



Vale Unsustainability Report 2021



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Letter from the International Articulation of those Affected by Vale (AIAAV)

For just over a decade, the International Articulation of those Affected by Vale (AIAAV, acronym in Portuguese) has been reporting frequent violations in communities located in the territories where Vale Inc. operates. We have determined that the socioenvironmental crimes committed by the mining company are not flaws or accidents, as Vale normally characterizes them. They are an intrinsic part of Vale's mega projects.

Vale's arrival in a territory is advertised as something positive, with full government support. The mining narrative promises a boost to local development, creation of more jobs, economic growth, etc. As this report shows, however, a mining project has countless negative impacts, both directly and indirectly. The construction of the mine is just the first step in a chain of impacts, bringing significant changes to the original landscape and lifestyle and extending to the new roads, rails and pipelines built to extract minerals for export onto global markets.

Traditional communities, when not relocated, are exposed to the destruction of natural resources like the lands, forests, watercourses, flora, fauna, with which they have, historically, lived in communion, building their cultures and ways of living.

Many times, these communities are expropriated from their lands and (after extreme duress)

resettled elsewhere, a process that lacerates cultures and relationships, forcing the communities to reinvent themselves in adverse conditions. The people not expelled from their own territories, are forced to live with daily contamination and air pollution, which often sickens entire communities.

The State, which should act as a regulatory body over the mining industry, defending human rights and protecting the environment, is instead promoting more and more investments in mining activities, adopting global mining practices, and allowing the sector to self-regulate. Mining companies like Vale also receive tax incentives and a series of exemptions and subsidies. Government laxity on inspections and on environmental licensing and control results in favoring economic projects that intensify environmental injustices.

From the outset of the sad context created by the COVID-19 pandemic, Vale, has worked to maintain profit levels at the expense of its employees. AIAAV is following and monitoring with utmost care the correlation between mining and the incidence of COVID-19. In March, right at the beginning of the pandemic, Brazil's Ministry of Mines and Energy (MME) issued Ordinance 135/GM; it determined that every segment of the mining sector was an essential service. This Ordinance was later endorsed by the Federal Government through Decree 10.329/2020.

In response, we brought together many social movements and civil society organizations to mount a campaign: Mining is not essential. Life is! We denounced the Ordinance, arguing that defining mining as an essential service was just another way of putting profit above everything else. The mining companies continued their operations, with the support of the Federal Government, despite the recommendations of the World Health Organization (WHO), and the Ministry of Health. Both these bodies recommended social isolation, in order to avoid crowds, as the most efficient measure to reduce the dissemination of the virus.

Through this campaign we demanded that government promote broad debate and elaborate a plan for a temporary and controlled reduction of mining activity, instead of making a decision that put the health of workers and their families at risk. We also argued for coordination of a policy to regulate mining stock, establishing schedules and rates of extraction. Other demands included plans for training and up-grading programs with full pay, for stay-at-home workers, for support to small and medium mining companies and for more regulatory control over illegal mining. None of this happened.

Regarding transparency in Vale's actions, the decisions and deals Vale makes with the State are carried out with no participation by civil society. In Brazil, especially during the (mis)rule of Bolsonaro, we have seen the deepening of an anti-rights agenda, sustained by the lack of access to information, by the

criminalization of social movement and their leaderships etc. Countless reports against human rights advocates have been made in this period, also numerous programs of protection have been scrapped.

As an Articulation, we have concluded that, in order to change this correlation of forces it is necessary to combine our efforts in different spheres. In the political-governmental sphere, for example, what is needed is election of democratic governments, that have close links with social agendas and interests. ones that are committed to radical environmental legislation reform and the defense of human rights. In the social sphere, we view organizing and networking processes as a central axis, directing our efforts to substantiate the reports made by groups and people directly affected as a way of strengthening their legal and political strategies.

Over the years, we have responded to many disasters caused by Vale. These disasters affect the lives of people in many different communities - traditional, quilombolas¹ and Indigenous. The disaster affected both rural communities and impoverished urban populations as well as the men and women employed by Vale in different parts of Brazil and around the world. We coordinate our action strategies, demanding prohibition, or restriction of mining activities. In partnership with other organizations, in a space we call inter networks, we have grown to understand the necessity of creating mining-free territories. In this sense, we defend full reparation for violations of rights and socioenvironmental damages as a process of transition.

¹ Quilombo and quilombola community are expressions used for the same purpose, to identify what is provided in the law as RCQ's (remnants of quilombo communities) or CRQ's (remnant communities of quilombos). Decree number 4887/2003 uses the term Remnants of Quilombo communities (same as used in Art 68 of the ADTC, of the Federal Constitution).

Article 2 of Decree No. 4.887, of November 20, 2003 regulates the procedure for identification, recognition, delimitation, demarcation and titling of lands occupied by remnants of quilombo communities. According to this article: "ethnic-racial groups are considered to be remnants of quilombo communities, according to criteria of self-attribution, with their own historical trajectory, endowed with specific territorial relations, with a presumption of black ancestry related to the resistance to the historical oppression suffered". Available at: http://www.planalto.gov.br/ccivil_03/decreto/2003/d4887.htm. Acces on: August 8th, 2021.

For full reparations, we consider both the scope of the human and environmental rights violations, and the fundamental rights of the victims. This implies a political battle for recognition and affirmation of the men and women affected. Consideration needs to be given not only to the direct victims, but also the indirect victims (family members), the collective victims, like Indigenous and other traditional people and the potential victims (referring to the social fabric).

Through dialogue with the men and women affected in the Paraopeba River Basin in Minas Gerais, we have adopted the idea of Affected beyond the mud. Using this slogan, we aim to bring to society critical reflections that, literally, go beyond the mud, opening possibilities of widening the dialogue to denounce Vale's impacts and violations around the world.

The concept of reparation we defend includes promotion of policies and legislation that hold companies and the State to account for the material and immaterial damages caused by the actions of a particular mining company. We defend a concept of reparation that includes economic, moral, psychological, and social reparation for the men and women employed in mining who are frequently the most affected by the impacts inherent in the process. The same for people who have been affected, direct or indirectly, by the company's and/or the State's actions that resulted in human rights abuses.

The reparation we defend should be capable of substantially improving living conditions, contributing to social cohesion, and expanding the possibilities of self-determination for the local society when it comes to possible paths to overcome economic dependency on mining.

Vale is neither attentive nor committed to finding solutions for the damages caused to the community. Nor does it uphold the community's right to reparations.

For this reason, civil society organizations, be it in Brazil or internationally, have an important role in defense and service delivery. There is a need to shine a light on the grave injustices unleashed by actions of the mining sector. The sole interest of the mining companies continues to be maintaining high profit levels for their shareholders and getting good returns in the game of financialization of both nature and life.

The struggle against mining companies requires a collective and organized effort from civil society, in a permanent process of mobilization and affirmation of the desire for territorial autonomy and sovereignty. We are engaged in this struggle. We are linked through AIAAV with social movements, trade unionists, environmentalists, NGOs, community associations and academics. Our members come from Brazil and other countries where Vale is active. Our aim is to strengthen the networks that are confronting the impacts of the extractivist logic promoted by Vale.

This assumes a process of political organization and broad development of alliances at national and international levels. For that, it is necessary to invest in a counter-narrative capable of mobilizing public opinion in favor of the legitimacy of these demands, recognizing them as fair and necessary for society today and for future generations.

Happy reading!





Vale's 2021 Unsustainability Report

Vale affirms proudly in its PR material and official reports² that its “risk and impact management seeks to take into consideration all themes related to human rights in the company’s activities, with identification, elaboration and implementation of controls for detection, prevention and mitigation”. When social conflicts occur, Vale insists that it “seeks preventive action through the company’s relationship guidelines, thereby managing the impacts of its operations, the associated risks and the establishment of relationships of trust and cooperation between the company and the community”. Lastly, when it comes to health and safety of its workers and the communities neighboring the mining operations, Vale reports that its strategy is always “based on three pillars: prevention of injuries and chronic diseases, prevention of fatalities and prevention of catastrophic accidents”.

As the cases in this document show, despite Vale’s discourse on “social responsibility”, propagated through the expenditure of a great deal of money for in advertisements and marketing, Vale’s attitudes and practices in the territories appear to be quite distant from its official discourse. All around the world, Vale’s operations are characterized by truculence and greed. Vale operates with systematic

disrespect for human rights, an authoritarian management style in response to countless conflicts and in the relationship with the community and its workers, and a total lack of commitment to the planet and nature. The Vale Sustainability Report does not present the true face of Vale, the face it reveals in the territories where it mines, where it runs steel plants, where its railways and trains operate, where Vale cargo is loaded in ports and shipped to global markets. Even less does the true face of Vale appear in its administrative reports.

