugs, alcohol, weapons, and prostitution. And greed. Some of our indigenous relatives are blinded by the brightness of gold. They are playing the dirty game of the daydu [armadillo and Munduruku trickster] and publicly claiming that the Munduruku people favor mining. Let us state it again: your words are full of dapxim – full of hate and lies.” (MUNDURUKU, 2019a)

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### Annual deforestation at the Munduruku and Sai-Cinza IT



Source: Inpe/Prodes, 2020.

hectares (INPE, 2020). The gold mining boom impacting the Munduruku territories in 2020 – and other ITs in the Amazon and other Brazilian lands – is directly linked to a rise in the price of gold, unequivocally related to the Covid-19 pandemic. As a financial asset, gold offers a higher level of financial security in the face of volatile currency prices.

Apart from skyrocketing deforestation and the socio-political pressures from the gold “rush” within Munduruku communities – which both intensified conflicts and increased death threats against indigenous leaders opposing this activity – the combination of pandemic and gold mining has also had several impacts on indigenous people’s health. Increased circulation of miners within the ITs (together, with the recruitment of indigenous people by miners) have directly contributed to the spread of Covid-19 within villages. According to data from the Wakoborūn Munduruku Women’s Association, there were more than 30 Munduruku Covid-19 victims between 2020 and 2021 (see also SALES, 2020). Since the beginning of the pandemic, Munduruku organizations have taken their own measures to fight the spread of the disease within their territories. They include the creation of sanitary barriers; warning signs placed at the entrance of villages; newsletters about the pandemic in their native language; health expeditions in dialogue with the shamans; and several complaints filed to the responsible governmental agencies such as the Federal Public Prosecutor’s Office (MPF), the Public Defender’s Office (DPU), FUNAI, the Supreme Federal Court (STF), the Inter-American Commission on Human Rights and the UN rapporteur on indigenous peoples’ rights.

Periodic malaria outbreaks affecting the Munduruku territories of the upper Tapajós Munduruku are also connected to gold mining. During the mining process, multiple pools of stagnant water are created. They are highly conducive to the proliferation of Anopheles, the mosquito that transmits the disease. Between 2018 and 2020, the Special Indigenous Sanitary District (Dsei) of the Tapajós River recorded an alarming amount of malaria cases among the Munduruku of the upper and middle Tapajós. Numbers went from 645 in 2018 to 1,666 in 2019, reaching 3,264 in 2020 (MINISTRY OF HEALTH, 2020). They quintupled between 2018 and 2020. This rise is likely related to the advancement of mining within the ITs and the accelerated increase in deforestation. In addition, in 2019, Jacareacanga was among the Brazilian municipalities with the highest incidence of malaria, according to the API (Annual Parasitic Incidence) index, utilized by the WHO and the Ministry of Health.

It is also worth noting that there are possible interactions between malaria, Covid-19, and mercury contamination to be studied. The latter is possibly the most critical and complex harm brought to indigenous people’s

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“We chiefs, leaders, men warriors, women warriors, are - ourselves - inspecting our territory. We have already started this year [2021] by acting on our own. It is our second inspection because we are tired of waiting while nothing gets done. The threats are only increasing, and the invasion of illegal mining within the Cururu River region (which we reported to the federal Public Prosecutor’s Office a month ago) is happening according to the scheduled date, just as they planned. The miners entered the streams from which we drink water and from which we catch our fish.” (MUNDURUKU, 2021a)

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### Malaria cases and API in the Munduruku Lands of Middle and Upper Tapajós