We intend to fill this gap with the Vale Unsustainability Report, systematizing in one document many of the protests, reports, fines, and prosecutions related to Vale all around the world. Our goal is to show that Vale’s actions are far from the official discourse of sustainability presented by the company. Its operations are surrounded with illegalities, destruction, and death. The only sustainability of interest to the mining company is the one that refers to its profits: whatever the cost may be. The episodes in Mariana and Brumadinho illustrate this situation clearly.

The Vale Unsustainability Report is a reply to the Vale Sustainability Report published annually by the company to show off its “good results” to its

2

The sections that follow were taken from the 2019 Sustainability Report published by Vale at the beginning of 2020.

shareholders and society in general. As Vale clarifies, its Sustainability Report 2019 was prepared according to the format developed by the Global Reporting Initiative (GRI), an independent international non-profit organization that funds itself by servicing and organizing corporate events. Since 1997, GRI has been developing a standard format, orienting companies in the preparation of their sustainability reports, identifying the group of socioeconomic indicators that should be reported on by the companies. GRI, however does not check the information the companies provide. There is no verification of whether they are truthful or not. Nor are there checks as to whether a company omits important information concerning its operations that, although real, could mark their “sustainable company” image. It is important to emphasize that everything is voluntary, meaning that omission or non-compliance do not result in any sanction for the company. Today, however, it is left to Vale to define, produce, and set up the sustainability indicators against which they evaluate themselves.

In its Sustainability Report, Vale states that it is still committed to the 10 Principles of Sustainable Development established by the International Council on Mining and Metals (ICMM). In addition, Vale asserts that it operates following the Guiding Principles of the United Nations (UN), on Corporations and Human Rights. It also highlights that its corporate goals are defined taking into consideration the implementation of UN’s 2030 Agenda, Indigenous People’s Rights and Convention 169 of the International Labor Office (ILO).

With the information contained in this report, we hope to demonstrate the flaws and biases in Vale’s reports and how little resemblance they bear to the company’s actions in the territories exploited by it. This report is the fruit of collective efforts, based on work over many years to monitor Vale’s operations inside and outside of Brazil. It is not the first nor will it be the last! Similar reports were published in 2010, 2012 and 2015 ³. Behind the report lies an articulated effort among communities, lawyers, social movements, social organizations, researchers and research groups, communicators, and popular educators, in Brazil and around the world, brought together through the International Articulation of those Affected by Vale. It works as a mirror that reflects the dimensions of the operations Vale tries to hide from the press, its shareholders, investors, and society in general. Besides documenting Vale’s truculence and crimes, we intend for this report to serve as a weapon to strengthen the communities and territories affected by the predatory actions of Vale. At the same time, we intend to demonstrate the fragilities of the company’s current audit and control mechanisms, national and internationally, whose actions are still shielded from inspection and punishment.



Materiality

Vale's Unsustainability Report was put together by the International Articulation of those Affected by Vale. It is based on research and materials presented by communities, organizations and social movements that act in territories affected by Vale's activities and projects. Our Report was written by many hands. Many researchers, professors and research groups helped us with information, research findings and conversations about Vale's operations. We thank, especially, PoEMAS (Politics, Economy, Mining, Environment and Society Group), Organon (Nucleus for Study, Research and Extension in Social Mobilizations), GEPSA (Socio-environmental Studies and Research Group, CRDH-UFJF/GV) Center of Reference on Human Rights, the Rio Doce Research Network, GEPEMSSP (Research Group on Social Change in South and Southeast Para) and GEMAP/CPDA/UFRRJ (Study Group on Social Change Agribusiness and Public Policies). Many other social organizations, social movements, Institutes, and trade union from among the many groups that make up civil society also contributed. The quality of their commitment, through analyses, research and detailed reports, shines through the Unsustainability Report, giving voice to the communities and workers who live amidst Vale's mining operations.

Special thanks are given to Justice on the Rails (Justiça nos Trilhos), Global Justice (Justiça Global),

the Movement for Popular Sovereignty in Mining (MAM), Institute of Alternative Policies for the Southern Cone (PACS), Margarida Alves Collective, the Missionary Indigenous Council (CIMI), and Inconfidentes Metabase Union, all based in Brazil. We also thank Mozambican civil society organizations for their contributions, namely, AAAJC (Association for Community Support and Legal Assistance), ADECRU (Academic Action for the Development of Rural Communities), JA (Environmental Justice of Mozambique) and UPC (Rural Provincial Union).

We dedicate this report particularly to the communities and workers that, even while they were suffering pressures and threats from Vale, did not give up the fight for life and for nature. It is necessary to resist and to face this monster that opens holes, destroys nature, and steals our common goods. We have included here mainly groups, communities, unions, and organizations from Brazil (Minas Gerais, Espírito Santo, Pará, Maranhão e Rio de Janeiro), Canada, and Mozambique. All the systematic information was taken from newspaper articles, magazines, reports, articles, and statements, from governmental documents and pieces related to Vale (all this material will be referenced throughout the text), as well as interviews with experts, communities, and activists).

What's the Value of Vale?

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Vale: Profits before life

In 2020, in the midst of the COVID19 world pandemic, Vale was the third largest corporation in the global mining market with a market value of 54 billion dollars⁴, according to the website *Mining.com* that specializes in the mining sector. Only the British-Australian-owned BHP and Rio Tinto surpassed it. The numbers that got the shareholders and the market so excited, also reveal a permanent history of looting natural resources, environmental destruction, and exploitation of workers.

Contrary to what it claims publicly, Vale is really neither Brazilian, nor part of Brazil's national patrimony. The trajectory of Vale gets confused with Brazil's recent history. In 1942, at a moment of nationalist efforts for industrialization, President Getúlio Vargas created the Companhia Vale do Rio Doce (CRVD). It was formed through federal government incorporation of the foreign-owned Companhia Brasileira de Mineração e Siderurgia and Itabira Mineração, both operating in Minas Gerais. Given the close relationship with the Brazilian State, Vale was "born inside out"⁵, directing its production to respond to the global demand for minerals during the Second World War. At first, its production was

directed toward England and the United States. From 1970, however, efforts were made towards expansion of its productive infra-structure and logistics, and the state company embarked on a period of exponential growth in exports to Asian markets, in particular Japan. From 1955 to 1975, export of Vale's iron ore and pellets grew 1.957%⁶!

In this way, Vale constituted itself as a national monopoly. It soon broadened its operations beyond mining, through subsidiaries that included cellulose, fertilizers, navigation and logistics services, steel, re-search etc. The weight of the company in the Brazilian economy was of such importance that, in the 80's, with Brazil still under a military government and in a time of crisis and State debt, Vale once again played a key role. In addition to reinforcing its action on the south axis, Vale expanded its operations to the north of Brazil, inaugurating the exploitation of iron in Carajás, and bauxite in the region of the Trombetas River, in Pará. The Greater Carajás Project included amplification of ore exploitation in the region, construction of a hydroelectric dam (Tucuruí), a railway linking Carajas to the port of Itaqui in Maranhao

⁴ According to Mining.com in March 2020.

⁵ KURY (1982) *apud* Armando Dall Costa in the article "A Vale no ovo Contexto da internacionalização das Empresas Brasileiras", from 2009.

⁶ Padilha (2020).

“On April 4th, 2021, on the conclusion of the inquiry opened in 2019, the CVM accused two former Vale executives, Fabio Schvartsman, former president of the company, and Gerd Peter Poppinga, former executive director of Vale’s iron and coal division, of non-compliance with their duties to the shareholders and investors, in relation to the incident of the tailings dam rupture at Córrego do Feijão mine, in Brumadinho (MG).”

state and the construction of steel plants along the railway line that cuts through Pará and Maranhão.

In 1997, Vale do Rio Doce Company was privatized, within the parameters of a National Privatization Program (NPP) being carried out by Fernando Henrique Cardoso’s government. The R\$3,3 billion privatization process was carried out despite great resistance and broad popular protests. The level of polemic resulted in several judicial questionings. In the period just before the privatization, the company had reduced its personnel, though a program of voluntary retirements, taken away labor rights, decreased salaries and expanded outsourcing⁷. In 2007, ten years after privatization, there were still about 107 lawsuits pending in the courts, both individual and public, all questioning the sale of the company. The biggest contestations were those claiming under-reporting of the assets of the company and undervaluing of its mineral reserves. Another major issue was a conflict of interest related to the evaluating company, Merrill Lynch. According to a technical report elaborated by the coordination of Post-Graduation and Research and Engineering of the Federal University of Rio de Janeiro (COPPE-UFRJ), Merrill Lynch was a partner of one of the interested buyers, global mining giant, Anglo-American.

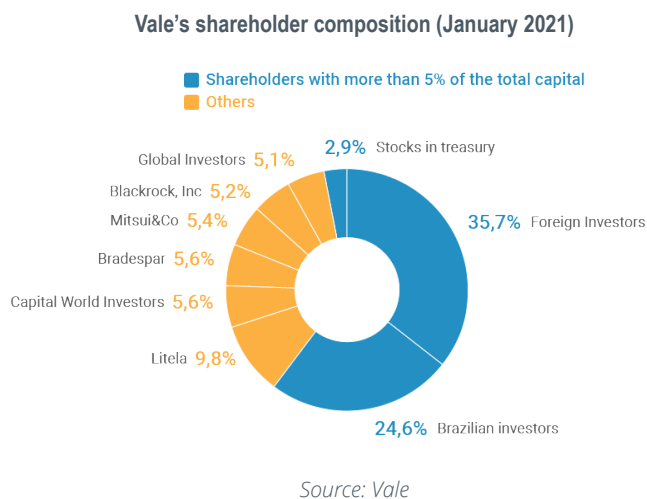
The privatization auction was won by Consortium Brazil, led by CSN (National Steel Company). Consortium members included Lítel Participações Inc., Elétron (from the Group Opportunity) and Sweet River (from the Canadian National Bank). This group went on to set up Valepar, a special purpose

entity that became the majority shareholder of Vale. In addition to the partners of Consortium Brazil, Valdepar eventually also came to include BNDESPar (right hand of the National Bank for Economic and Social Development, BNDES) and Investvale (Vale employees’ investment club). Benefitting from the favorable prices for iron in the years of the new millennium and seeking to maintain its position as world leader in the international market, Vale advanced into new territories at an accelerated rate. It enjoyed strong support from the Brazilian State (through public financing and huge tax exemptions). Because we are talking about mining, the negative effects also grew rapidly, resulting in violation of human rights, environmental devastation, pollution, and reproduction of social inequality. The rupture of tailings dams at Brumadinho (2019) and Mariana (2015) dams were not isolated cases, but the result of Vale’s *modus operandi* in the territories. They were not the first collapses and, unfortunately, they will not be the last ones.

Companhia Vale do Rio Doce changed its name in 2009 to Vale Inc. to approximate its corporate image to other global mining companies. Desiring to align its corporative and governmental structure to mining companies like BHP and Rio Tinto, Vale also implemented changes in its governance, trying to become a “real corporation”. In 2017, Vale signed off on a new agreement with its shareholders. This new agreement was consolidated in November 2020 with the dissolution of the old control group formed by BNDES (BNDESPar), Mitsui and Bradesco

⁷ MOURA, E.; SOARES, P.; VIEIRA, V.; GODEIRO, N. Vale do Rio Doce: nem tudo que reluz é ouro. Da privatização à luta pela reestatização. São Paulo: Editora Sundermann, 2007.

and the pension funds of state companies (Banco do Brasil's Previ and Petrobrás' Petros among others). As a result, Vale's shareholder composition became less centralized, meaning more new investors taking over control of the company, and the company directors no longer having full control. It is worth noting that, among all these changes, the arrival of new foreign investors, particularly special,



investment funds of asset managers like Capital Research Global Investors, Capital International Investors, Black Rock, Standard Life Aberdeen, Capital World Invest, Investco and Orbis Allan Gray. Adding in the minor shareholders, we can see that foreign shareholders already owned 55% of the company by January 2021, as illustrated below.

The destination of the special class shares (golden shares) is not yet clear as part of the arrangements

for the new deal. In the privatization process in 1997, the Brazilian Federal Government held 12 *golden shares*, giving them power of intervention over the company's decisions, particularly with respect to relocating company headquarters, possible sale of the company or the closure or sale of any step in the production/ commercialization chain involving the systems of mining/railway/port etc. Those shares give the Federal Government a unique right to intervene in Vale's strategic decisions. It is important to mention that up to today the Federal Government has never exercised the rights guaranteed by the golden shares. In 2020, the Federal Government consulted the Federal Court of Auditors (TCU) about mechanisms to extinguish these golden shares. TCU confirmed that extinguishing the shares would be conditional on the approval of the National Congress, including decisions concerning financial compensation.

The extinguishing of golden shares, the new shareholder composition and Vale's current corporative governance structure all represent a deepening of the privatization and denationalization of Vale. They also reflect a deepening financialization of Vale's operational logic, aligning productive activities to the creation of value for the shareholders and for the search for financial returns.

In the future, whenever you watch any of Vale's advertisements with a narrative about Vale's commitment to forests, to local communities and to a sustainable future, remember that the company's real commitment is to the search for profit and distribution of dividends among its shareholders. Whatever the cost may be.

Mission

Extract natural resources to the last drop, whatever the cost may be.

Vision

Be the Number One global mining company extracting natural resources with such expertise that neither environmental demands nor human rights claims raise our costs or get in the way of our mission.

Values

Profit is the only reason for being.

Exploit workers to the maximum.

Extract resources until they are exhausted.

Increasing exports trumps everything.

Make profit even at the cost of more poverty.

The territories belong to Vale, for good or evil.



The COVID-19 Pandemic: Transforming crisis into opportunities

As a good corporation, Vale has been taking full advantage of the crisis caused by the COVID-19 pandemic to increase its profits and improve its image. At the first signs of the pandemic, still in March 2020, Vale and other companies in the mining sector acted quickly to guarantee mining as an “essential activity”, thereby allowing them to continue normal operations. At the same time, the pandemic opened opportunities for the company to improve its corporate image.

According to the “COVID-19 Donation Monitoring” initiative, the mining sector was the third largest donor in Brazil, contributing R\$ 588 million (9% of the total). Vale, alone, was responsible for the donation of R\$ 500 million, applied to the purchase of 5 million rapid test kits for COVID-19 from China and personal protective equipment. The donation was announced euphorically during the daily Ministry of Health press conference reporting on public actions taken against the pandemic.

In Brazil, Public Decree 10.282 was issued on March 20, establishing the public services and essential activities to be maintained during the pandemic. Mining was not included in the first publication. Five

days after the announcement of Vale’s donations, and after series of meetings held among representative entities of the mining sector, such as the Brazilian Institute of Mining, and Ministry of Mines and Energy (MME), another decree was approved. Presidential Decree 10.329/2020 was approved on April 28th, 2020. It included mining among the essential activities (including research and extraction). The Ministry of Mining and Energy gave assurances to the Mining Observatory that that what turned “mining into essential activity would be its own essentiality”. Allegedly mining would be indispensable because it would provide input for the sectors of food, medicine, packaging, parts, and equipment. In an interview with the Mining Observatory, Bruno Milanez (Professor at the Federal University of Juiz de Fora) pointed out that by deciding that mining was an essential activity, MME created an exception to the rule. Mining is an activity operating on a large scale, with a long chain of extraction, processing, stocking, logistics and transformation. Plans for a reduction of mining activities down to the essential, would accompany the observable reduction in demand for mineral products during the pandemic. Furthermore, in Brazil, a good part of mining production is bound for exportation (80% of gold and copper and 70% iron ore).

This fact alone would create doubt about whether mining is really essential. At the same time, it is not clear why minerals like gold should be considered essential in the combat against a health crisis.

With its mining operations in full swing justified by their designation as “essential”, Vale closed the year of 2020 with a profit of R\$ 27 billion, reversing the loss of R\$ 4,9 billion in 2019. These results allowed distribution throughout the year of R\$ 34,2 billion in dividends to shareholders (R\$ 12,4 billion as profit return in the first semester of 2020 and R\$ 21,8 billion referring to the second semester results). Taking those numbers as a base, Vale’s donation to the COVID-19 appeal seemed to be an excellent transaction. The donation represented only 1,85% of the exorbitant profits obtained during the pandemic and generated an incalculable payback in image. This was a recurring trait in the action of mining the companies during the pandemic. In June 2020, a group of organizations and the National Committee in Defense of Territories Facing Mining released a report. The title of the report was: “Voices from the Earth: how the global mining industry is benefitting from the COVID-19 pandemic”. The report documents practices employed by mining companies to make profits from the pandemic⁸.

Growth in profits was obtained at the expense of their employees’ health and the increased risks to which their employees were exposed. The Vale 2020 Administrative Report indicates that because

Vale’s advertisement with its main actions in support to the combat against COVID-19.

Source: TAFFARELLO et al. (2020)

of the pandemic, the company has implemented a working-from-home program with more than 15 thousand employees working remotely (21% of its workforce). The administrative sector is still working from home, but groups of skilled workers are back to routine production (mines, truck stations, factories, housing, and canteens etc.)⁹. The company claims that it has created basic security protocols such as: the use of masks, hand washing and temperature checks. But that has not been enough. On March 26th, 2020, videos and photos obtained

by Intercept Brazil and from Mining Observatory showed workers and outsourced employees in large gatherings and in direct contact with each other in Pará and in Minas Gerais¹⁰. Workers’ representatives sounded the alarm about the need to stop the activities but were not heeded. Some judicial actions were taken to interrupt mining for a couple of days, but they soon lost their effect. Minas Gerais’ Government Department of Labour (MPT-MG), for example, prohibited activities in Itabira (especially in the mines of Conceição, Cauê and Periquito). In

To provide test kits and PPE (Personal Protective Equipment) for health professionals, we leased **13 planes** that brought **600 tons** of products straight from China. A total of **116 of our employees** were involved in this operation, in Brazil and in China.