Base	Number of cases	API
JACAREACANGA	151	112,7
SAICINZA	33	18,3
KATÕ	28	18,7
SANTA MARIA	68	120,4
TELES PIRES	39	56,9
ITAITUBA	6	4,4
WARO APAMPU (POST MDK)	17	19,3
MISSÃO CURURU	128	101,0
RESTINGA	70	73,6
CAROÇAL DO RIO DAS TROPAS	105	96,7
<b>TOTAL</b>	<b>645</b>	
<b>PERIOD: 01/January/2019 - 31/December/2019</b>		
Base	Number of cases	API
JACAREACANGA	553	393,0
SAICINZA	206	110,2
KATÕ	99	64,3
SANTA MARIA	23	39,8
TELES PIRES	29	40,5
ITAITUBA	4	2,9
WARO APAMPU (POST MDK)	97	106,5
MISSÃO CURURU	121	91,7
RESTINGA	65	66,0
CAROÇAL DO RIO DAS TROPAS	469	417
<b>TOTAL</b>	<b>1.666</b>	
<b>PERCENTAGE INCREASE (%) (2018-2019)</b>	<b>158,30%</b>	
<b>PERIOD: 01/January/2020 - 31/December/2020</b>		
Base	Number of cases	API
JACAREACANGA	430	320,7
SAICINZA	890	468,7
KATÕ	814	518,8
SANTA MARIA	115	193,6
TELES PIRES	151	206,3
ITAITUBA	2	1,3
WARO APAMPU (POST MDK)	271	291,1
MISSÃO CURURU	212	156,9
RESTINGA	277	273,2
CAROÇAL DO RIO DAS TROPAS	102	86,0
<b>TOTAL</b>	<b>3.264</b>	
<b>PERCENTAGE INCREASE (%) (2019-2020)</b>	<b>95,92%</b>	
<b>PERCENTAGE INCREASE (%) (2018-2020)</b>	<b>406,01%</b>	

Source: Prepared by the authors based on data from Dsei Rio Tapajós (SESAI) via LAI.

health by gold mining in the ITs. Experts have been studying contamination through mercury among populations of the Tapajós Valley since the late 1980s. It has historically been at the center of debates over mining activities.

It was only after the 2000s that attention was brought to the impact of contamination on the Munduruku people. Regarding potential interactions between the diseases mentioned above, mercury contamination can increase the likelihood of malaria infections, as resistance to the parasite is impaired and the development of immunity is compromised (EAGLES-SMITH

et al. 2018, p.185). Moreover, this disease appears among the comorbidities that can aggravate Covid-19 cases, according to studies conducted in July 2020 (REDE PRÓ-YANOMAMI AND YE'KWANA, 2020).

The most dangerous form that mercury takes in the human body is methylmercury (MeHg), which has an exceptional capacity for bioaccumulation and biomagnification – in addition to being able to cross the blood-brain barrier, the placenta, and the mammary gland, thus affecting the nervous system of adults and newborns alike.

The discharge of elemental mercury into rivers (after being used to separate gold from other sediments) is usually seen as the origin methylmercury contamination within mined areas. In 2018, experts estimated that miners poured seven million tons of tailings into the Tapajós River per year, with mercury being a large part of these residues (GEISER, 2018). After being released into the river, mercury is methylated by bacteria, transformed into methylmercury, and eventually finds its way into the food chain. Although this is one of the sources of contamination, there are other ways by which methylmercury can enter the Amazon rivers. Mining and other anthropic activities that cause deforestation are examples of such sources. By removing

**Illegal mining in the region near the Kaburuá River, in 2018 (photo taken by drone at the Munduruku IT)**





**Illegal mining of the  
“bico de jato” kind  
(“et nozzle”) inside  
the Munduruku IT**

soils from riverbanks and causing erosion, these activities initiate a process by which the mercury already present in the soil is released and made available to be transformed into methylmercury (ROULET et al., 1998; TELMER et al., 2006; JENNINGS, 2020). It is important to state that Amazonian soils have some of the the highest mercury concentrations worldwide (ROULET et al., 1998; WASSERMAN et al., 2003).

Methyl-mercury exposure of Amazonian populations in general and the Munduruku people derives mainly from the ingestion of contaminated fish. In a study by Basta and Hacon (2020), conducted with 200 Munduruku people in the Sawre Muybu IT (the middle Tapajós, municipality of Itaituba), “mercury levels were detected in all participants, without exception – adults, children and the elderly. In general, mercury levels above safe limits were detected in six out of ten participants (57.9%)” (p. 1). In the study carried out in 2019 by Meneses et al. (forthcoming), in Munduruku communities of the upper Tapajós, it was noted that 99.09% of the people studied had mercury levels above the acceptable limit in their blood ( $10\mu\text{g} / \text{L}$ ) – with 53.6% of them showing levels between  $50\text{-}100\mu\text{g} / \text{L}$  (MENESES et al., forthcoming). In both studies, the people who displayed the highest levels of methylmercury in their bodies were precisely those who lived in the areas most impacted by mining.

## History and actors in the destruction

Since the beginning of gold mining in the Tapajós Valley (late 1950s), the activity has undergone significant technological changes. From manual alluvial panning (carried out more or less individually, primarily by former rubber tappers), gold prospecting started to become mechanized between the 1970s and 1980s, when it went through several changes in its form of production and social organization. By the 2000s, it had acquired a more entrepreneurial or small mining profile (TORRES, 2016). As one could expect, these transformations are closely connected with the sociopolitical and economic contexts in which they took place. Here, we highlight the historic peaks in the price of gold that boosted the well-known 1980s rush and subsequent mining outbreaks in 2008 and 2016.

From the first to the second decade of the 2000s, gold-digging on the riverbeds employed dredging extractors to achieve more depth while drilling. Conversely, dry land mining started to employ backhoe excavation (popularly known as PCs), in addition to the “et nozzles” to break down ravines. This technological advancement – which also brought a leap in the capacity for exploration as well as degradation of mining areas – occurred mainly after the increase in the price of gold in 2008 and the emergence of a PC rental market (WANDERLEY, 2015). Like dredgers, these “C” backhoe excavation machines are costly; they currently sell for amounts ranging from 500 thousand to one million reais each.

This last data provides a clue into the socio-economic profile of gold mining owners today. This class is distinct from the traditional gold diggers. They are, in fact, businesspeople who, for instance, were able to replace the backhoe excavation machines destroyed during operations at the Munduruku and Sai Cinza ITs in a matter of days (in 2018 and 2020). This fact was witnessed and reported by the Munduruku, who have been filing complaints to the government for years and providing information on who these miners are, where they are, and how the main groups behind such illegal mines operate on indigenous land. Although it was widely known in the Tapajós region (not only in Jacareacanga but also in Itaituba, Novo Progresso, and elsewhere), only one of these groups had its involvement with mining on Munduruku land significantly and publicly exposed in 2020. This is the “Boi na Brasa” (Roasting Bull) group, a family known to some as a “criminal faction” (TUBINO, 2020) and target of the *Bezerro de Ouro I* operation (Golden Calf Operation I), carried out in August 2020 to dismantle this very group. *Boi na Brasa* promoted, in the region of Flona Crepori (neighboring the Munduruku IT), environmental damage estimated at eight million reais.

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“We have already warned you once, and we will warn you again that the Boi na Brasa group continues to recruit our indigenous relatives. Now they are passing by helicopter above the villages and collecting signatures so they can invade other areas. We have been denouncing this same group for three years, and very little has been done about it. They remain within our territory. Still, evangelical pastors are collaborating with invasions and making up lies to our people. There are constant threats against the leaders who oppose such invasions on the land. We are against the role of the evangelical church pastors that come to collaborate with the entrance of gold mining and only want the profit - and not the good of our community.” (MUNDURUKU, 2021a)

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Members of *Boi na Brasa* own farms and other properties in different municipalities nearby. They have articulated a robust recruitment scheme for indigenous people through cash payments, the donation of gold mining equipment, and delivery of essential goods, among other things, as indicated by local sources. They are also suspected of fostering protests in favor of the regularization of mining in indigenous lands, according to Munduruku leaders.

As Wescley Tomaz, an Itaituba councilor of the MDB party, said “mining moves everything in the Tapajós region.” In 2020, Tomaz was re-elected and has become, in recent years, one of the prominent names in the pro-mining lobby alongside veterans like José Altino Machado (famous for inciting, in the 1980s, a miner’s invasion of the Yanomami IT), Antônio da Justa Feijão (a former deputy, arrested in 2017, on charges of having headed the sale of mining licenses in Amapá), Vilélu Inácio de Oliveira (a businessman linked to the Tapajós mining activities), and Dirceu Sobrinho, the president of the National Gold Association. The latter is well known for being the target of multiple lawsuits from the states of Pará and the Amazonas Federal Public Prosecutor’s Office (MPF) (PRAZERES, 2019).

Apart from these names, there are also figures such as Roberto Kat Suda, a Hyundai store owner (supplying the region’s gold mines), and a political ally of Valmir Climaco, mayor of Itaituba (MDB) and a gold mine owner. Like Climaco, other politicians involved in this context have a record of public service intermingled with mining activities in Pará. Senator Zequinha Marinho (PSC party – Pará) is an emblematic case. Together with Deputy Joaquim Passarinho (PSD party – Pará), he has been a solid ally of pro-mining groups and lobbies. The Senator is largely responsible for providing these groups easy access to the Planalto Presidential Palace after Jair Bolsonaro took office as the president of Brazil (FEDERAL SENATE, 2019).