5 million
rapid test kits were donated to the Federal Government

15,8 millions
of Personal Protective Equipment to the Ministry of Health

- 2,54 million N-95 masks
- 10,7 million disposable surgical masks
- 2,3 million aprons
- 216 thousand gloves
- 4,5 thousand goggles



Main actions to support the combat against COVID-19

3 Campaign Hospitals
were built in Paraupabas (PA), Açailândia (MG) and Rio de Janeiro;

3 Refurbished Hospitals
in Minas Gerais (Belo Horizonte) and in Pará (Paraupabas);

R\$ 2 Million
donated to the State Neurological institute, which became a reference point for hospitalization and treatment for Covid-19 in Rio de Janeiro.

US\$ 1 million
was destined to “Vale COVID-19 Challenge” fund, to support innovative solutions for prevention and treatment of COVID-19. In partnership with Israelita Albert Einstein Hospital and Rede Mater Dei de Saúde;

14,5 million
supplies given directly to institutions, between test kits and PPE for the six states where the company operates (MA, PA, RJ, MS, ES and MG).

10 thousand indigenous families
received kits of cleaning materials in MG, ES, PA.



Fun Fact
All the equipment donated was transported in **25,975 boxes** that, together, weighed the equivalent to **308 cars**.

8 National Committee in Defense of Territories before mining Activities (2020).

9 Zucarrelli (2020).

10 The registers were made in Vale’s North Corridor, In Pará, where there are the operations at S11D, Carajás, Salobo 3 and Sossego (in Marabá, Parauapebas and Canaã) and in Minas Gerais (in Congonhas Ouro Preto and Mariana).

the Inspection Report, MPT-MG identified irregularities that put workers' lives and health at risk. In an article in June 2020, Mining Observatory, pointed out that of the 361 cases of COVID-19 confirmed in the town of Itabira, at least 188 cases were employees of the mining company 11.

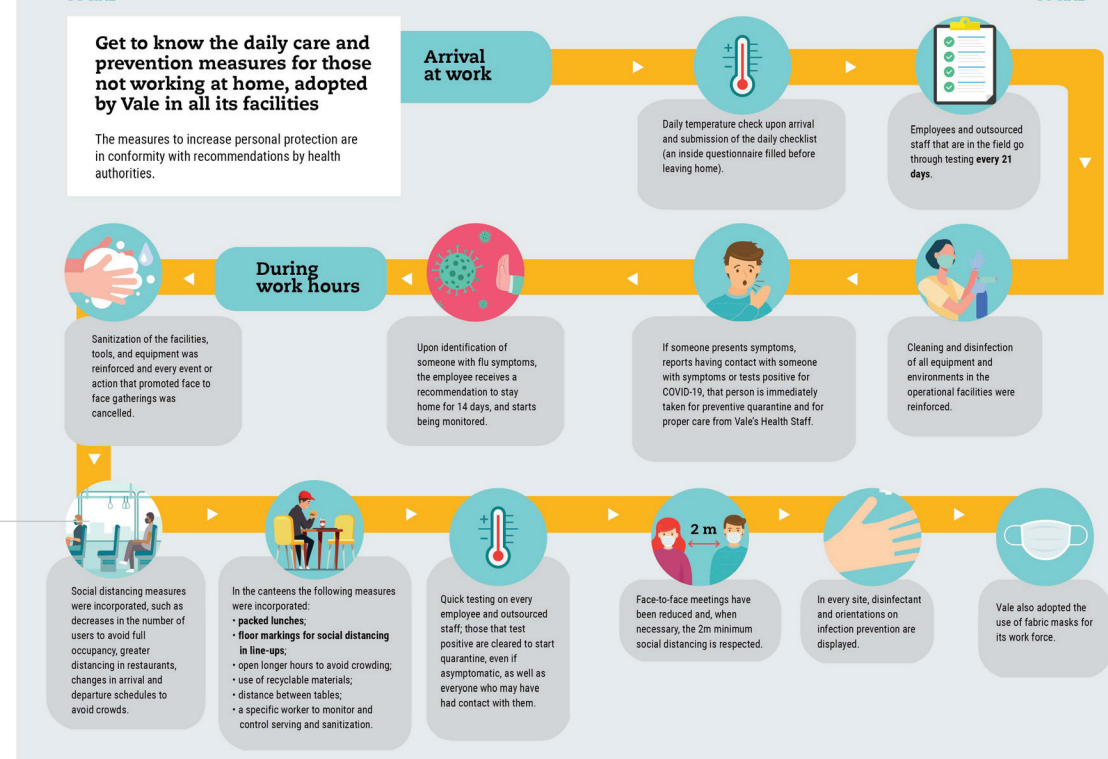
Vale, then became a vector for the spread of COVID-19, which overburdened the public health services and put at risk the lives of both permanent and outsourced workers as well as adjacent communities. The data analysis from SUS 12 about the dissemination of COVID-19 in Brazil shows that, in Minas Gerais, out of 30 towns with the highest contamination by COVID-19 in 100 thousand habitants, 5 of them had operations owned by Vale: Congonhas, Itabira, Mariana, Nova Lima and Itabirito. (All of them had indicators that showed double, or more than the ones observed in the state capital, Belo Horizonte).

The map put together by the International Articulation of those Affected by Vale with data from Minas Gerais (regions of Itabira and Ouro Preto), shows that, until February 22nd, 2021, the towns with the highest number of cases of contamination by COVID-19 were the ones that held mining activities.

On the one hand, Vale emphasizes its role in the combat against the pandemic with donations and a great deal of PR propaganda. On the other hand, the company continues to deny the most basic rights to the communities affected by the rupture of the dams. In Paraopeba River basin, after the spillage

Vale's advertisement with its main actions in support to the combat against COVID-19

Source: TAFFARELLO et al. (2020)



caused by Vale, many communities continued on without having access to drinking water. Countless requests by the affected communities were formally presented to the Public Prosecutor's Office of Minas Gerais, the Public Defender's Office of Minas Gerais, the Public Prosecutors Office, and the Federal Public Defender's Office soliciting Vale to provide water for the families. A court decision was taken on May 31st, 2019, that obligated Vale to provide water in adequate quantity and quality to those affected, whether they expressed themselves individually or collectively. But there was no compliance from Vale. A request from the offices of the State Prosecutor and State

and Federal Public Defenders issued on June 22nd, 2020, confirms that until that moment, at the peak of the pandemic's first wave, thousands of people from mining communities were still without access to water, increasing the risks these families were exposed to, and threatening the region's public health.

Parauapebas, In Pará, also experienced an outbreak of COVID-19, and a collapse of its healthcare system. There were press reports on the difficulties faced by Vale employees to diagnose the disease and to get tested, as well as company attempts to hide COVID's contagiousness in the work environment. That was the case for 35-year-old Vale employee,

11 Angelo (Mining Observatory, June 3rd, 2020).

12 Sistema Único de Saúde, Brazilian public health system.

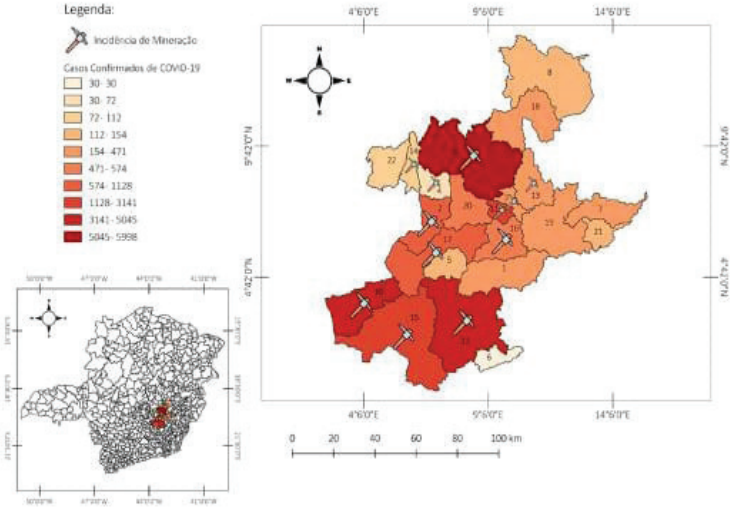
Evaldo Fidelis 13. Fidelis only managed to get a COVID test in Vale's Yutaka Takeda hospital 10 days after the beginning of symptoms and only after much persistence. According to Evaldo, the Vale health department took 15 days to contact him after he reported his first symptoms. Because of that, workers continued to be contaminated, spreading the disease, and, many times, not even having the right to an accurate diagnosis. Evaldo says: "I felt like they were stalling, to see if I would give up". The situation was so serious that, on May 25th, 2020, the OAB (Brazilian Bar Association) in Parauapebas forwarded a letter to Vale, requesting information about the severity and scope of the pandemic in the city, they specifically requested information on the number of Vale's workers testing positive for COVID-19.