Indeed, in the Tapajós and elsewhere, both economic and political power revolves around mining. Western Pará occupies a central place in the chessboard that is the current mining lobby, contributing to the composition of this complex scenario. In previous decades, regions within Rondônia and Roraima were the main references. Today, however, the Tapajós is at the center of debates on gold mining and its limits within protected areas. This protagonist led the former president of the Federal Chamber, Deputy Rodrigo Maia (DEM party, Rio de Janeiro), to promise Katsuda, Tomaz, and others that he would visit the region at the end of 2020. The visit never happened. Despite there being differences within the interests at stake, these and other pro-gold mining representatives have common ground with the mining lobby– the liberation of indigenous lands for mineral exploitation since the Bolsonaro government’s early days. It is a topic dear to the president, part of

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“We have been protesting for three weeks against the invasions of our territory. We keep receiving many threats for defending our home, our territory. We can see that the pariwat [non-indigenous people] really want to take over our home. We never invaded your home. You are disrespecting the authority of our men chiefs, our women chiefs; our men warriors, our women warriors; our shamans, and leaders. That is why we blocked the road to Jacareacanga. To continue protesting against this regulation that allows mining on indigenous land and for the immediate withdrawal of pariwat miners from our lands.” (MUNDURUKU, 2019c)

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his campaign promises (ANGELO, 2020; MCEVOY et al., 2020), and his current political agenda. It is well-known, especially after Projeto de Lei, or Bill, 191/2020 was sent to the Chamber of Deputies. One of the Bill's objectives was precisely the regularization of mining in ITs.

Similar to 37 previous legislative proposals, Bolsonaro's motion intends to regulate the first paragraph of article 176 and the third paragraph of article 231 of the Federal Constitution, thus allowing, at the same time, research, mining, and also hydroelectric and oil exploration within ITs. In doing so, it completely disregards the right that communities potentially impacted by the proposition have to free, prior, and informed consent. Such rights to mandatory consultation are guaranteed by ILO Convention 169 of which Brazil and the other signatory countries are obliged to comply with.

It is worth remembering that, in addition to conflicts involving mining in ITs, there are also a significant number of emblematic examples of the impacts caused by large mining companies on indigenous lands in Brazil. Concerning *garimpagem*, the Haximu massacre in the Yanomami IT stands out, involving 16 casualties. However, the massacre is far from being the only violent episode promoted by miners against indigenous people, both within Yanomami IT and other lands. Among the impacts of mining caused by companies, the case of the Gavião people, affected by the Carajás Mining Complex of Vale do Rio Doce (Doce River Valley); the Xikrin people, in the *Ourilândia do Norte* region, affected by the same company; and the Krenak, victims of the Samarco / Vale / BHP (Broken Hill Proprietary Company) disaster.

The proposed Projeto de Lei, or Bill, 191/2020 is part of a broader set of attacks by the Bolsonaro administration against indigenous lands and environmental agencies. These attacks include, for example, administrative maneuvers allowing land leasing; the emptying of Brazilian Institute of Environment and Renewable Natural Resources' (IBAMA) budget; the clash with the National Institute for Space Research (INPE) regarding deforestation data on the Amazon; and the misuse of public resources from the Armed Forces to address this problem.<sup>1</sup> The federal executive branch makes no effort to hide the Bolsonarist agenda against protecting indigenous lands, conservation units, and similar areas. The

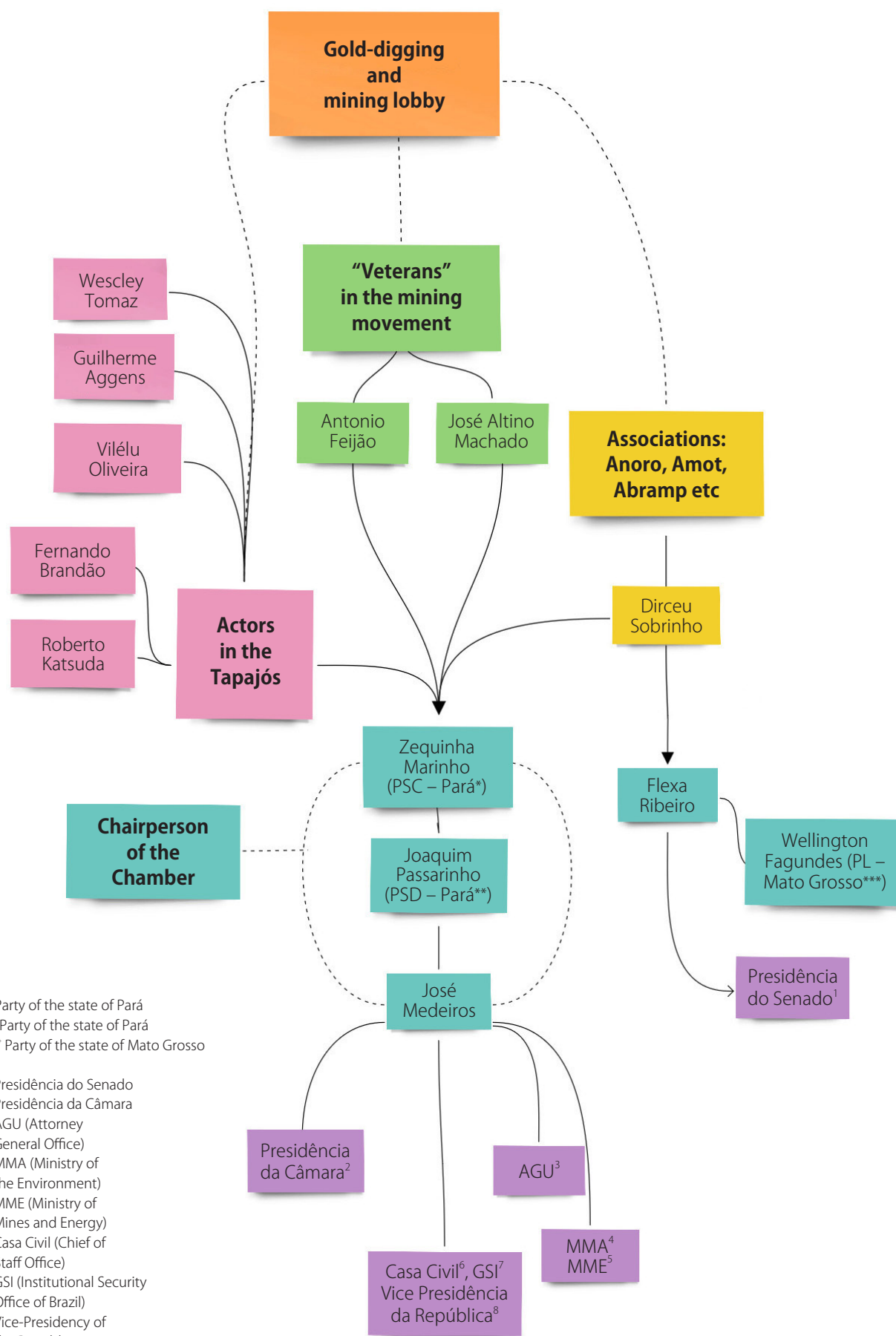
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"We are outraged, sad, and disappointed with authorities like FUNAI, IBAMA, and Icmbio, who were supposed to help protect our lands but actually gave it right into the hands of the gold miners. [...] For five years, the Ipereğ Ayū and Women Movement (who are now together in the Wakoborūn association) have been denouncing the evils of mining and what this activity is causing upon our people. As we did not receive support from any agency, we decided to inspect and protect our land ourselves. We have already taken action in the PV village and on the Kaburuá river after we burned a gold digger's machine." (MUNDURUKU, 2018b)

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<sup>1</sup> On the last point, see, for example, the article "Puxadinho militar com dinheiro da Amazônia" ["Military 'home extension' with money from the Amazon"], at <https://piaui.folha.uol.com.br/388206-2/>. About the lease, see "Instrução do governo abre espaço para fazendeiros em terras indígenas" ["Government ruling paves the way for farmers on indigenous lands"], at [https://noticias.uol.com.br/columns/rubens-Valente/2021/02/24/portaria-funai-Empreendimentos-indigenas.htm?cm\\_pid=copiaecola](https://noticias.uol.com.br/columns/rubens-Valente/2021/02/24/portaria-funai-Empreendimentos-indigenas.htm?cm_pid=copiaecola), accessed on 04/March/21.

**Articulations between actors in the mining lobby and gold-digging as well as pro-mining parliamentarians and authorities in the federal Executive branch**



continuation of the prevailing assimilationist military discourse from the 1970s (regarding indigenous peoples in general and the Amazonian populations in particular) is also explicit and characteristic of the Bolsonaro administration and its heads of government.