Maintaining Vale's operations in Pará has also been associated with the incidence of COVID-19 in Indigenous communities. The Xikrin do Cateté Indigenous Territory is surrounded by Vale installations, In June 2020, it had the second highest death rate among all the 65 Indigenous areas in Pará. On the one hand, these Indigenous people are already more at risk of getting COVID-19 because of chronic health issues (diabetes, high blood pressure and heart conditions). Their vulnerability is increased by the heavy metals in the Cateté River, the result of Vale's mining activities in Onça Puma. On the other hand, Parauapebas is the town closest to the Xikrin do Cateté territory and it went through a huge explosion of COVID-19 cases. The Indigenous

people that depend on the town to get medical services, to shop, to go to the bank, were being contaminated as they went around town. The deaths because of COVID-19 attacked the eldest, known as *warriors*, who provide leadership and have responsibility for maintenance of cultural traditions 14.

Public data corroborate Evaldo Fidelis' feelings and shed light on the situation lived by the Xikrin. In June 2020, in the apex of the first phase of the pandemic, from the 499 deaths registered in Southeast Pará southeast, 457 were in municipalities that had mining activities. Moreover, 92% of the 17.732 confirmed cases, were in mining towns 15. On March 14th, 2021, five of the twelve towns in Pará with the highest rates of contamination from COVID-19 per 100,000 inhabitants, were also headquarters for Vale's mines (Parauapebas, Canaã dos Carajás, Ourilândia do Norte e Curionópolis). On March 25th, 2021, once again the Parauapebas' OAB subsection, this time joined by and the Medical Association of Carajás (AMC), forwarded an official request to Vale, asking them to carry out a temporary shutdown of mining operations in the municipality, because of the accelerated rate of COVID-19 contamination by the population and the total collapse of the health system.

In Mozambique, Vale has also taken advantage of the pandemic to boost its image. In April 2020, It announced a grant of humanitarian aid of US\$ 2 million to combat COVID-19. This action earned them a merit certificate issued by the provincial government of Tete. Between March and April of



Municipalities

- 1- Avinópolis; 2- Barão de Cocais; 3- Bela Vista de Minas; 4- Bom Jesus do Amparo; 5- Catas Altas; 6- Diogo de Vasconcelos; 7- Dionísio; 8- Ferros; 9- Itabira; 10- Itabirito; 11- João Monlevade; 12- Mariana; 13- Nova Era; 14- Nova União; 15- Ouro Preto; 16- Rio Piracicaba; 17- Santa Bárbara; 18- Santa Maria de Itabira; 19- São Domingos do Prata; 20- São Gonçalo do Rio Abaixo; 21- São José do Goiabal; 22- Taquaraçu de Minas.

Source: Secretaria Estadual de Saúde de Minas Gerais (Information referring to 01/11/21).
Created by: Marcelo Bruno Ribeiro Barbosa and Sara Abreu on January 11th, 2021.

13 Angelo (Mining Observatory, June 3rd, 2020).
14 HOEFMEISTER, N.; WENZEL, F. Uma Morte a cada Quatro Dias: povo Xikrin é o mais afetado pela COVID 10 no Pará. A Pública, June 17th, 2020.
15 MAM. Eixo Carajás, no Sudeste do Pará, tem números alarmantes de contaminação pela COVID 19. Veja balanço. Pará: MAM, June 18th, 2020.

2020, Vale chartered a plane to repatriate about 700 Brazilian workers and their families who were based in Mozambique. But this did not stop the coal mine from maintaining full operations 16. In the village of Moatize itself, the arrival of the pandemic has not been easy for the communities neighboring the mine. While the community residents are required to stay home, use masks, and maintain social distancing, they are also forced to breathe in coal dust on a daily basis. They also live with fear of staying in their homes while Vale continues blasting operations to extract coal. At the beginning of the pandemic, when they tried to flee from their houses to escape the explosions, they were harshly reprimanded by police in charge of enforcing stay home policies, according to reports from neighbors. Vale's preoccupations - above all else - are profit levels and corporate image. While it boasts about its good deeds during the pandemic, workers and communities that live with its operations are subjected to high risks of contamination by Covid-19 and have their most basic rights denied 17.

16 Lusa (2020).

17 TAFFARELLO et al. (2020).

Pará towns with the highest index of contamination by COVID in 10 thousand habitants (March 15th, 2021)

	Name	Population 2000	Accumulated Cases for 100 thousand
	Pará	8.690.745	4.451
	Belém	1.499.641	5.200
1	Jacareacanga	7.590 (5)	22.381
2	Parauapebas	213.576	16.998
3	Canaã dos Carajás	38.103	16.810
4	Faro	7.070	12.705
5	Ourilândia do Norte	33.335	11.385
6	Tucumã	40.136	10.896
7	Vitória do Xingu	15.279	9.773
8	Brejo Grande do Araguaia	7.368	9.770
9	Curionópolis	17.846	9.365
10	Óbidos	52.306	9.199
11	Redenção	85.563	8.929
12	Oriximiná	74.016	8.906

Source: Painel COVID 19 Brasil

“As the federal government does not have health policies, the mining company took advantage of this void and saw an opportunity use the power it holds to donate and bring planes from China, its biggest ore buyer. For those looking in from outside, the spotlight is on everything that seems wonderful, but the worker in the mine is the one that knows the truth. They have to stay sick and quiet, if they speak, they suffer boycott”

Vale's worker in Pará¹

¹ Article in Observatório da Mineração, named “Infecção por Covid-19 explode entre trabalhadores da Vale no Pará e cidade entra em colapso (May 27th, 2020).

Minas Gerais' towns with the highest index of contamination by COVID in 10 thousand habitants (March 15th, 2021)

	Name	Population 2000	Accumulated Cases for 100 thousand
	MG	29.771.656	4.549
	BH	2.512.070	4.911
1	Araporã	6.931	19.202
2	Itabirito	52.446	17.002
3	Extrema	36.951	15.564
4	Santa Rita do Itueto	5.457	12.807
5	Pirapetinga	10.772	12.556
6	Nova Lima	96.157	12.217
7	Itueta	6.063	12.097
8	Santana do Paraíso	35.369	11.952
9	Uberlândia	699.097	10.707
10	Itapeva	9.881	10.672
11	Vazante	20.642	10.296
12	Conceição do Mato Dentro	17.503	9.976
13	Rio Paranaíba	12.335	9.591
14	Camanducaia	21.801	9.164
15	Ibitiura de Minas	3.492	9.117
16	Lajinha	19.918	8.869
17	Mariana	61.288	8.860
18	Santa Rita de Minas	7.268	8.819
19	Ubaporanga	12.493	8.724
20	Antônio Prado de Minas	1.587	8.698
21	Lagoa Formosa	18.111	8.642
22	Bandeira	4.766	8.634
23	Tombos	7.850	8.589
24	Alvarenga	3.844	8.549
25	Itabira	120.904	8.524
26	Capinópolis	16.234	8.489
27	Durandé	7.870	8.456
28	Congonhas	55.309	8.261
29	Jaguarapu	3.142	8.075
30	Coronel Fabriciano	110.290	8.074

Source: Painel COVID 19 Brasil

Timeline

2015

Vale is investigated and prosecuted for slave labor in Itabirito (MG)

Mar

309 drivers who were transporting iron ore using a private road that connects two mines belonging to the company were found to be working in degrading conditions and under threat.

Vale had a mine interdicted and was prosecuted for 32 working infractions for submitting drivers to work conditions analogous to slavery in Itabirito (MG)

Rupture of Mariana Dam

Nov

19 deaths

Inspection held by ANTT confirms problems on the crossing roads of EFC throughout Carajá's Corridor.

Private security guards attack rural workers in Canaã (PA)

2016

Nov

Inaugural year of the S11D project.

Guards hired by Prosegur (private security company employed by Vale), attacked rural workers with guns in São Luiz farm, in Canaã (PA), where there is an encampment. The 300 families ended up being evicted.

2017

Demonstration in Mozambique against enclosure of lands by Vale ends up with one person pursued and killed

Hussen Antonio was shot in his home located near the site of a protest organized by residents of Nhanchere, on the outskirts of Moatize. The protesters were demanding access to the interior of an area leased to Vale, where they had traditionally gathered firewood and pastured their cattle.