“Our Indians (sic) today live like beggars in rich lands,” said Vice President Hamilton Mourão during the turbulent context of the suspension (later revised) of Operation *Pajé Brabo II* (Angry Shaman Operation), in August 2020. The aim of this operation was to inspect and combat illegal gold mining in the Munduruku and Sai Cinza ITs (EM, 2020). Designed to be an outstanding action, *Pajé Brabo II* ended up failing due to an information leak that left miners on the alert and allowed them to hide the equipment before the Federal Police arrived (G1 Pará, 2020).

This scenario was the background for an imbroglio of federal proportions, with successive interventions by the Ministry of Defense and a visit to Jacareacanga by the Minister of the Environment, Ricardo Salles. During the visit, Salles clearly defended illegal mining and even left the city with a delegation of miners who were transported to Brasília on a Brazilian Air Force plane. In the aftermath of *Pajé Brabo II*, the “Golden Calf II” operation was conducted within the same month of August. This time the operation was within the indigenous lands. While mining machinery were destroyed, this alone was not enough to constrain the activity – as indicated to the researchers by indigenous people, who continued to observe the transit of vessels with backhoes, fuel, and other materials suitable for gold mining (personal communication).

The *Pajé Brabo I* operation followed almost the same script: it was carried out in April 2018 at the Munduruku IT. Although different institutions and numerous agents were mobilized, the efforts were not enough to affect the mines and their owners to the point of interrupting their activities. Conversely, the effects on local conflicts were immediate, intensifying threats to Munduruku leaders who oppose mining. While such threats had occurred in the past, they escalated in the aftermath of the operation. In the same period of 2018, two of these indigenous leaders applied for admission into the Protection Program of Human Rights Defenders (PPDDH), a federal program then linked to the Secretariat of Citizenship of the Ministry of Human Rights. Nevertheless, as part of the program, the assistance provided fell far short of the leaders’ reality and needs. Their complaints did not receive any follow-up, and over a year later, the leaders chose to leave the PPDDH program. With an agreement signed between the government of Pará and an NGO to run the program within the state, it is hoped that the leaders under threat will now be able to receive the support needed.

Similarly, several other women and men from associations and other organizations of the Mundurucu people have committed, over the last decades, to protect their territories in the upper and middle Tapajós, working on different and yet complementary fronts: the regularization of indigenous land titles; combating invasions and predatory illegal extractive activities within these areas; resistance to what they call “death projects” (hydroelectric, waterways, railways, ports, and other development projects); opposition to bills and other normative proposals aiming to weaken the protection of indigenous lands and the original rights of indigenous peoples; and internal empowerment and organization within their own communities (cf. LOURES, 2017; MOLINA, forthcoming).

**Mundurucu men warriors and women warriors prepared for autonomous inspection of their territory, 2018**





**Cacique (Chief) Juarez**  
Saw and delegation of 50  
Munduruku people at a  
press conference on gold  
mining and the so-called  
megaprojects (UnB, 2019)

## The struggle and self-determination of the Munduruku

Since the 1960s, the Munduruku's experience regarding gold mining within their territories has been, on the one hand, an experience of "various tragedies" and, on the other, a relentless struggle (LOURES, 2017). These successive tragedies had a direct connection, in the second half of the 20th century, with the transition from the extraction of rubber to that of gold, accompanied by the work of traders and missionaries, in addition to the Brazilian government indigenous agencies themselves (first the Indian Protection Service, or SPI, and then FUNAI). Concerning this last point, in 1986 – the period of the famous "Amazonian gold rush" – FUNAI went so far as to send a technician to study the possibilities of installing gold mining machinery ("chupadeira") in the area (FUNAI, 1986). Moreover, there are records of a FUNAI Indigenous Post acting as one of the main points for the sale of gold in the upper Tapajós (BURKHALTER, 1982).

There are various fronts of Munduruku resistance against the devastation brought forth by gold mining in the upper Tapajós: from complaints to public authorities, civil society, and international bodies; organizing acts, meetings, and conferences on the topic; and autonomous surveillance expeditions within the territories. Complaints against mining date back to, at least, 1987, when the Munduruku sent a letter to then President José Sarney. Regarding Munduruku acts, gatherings, and meetings positioned against mining, it is worth mentioning that in 2018, a meeting was called forth in the village of *Praia do Índio* by Munduruku people's grassroots

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"We heard that the president of FUNAI gave CPRM (Mineral Resources Research Company) a license to conduct mineral exploration on our land. [...] We did not accept any company in our area, so we asked President Sarney to help us. Your Excellency, we want to live in peace."