2018

14 thousand railway sleepers made with native wood from the Amazon are seized in Vale's patio in Açailândia (Maranhão)

May

8

Infraction notice issued with a fine of 4,3 million.

Collapse of a walkway under construction over EFC in the town of Capim-Açu, town of Arari, Maranhão

Rupture of Brumadinho Dam

2019

Xikrin Indigenous people from Cateté open new case against Vale's operations in its Salobo Mine.

25

Jan

259 Deaths and 11 missing.

10

Jul

There were no studies of the Indigenous component in the licensing process. The Xikrin people's right to consultation was not respected, meaning non-fulfillment of ILO Convention 169.

2020

Feb

Ship sinks in in Maranhão

Apr

11

First death of a Vale worker from COVID-19

Sep

The ship “Wakashio” comes aground on a coral reef off the coast of Mauritius, eventually leaking about 1000 tonnes of heavy oil

Wakashio, a ship controlled by Mitsui, left China (Tianjin) loaded with fuel on its way to Brazil, where it would dock in Tubarão Port, operated by Vale. In Brazil, the ship would be laden iron ore for transport to China. Mitsui is one of Vale’s shareholders and its partner in many projects.



Children get hurt by a buried land mine in a settlement built by Vale in Cateme (Mozambique)

27

Nov

1 child died and 4 were severely wounded.

The settlement was built over an area known to have been mined.

On the Path to destruction

- 23 **Rupture of the dam at Mariana and contamination of Doce River**
- 31 **Rupture the dam at Brumadinho and contamination of Paraopeba river**

Rupture of the dam in Mariana dam and contamination of Doce River

Vale claims that “all activities carried out in operations executed by Vale are backed up by specific procedures aimed not only at successful execution but also at identification of potential dangers and risks associated with the activity. This includes definition of the critical control measures necessary to maintain acceptable levels of risk.”¹⁸ The disasters provoked by the rupture of Fundão dam, in Mariana, and B-I, in Brumadinho, both in Minas Gerais, prove the opposite. Their effects and devastating consequences will linger for a very long time. Not only have the damages not been repaired or compensated, the very “repair measures” are, themselves, multiplying and compounding the damages.

Neither of the disasters can be called an accident. Their causes and explanations have to do with Vale’s political and technological choices in relation to how to extract and dispose of the tailings waste resulting



▲ Gateway to the city of Barra Longa (MG)

▼ Destruction caused by the rupture in Fundão dam, Mariana (MG)

Photo by: Daniela Fichino, Justiça Global. November, 2015





Paracatu de Baixo, Mariana's District (MG), November, 2015

Photo by: Daniela Fichino, *Justiça Global*

“When we were tiny babies, we learned how to swim in the river (Doce or Watu), now, they bathe in a 1000-liter water reservoir. All will be educated to never forget what Vale did to the river. As long as they have blood in their veins, they will fight.”¹

Shirley Krenak, Krenak Indigenous woman and affected by Vale

¹ Quote cited in “O banho no rio, restou aos índios a caixa d’água”, article published by ISA.

from mining. Looking to better its results on the market, Vale keeps on intensifying ore extraction in ways that maintain steady profit levels and compensate, whenever needed, for falls in global market prices. These corporate practices oriented towards profit at any cost increase socioenvironmental risks. They guarantee gains in revenue for Vale and transfers of damages to the general public 19.

“One aspect little taken up in debate, however, is the opportunities these disasters create for the business world” 20. The rupture of Fundão dam, in Mariana launched a neoliberal governance model for conflict resolution and gave birth to a market and industry for reparations, with Fundacao Renova as its poster child. The rupture of B-I dam in Brumadinho resulted in negotiation of a deal between Minas Gerais’ state and Vale, which was concluded without any involvement from the victims. The deal took for paid up all the diffuse damages (most of them crimes against the environment), even before those damages could be assessed. Blank checks that legitimize the mining company’s criminal actions.

On November 5th, 2015, Fundão dam, operated by Samarco mining company ruptured. Samarco is a joint venture between Vale and BHP Billiton, a huge, Anglo-Australian mining company, considered the biggest in the iron metals sector. The rupture took place in the town of Mariana, in Minas Gerais. In just a few minutes, 44 million cubic meters of waste reached the district of Bento Rodrigues, destroying

it completely. The mud spread, burying houses in the districts of Paracatu de Baixo, Camargos, Bicas, Ponte do Gama, Paracatu de Cima, Pedras and Campinas before arriving at the mouth of Doce River.

The next day, November 6th, the flood of mud reached the neighboring town, Barra Longa, causing more destruction of crops and hitting the town’s central area, besides the villages of Barretos and Gesteira. Even though the mud had only reached Barra Longa 14 hours after the rupture, this city’s population was not informed of the accident by the mining company or by the government. The mud destroyed houses, churches, schools, corrals, bridges, crops and animal barns 21.

The mud travelled 682 km through the rivers Gualaxo do Norte, Carmo and Doce, crossing 45 towns in the states of Minas Gerais and Espírito Santo, until it reached the mouth of the Doce River on November 21st, 2015, 16 days after the rupture. It entered the sea for a stretch of 168 km² starting from the village of Regência Augusta. Given the extension of the spill, the Espírito Santos cities of São Mateus and Aracruz were hit along the coast. When it contaminated the sea, the mud also contaminated the Abrolhos Complex, a marine protected area. 22.

Thirteen of the twenty people who died were outsourced workers employed by Samarco. The other six were from the first hit communities. One of the fatalities was a baby still in gestation.

19 As analyzed and demonstrated by Milanez et al (2015).

20 According to Andréa Zhouri (professor and researcher at UFMG) in a column from Flea de São Paulo (February 9th, 2021).

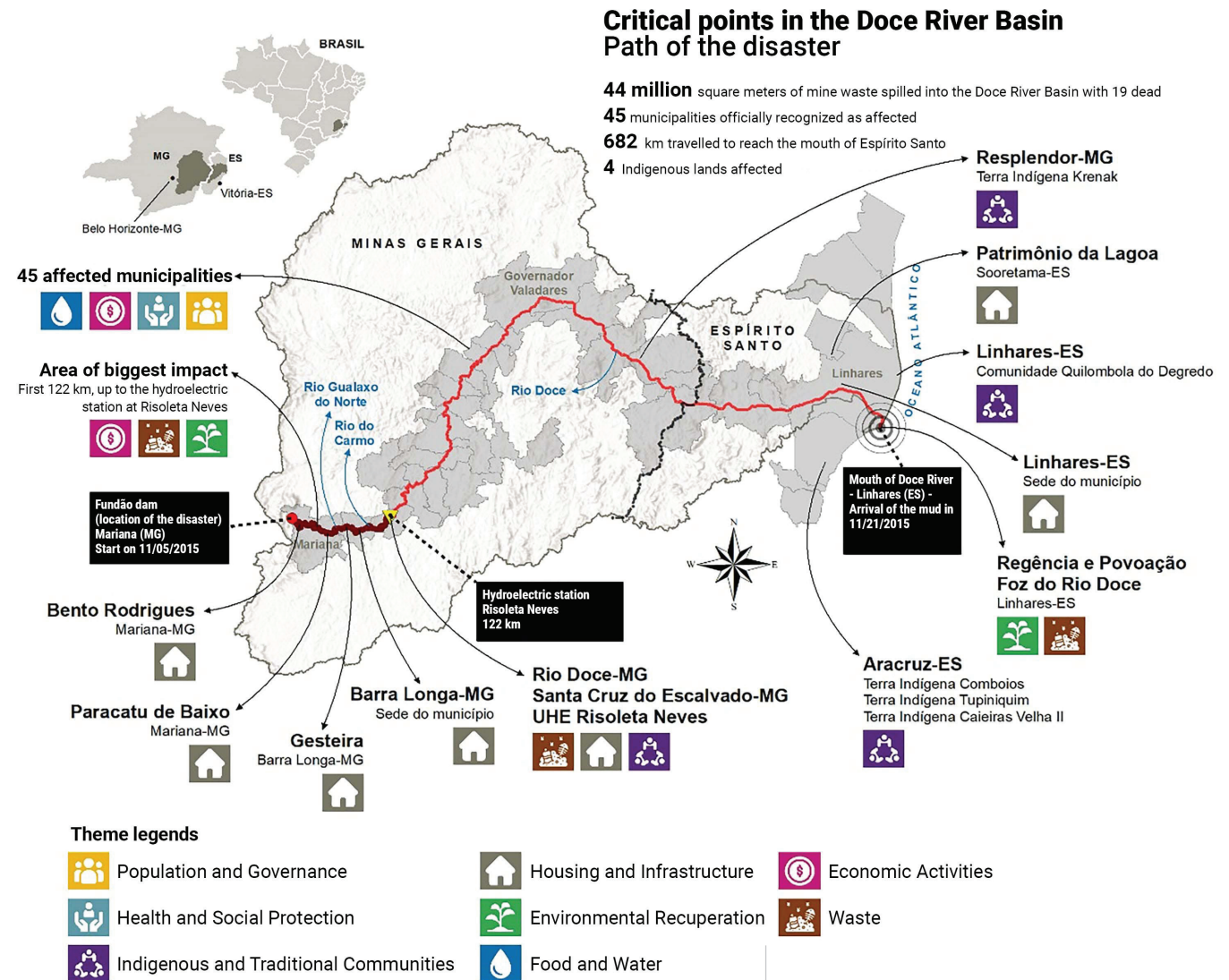
21 *Justiça Global* (2016).

22 According to Miguel Angelo in an article from Mining Observatory from July 4th, 2018.

The mother suffered a miscarriage after her son drowned in the mud. Over 1.200 people became homeless. The map shows the pathway of the mud, identifying critical points, including places where traditional people and communities were located and points of cultural and historical importance.

The first response by Vale was to deny any responsibility for the disaster. Investigations by the Federal Police, however, revealed that money that should have been invested by Samarco in maintenance of Fundão dam was diverted to increase ore production 23, thereby elevating the risk level of the dam.

“The report by Cleary Gottlieb Steen & Hamilton LLP published in August 2016, revealed that three serious incidents had occurred prior to the rupture of November 2015. The incidents were related to the construction process of the dam, known as ‘upstream lifting’ when part of the toxic waste (mud) is used in the actual structure and expansion of the dam. It is the cheapest method for construction of this type of dam. An ‘improvisation’ carried out by Samarco, in 2012, on the left jamb of the dam, area where the rupture took place, is linked to the causes of the tragedy. The company should have closed and built a duct, before raising the ‘height’ of the dam (to contain even more mine waste). In order to save time, however, and to ‘maintain full operations’ during this period, the alignment of the dam on the left jamb was indented from its former position. This put the landfill directly over the mine waste deposited. With that ‘all the conditions necessary for a liquefaction to happen were in place’ according to an excerpt from the report



made by Norbert Morgenstern, Steven Vick, Cássio Viottu and Bryan Watts, internationally recognized experts on construction of mine tailings dams” 24.

Vale’s dam presented many problems. The first operations license for Fundão dam was obtained by Samarco in 2008 and, at the moment of the rupture, it was being renewed. At the time, the risk analysis done by Vale classified the possibility of rupture at the lowest level: “unlikely” 25! In addition, Samarco was not in compliance with dam security legislation: it did not have a warning siren system, nor did it have trained personnel available to assist the community in the case of an emergency. With no effective emergency plan in place, the residents of Bento Rodrigues had to organize themselves, reverting to self-help to escape the mud flow.

More than 3000 types of damages calculated, and millions of people affected

With the rupture of the Fundão dam, Doce River became silted, and riparian forests were destroyed. A river died and with this came deaths of plants and animals. The history of many territories that were close to the dam ended up in the mud. According to technical reports from IBAMA, the river was contaminated with heavy metals and components with high toxic levels such as: Aluminum, Barium, Calcium, Lead, Cobalt, Copper, Chrome, Tin, Iron, Magnesium,

Manganese, Nickel, Potassium and Sodium 26. A month after the disaster, about 9 million tons of fish were found dead on the banks of the Doce River. At least 1.469 hectares of land were destroyed. It is estimated that 3,2 million people reside in the Doce River Basin, all of them potentially affected 27.

Five months after the dam ruptured, Fundão’s tailings were still leaking into the Doce River Basin. The dam at the Candonga Hydroelectric Station (located in the municipality of Rio Doce, MG) served as a barrier to hold back part of the mud, putting at risk the structure of the dam (not built for this purpose) and interrupting power supply for the entire region. Under pressure to come up with a solution, Samarco decided to build a dam (Nova Santarém) and a dike (S4) in the Bento Rodrigues area to contain the mud. This was done without any studies or technical reports presented and, certainly, without consulting the affected community. Small legal battles were mounted to stop the construction work, which would flood a large part of the district of Bento Rodrigues and further alter the landscape and spatial planning without going through any mechanism of social control. A decree from the governor of Minas Gerais (Fernando Pimentel), in 2016 resolved the issue in Samarco’s favor. The affected people were against the decision, but they were not heard. Now, Bento Rodrigues is flooded. It is important to bear in mind that in the 2014 elections, Vale donated R\$ 19.32 million to the

“How do you bring the dead back to life?”¹

Dejanira Krenak, Indigenous and Matriarch of the Krenak ethnicity and affected by Vale

1 Quote cited in “O rio morreu”, article published by “Uma gota no oceano”.

Workers’ Party (PT), collaborating with the campaigns of former president Dilma Rousseff and Fernando Pimentel’s 28. This, by the way, is an old practice of the mining company, which tends to finance campaigns of almost all parties and candidates.

The mud has decisively damaged economic activities and energy generation in the entire Doce River Basin. In the days following the disaster, several municipalities declared a state of public disaster resulting from the lack of water and power. Fishermen, riverbank dwellers, farmers, land reform settlers, traditional peoples, urban dwellers and small businesses were all prevented from working because of the mud. Reports by the Getúlio Vargas Foundation (FGV) 29 show an overload on public services such as social assistance, health, security, and education. In the years following the spill, epidemics of dengue fever proliferated and intensified along the Doce River Basin. The damage

24 Guimaraes (2019).

25 Milanez *et al* (2015).

26 Environmental Conflict Observatory of Minas Gerais (2020).

27 Milanez *et al* (2015).

28 Milanez *et al* (2015).

29 Federal Prosecutions Office, Views and Reports in the Samarco Case.

classification 30 constructed by Cáritas, an independent technical advisory service for the affected people in the municipality of Mariana, identified more than 3,000 types of damage caused by the rupture in Mariana municipality alone. Up to today, the work of surveying the damages and autonomous construction of reparation projects has not even begun in 14 of the 19 territories affected by Vale.

The delay in the reparation process has been causing serious damage to the health of those affected. The tailings dust that plagues the town of Barra Longa, where large volumes of tailings were deposited, is only one of many examples. As GESTA (Studies in Environmental Issues Group) revealed in 2016, a child just over one year old suffered from serious allergic and respiratory problems and required constant medication and medical attention due to this dust. Five years after the disaster, residents of 45 municipalities in Minas Gerais and Espírito Santo still have their incomes compromised. Families that were forced to leave their homes still live in temporary accommodation rented from Samarco because the Vale resettlement has not yet been proceeded. Some families have moved two, three or more times while waiting for the resettlement. The period estimated for the handover of new houses was the first half of 2019. By February 2021, however the Renova Foundation had still not concluded the project, clearly not complying with the deadline set by the courts 31.

In addition to the delays, the resettlements of Bento Rodrigues and Paracatu de Baixo are being planned according to an urban model, even though they are rural communities. “The land of Lavoura which was chosen for the reconstruction of Bento belongs to the steel company Arcelor Mittal. It is a vast area with eucalyptus plantations, which may have compromised the quality of the soil and water. In addition, the area houses an open-air landfill, which also compromises the environmental conditions for possible future agricultural use” 32. How will families be able to continue farming on such land?

Alcoholism, depression, and anxiety are among the damages related to the spill and the slowness of the reparations process. The people and groups who are demanding compensation from Vale feel constant pressure to negotiate their rights with the companies and their battalions of lawyers. “The institutional treatment of the affected people by the company and State institutions is one of the main factors that engenders social suffering among those affected by the disaster” 33. How to fight against a powerful giant like Vale?

Environmental Racism

The deep ethno-racial asymmetries that organize Brazilian society generate an enormous inequality of power among the parties involved in this conflict. The selective absence of regulation and inspection by



Houses and cars destroyed by the rupture of the Mariana dam

Photo by: Daniela Fichino, Justiça Global



Bento Rodrigues, District of Mariana (MG), November 2015

Photo by: Daniela Fichino, Justiça Global

30 A damage matrix is a document that tries to number and price the different types of damages direct and indirect, and reparation images.

31 Alves (2021).

32 Environmental Conflicts Observatory of Minas Gerais (2020).

33 Environmental Conflicts Observatory of Minas Gerais (2020).

the State leaves the path open for mining companies to define the destinies of mining territories and the people who live in them. Institutionalized environmental racism, well-structured and institutionalized, results in choosing to build dangerous tailing dams, built with cheaper (but riskier) methods for treatment and storage of tailings, in those territories that are home to poor, black and Indigenous populations.

The district of Bento Rodrigues, where approximately 85% of the population is black, is located a little over 6 km from the collapsed tailing dam. Paracatu de Baixo with a black population of 80 percent, is just over 40 km from the epicenter of the disaster. The village of Gesteira, approximately 62 km from Fundão dam, has a black population of 70.4 percent and the municipality of Barra Longa with a black population of 60.3 percent, is about 76 km away from the dam 34. The rupture of the dam affected the population of Minas Gerais as a whole, but it harmed and destroyed the lives of black and Indigenous people most severely.