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organizations and neighbors bordering the middle Tapajós (especially from the riverine communities of *Montanha and Mangabal*). The meeting took the form of a public hearing on gold mining and its impacts in the Tapajós area. It had about 300 participants, including indigenous people, *beiradeiros* (riverine peoples), researchers, the Public Prosecutor's Office, the Chico Mendes Institute for Biodiversity Conservation (ICMbio), FUNAI, and partner organizations. It is also important to note the series of protests and demonstrations against the proposal to regularize mining within ITs, carried out by the Munduruku people in Jacareacanga, Itaituba and Brasília, between September and December 2019 (ANGELO, 2019; CIMI, 2019a, 2019b, 2019c).

As for the autonomous actions for territorial protection – taken on by the Munduruku themselves due to the slow and inefficient response from public authorities – the most significant were those organized by the various Munduruku associations and other organizations since 2014. In 2018, for example, there were four expeditions for the purpose of combating mineral extraction, which also included the destruction of mining machinery. In the first of these actions, reported by the press (MAISONNAVE, 2018), the Munduruku stated that PV, one of their villages, “does not exist anymore” because of mining.

Mining is controlled by the *pariwat* [non-indigenous] who pay our indigenous relatives to guard their machines. The PV village is today the main point of diseases and invasion of our territory; everything is controlled by the *pariwat*. Even the airstrip that existed so that health care could reach the residents was moved, because it hindered their mining. The *pariwat* are armed and have given weapons to our indigenous relatives to defend them. (MUNDURUKU, 2018c)

In January 2021, another series of Munduruku-led surveillance expeditions began at the Munduruku and Sai Cinza ITs. Led by seven Munduruku organizations, these actions are part of a larger set of autonomous protection strategies for the ITs. These expeditions were called forth during the so-called Resistance Assembly, which brought over 200 Munduruku together in the Waro Apompu village in December 2020. Since the second 2021 expedition, in early March, tensions in the region have intensified. Aware that a group of miners intended to cross the last frontier for mineral exploration within the Munduruku IT (the Cururu River region), the Munduruku mobilized dozens of men, women, and children to prevent the advancement of ferries carrying loader tractors into the Baunilha stream, considered the entrance to the Cururu River (MUNDURUKU, 2021b, 2021c). At the same time, the Munduruku notified the governmental agencies responsible for the inspection and protection of the IT and its communities. On the 16th of that same month, the Federal Public Prosecutor's Office (MPF) filed an

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“We will remain to protect our territory independently. Even if we do not have an answer, we will continue: women warriors, men warriors, caciques (chiefs), and shamans. We shall continue our struggle with the help of our guiding spirits, our shamans, and the Muduruku people's associations, who act together in defense of our territory. We defend it because our spirits are related to the land, river, forest, animals, and fish; there is a large pharmacy open to all to treat various diseases in our land. The protected Land is also a Great Teacher so that we can learn everything there is on it.” (MUNDURUKU, 2021b)

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urgent request before the Federal Court in Itaituba (state of Pará), calling for federal forces to prevent the advancement of miners into the region (MPF, 2021a). “The transit of miners is being monitored by helicopters, and this indicates an orchestrated action by criminal groups in association with a small portion of indigenous people who work with mining interests,” said the MPF at the time (op. cit.). The invaders were heavily armed, so the agency was explicit about imminent risk of conflict threatening the Munduruku people opposed to mining (cf. MPF, 2021a). Nevertheless, the governmental authorities did not take the measures required to contain the circulation of miners and avoid conflict.

For this reason, on March 22, the MPF opened an investigation into public service/administrative misconduct by authorities who should have acted to prevent invasions on Munduruku lands (MPF, 2021b). Three days later, a group of illegal gold miners and a minority of recruited indigenous people stormed the headquarters of those Munduruku organizations opposed to mining in Jacareacanga. They destroyed furniture, documents and damaged the building’s facade (MPF, 2021d). The indigenous people told researchers that tension in the region had reached unprecedented levels, with the notable escalation of miners’ access to weapons and an increase in hate speech against organizations that oppose the invasion in their ITs.

**Munduruku children holding a plate made for the autonomous inspection of the territory, 2021**



Some of the impacts of illegal mining in Munduruku and Sai Cinza ITs include: the recruitment of indigenous peoples into mining, spread of diseases (including sexually transmitted infections), circulation and use of alcoholic beverages, prostitution among Munduruku women, arms trafficking, and exploitation of child labor. Such impacts have been denounced throughout the years by the Munduruku and have also been historically recorded, including in a FUNAI report (1973).

As a closing note it is vital to say that observations in this report concerning the impacts of gold mining and related problems should not be assumed as having any primacy over the positions of the indigenous people themselves. To assess any of these effects and impacts, one must follow Munduruku's determinations, such as those expressed in their consultation protocol (MUNDURUKU, 2014). The same applies to implementation or regulation of any activity within indigenous lands, including propositions such as PL (Bill) 191/2020.

**Demonstration at the Subco audience at the Mining Permanent Mission to the Chamber of Deputies, 2019 "e are against mining on Munduruku lands in the Upper and Middle Tapajós"**



## Letters and documents from the Upper and Middle Tapajós Munduruku people

MUNDURUKU. **Carta pedindo a retirada das mineradoras dentro do território.** [“Letter asking for the withdrawal of mining companies from the territory”] Village Missão São Francisco Cururu, Dec. 1987.

MUNDURUKU. **Protocolo de consulta Munduruku.** [“Munduruku consultation protocol”] Itaituba: Movimento Munduruku Ipe reğ Ayũ, Associação Da’uk, Pusuru, Wuyxaximã, Kerepo e Pahyhyp, 2014a.

MUNDURUKU. **Carta sobre fiscalização autônoma e retirada de garimpeiros na TI Munduruku.** Aldeia Caróçal Rio das Tropas: Movimento Ipereğ Ayũ, 21 de Jan. 2014b.

MUNDURUKU. **Carta do povo Munduruku ao Comitê de Direitos Humanos da ONU.** [S.I.], 1 de Out. 2015a.

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MUNDURUKU. **Carta sobre a atuação do José Altino Machado nas terras Munduruku.** Associação Pariri. Accessed on: <https://www.facebook.com/AIPariri/photos/nós-ind%C3%ADgenas-do-povo-Munduruku-do-m%C3%A9dio-e-alto-rio-tapaj%C3%B3s-vimos-responder-o-a/2057685411198012/>. 20 de Dez. 2018a.

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MUNDURUKU. **Pedido de desculpas à mãe dos rios – Idixidi** (Rio Tapajós).

Jacareacanga: Movimento Ipereğ Ayũ, 25 de Mar. 2018d.

MUNDURUKU. **Comunicado do povo Munduruku: o desgoverno do Brasil não**

**fala pelo povo Munduruku.** Jacareacanga: Movimento Ipereğ Ayũ, Associação Wakoborũn, Associação Pariri, Associação Dace, Associação Wuyxaximã, Associação Pusuru, Associação Kurupsare, CIMAT. Accessed on: <https://movimentoiperegayu.wordpress.com/2019/09/27/comunicado-do-povo-munduruku-o-desgoverno-do-brasil-nao-fala-pelo-povo-munduruku/>. 27 de Set. 2019a.

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MUNDURUKU. **Carta da Assembleia de Resistência.** Aldeia Waro Apompu:

Movimento Ipereğ Ayũ, Associação Da'uk, Associação Wayxaximã, Associação Arikico, Associação Wakoborũn, Associação Indígena Pariri, CIMAT. Accessed on: <https://movimentomundurukuiperegayuii.wordpress.com/2020/12/20/assembleia-da-resistencia-aldeia-waropompu-15-a-18-dezembro-de-2020/>. 18 de Dez. 2020b.

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**garimpagem ilegal em nossa Terra Indígena Munduruku.** Jacareacanga: Movimento Ipereğ Ayũ, Associação Da'uk, CIMAT, Associação Arikico. Accessed on: <https://movimentomundurukuiperegayuii.wordpress.com/2020/10/07/carta-de-apoio-a-operacao-de-fiscalizacao-contr-a-atividade-de-garimpagem-ilegal-em-nossa-terra-indigena-Munduruku/>. Set. 2020d.

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**Prevenção e contenção de transmissão do Coronavírus (COVID-19) nas aldeias Munduruku do alto e médio Tapajós.** 2020f.

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