Four Indigenous lands were affected: Krenak, Comboios, Tupiniquim and Caieiras Velha II, in addition to the Quilombola Community of Degredo, in Linhares, Espírito Santo. All these traditional peoples and communities are fighting not only for measures of reparation and compensation. They are also fighting for their belief systems and their cultural practices and deep relationship with the river to be considered in the negotiations with the mining company. As Ailton Krenak explains:

“Watu, our name for that river, is an entity; it has a personality. It is not a ‘resource’ as Vale’s rogue engineers, government administrators, the National Water Agency and the Basin Committee designate it [...] Even if the company is forced to supply people in a place with mineral water, it seems like you are putting the people in a balloon, administering an IV and oxygen, leaving them in a coma like the river. The river is in a coma. In a way, this restlessness that people are now living on the riverbanks leaves them in the same symbolic state of coma that the river body is in.” 35

To the Krenak people, the death of the Watu (the Doce River) is like the murder of a relative. This is what the Indigenous people are fighting against. The murder of the river is also the genocide of humans who live in communion with it. It means the loss of territory for recreation and for cultural resurgence. On November 13th, 2015, the Krenak set up a blockade on Vale’s Vitória-Minas Railroad, in protest against all the forms of discrimination accompanying the process of (non)reparation.

Another important victory in this struggle against the world’s largest mining companies was achieved by the quilombolas of Degredo, in Linhares, in the state of Espírito Santo. The Degredo community managed to form its own technical advisory committee. It will be the quilombolas of Degredo themselves who will be in charge of guaranteeing the community’s duly informed participation and the development of reparation projects. As Simony Silva de Jesus, general

coordinator of the Association of Fishermen and Extractivists and Quilombo Remnants of Degredo (Asperqd), says, “the role of technical assistance is essential in the fight of these communities [...] it is very easy to arrive in the community and tell people something they do not understand. It is very easy to take samples and say that everything is fine. It is necessary to help people understand the agreements that were made and are not being respected. A lot of things are being distorted. The information does not arrive.” The structure of this advisory assistance was designed to strengthen the community. The money from the reparations will stay in the community. The Association’s administrative fee will go towards a fund to be invested in the community itself and the goods acquired by the Advisory assistance will be donated to the community. To quote Simony, “We want to inspire other communities to break with their custodians and to speak for themselves” 36.

The industry of reparation and the neoliberal management of socioenvironmental conflicts

A very unique governance model was created to deal with the impacts resulting from the rupture of the Fundão dam. In March 2016, Samarco, Vale, BHP Billiton, the federal government, and the governments of Minas Gerais and Espírito Santo signed a Terms of Transaction and Adjustment of Conduct (TTAC), known as the “acordão” (or master

34 Milanez et al (2015).

35 Environmental Conflicts Observatory of Minas Gerais (2020).

36 Cozumenco (2020).

agreement). Designed without the participation of those affected, this master agreement established that R\$4.4 billion would be paid over the next three years to compensate for the socioenvironmental damage. In addition, it foresaw the constitution of a R\$ 20 billion funds for the recuperation of the River Doce Basin over period of up to 15 years. This TTAC created a *sui generis* governance structure: The Renova Foundation, a private entity, recently created by Samarco, Vale and BHP was granted permission to manage this billion-dollar fund.

Renova was given the responsibility for elaborating and implementing 42 reparation, mitigation, compensation, and indemnity programs by 2030. It was also in charge of creating a registry of those affected (in the end, it was the companies that decided who did or did not have the right to compensation) 37. In this way, the whole process of managing the reparations moved to the control (albeit indirect) of the three mining companies responsible for the disaster. A report by the Getúlio Vargas Foundation, on the performance of Renova, points to some of the many violations of the affected communities' rights by this foundation: "lack of transparency and access to information; insufficient recognition of damages from the disaster; absence of social participation in its construction; absence

of communication with the programs related to Indigenous peoples and traditional communities.

After five years, the "master agreement" between Samarco, Vale, BHP and the State is skating on thin ice after many ups and downs, having been both suspended and later annulled 38. A complex governance structure was created as new smaller agreements were made to make the first "master agreement" more adequate. Ramboll Group A/S was hired to evaluate and monitor the Socioenvironmental, and Socioeconomic Reparations Programs and Lactec Institute was hired to make the socioenvironmental diagnosis. Brazil Human Rights Fund coordinates the work of independent technical advisors (14 have not yet been put in place from a total of 19 39) and Getúlio Vargas Foundation (FGV) acts as a Federal Public Prosecutor's Office expert, carrying out socioeconomic diagnoses.

The "master agreement" is at a stalemate since many of its terms have not been fulfilled. Thousands or millions of families have not yet won official recognition as affected or registration as such. The resettlement projects have no projected date for hand over to the families that were forced to leave their homes. Informed participation of those affected is still far from guaranteed. Five years after the rupture, the affected families still do not have the right to full compensation. In October

2020, the Federal Public Ministry requested the Federal Court to resume the public civil action against Vale immediately, requesting R\$ 155 billion in reparations 40.

In the face of its total incompetence, of the many proofs of corruption and after rejection of its financial accounts four times by the Public Prosecutor's Office of Minas Gerais, Renova may be dismantled at any moment 41. The Foundation is being accused, among many other problems, of being used by Vale and BHP in an ingenious fiscal maneuver: the donations made by these two mining companies to Renova are being recorded "as a debt contracted by Samarco, which undertakes to return the money to its parent companies" 42. In other words, in the end, the reparations money goes back to the already billionaire Vale and BHP, a fraud that would allow both to take back at least, R\$ 1.5 billion 43.

The corruption does not stop there. As denounced by the Mining Observatory, "Mônica Bermudes Medina Pretti, prosecutor of the Public Ministry of Espírito Santo (MPES) and coordinator of the Rio Doce Recovery Working Group (GTRD), is the niece of Sérgio Bermudes, one of Vale's lawyers and sister of a Samarco lawyer". This constitutes a conflict of interest. Vale and BHP are also accused by the Federal Public Prosecutor's Office of acting illegally in collusion with lawyers and a judge in the state

37 Vitti (2019).

38 In July 2016, the agreement was suspended by STJ, after that it was annulled by the Regional Federal Court.

39 Only the municipalities of Mariana, Barra Longa, Rio Doce, Santa Cruz do Escalvado and Xopotó and the municipality of Degredo in Espírito Santo, have advisors.

40 Angelo (Mining Observatory, article of October 1st, 2020).

41 Angelo (Mining Observatory, article of February 25th, 2021).

42 Angelo (Mining Observatory, article of November 5th, 2020).

43 Angelo (Mining Observatory, article of July 27th, 2020).

of Espírito Santo. Among many other irregularities, the moral damages due to the affected people were limited by a judge, to R\$ 10 thousand per person. By accepting this amount, the victims were coerced into giving up a US\$ 6.3 billion lawsuit in the UK against BHP (brought by more than 200,000 people and that is considered the largest lawsuit in the history of the country 44). Lawyers also participate in the scheme. They profit from the individual lawsuits filed by the affected people, taking at least 10% of the compensation received by them in the form of commissions and fees 45. Thus, these lawyers would have had already earned, at least, R\$ 70 million 46.

Not only that, the criminal action lawsuit that “requests the conviction of 21 defendants for the crimes of flooding, collapse, bodily injury and homicide with eventual malice (when one assumes the risk of killing) continues without any deadline [for its completion]. The complaint filed in 2016 asks that

the defendants be submitted to a trial by jury. Only 5 of the original 21 defendants are still involved in the process, all connected to Samarco and none to Vale and BHP. None of the 140 witnesses have been heard to date. The hearings have been systematically postponed, and the companies have done everything – with success – to postpone the proceedings” 47.

While families wait hopelessly for their rights to be guaranteed, on December 11, 2020, Samarco resumed its operations in Mariana including ore extraction 48. The operating license had already been obtained in 2019, despite the collapse and the socioenvironmental crimes committed by the mining company. The company anticipates production of eight million tons of iron ore per year in this complex. The residents continue to wait, unsuccessfully, for compensation for all the losses they have suffered from mining.

44 Angelo (Mining Observatory, article of November 5th, 2020).

45 Angelo (Mining Observatory, article of March 11th, 2021).

46 Angelo (Mining Observatory, article of March 27th, 2021).

47 Angelo (Mining Observatory, article of November 5th, 2021).

48 Pimentel (O Globo, December 11th, 2020).

Rupture of the Brumadinho dam and contamination of the Paraopeba River

On January 25th, 2019, just over three years after the disaster in the Doce River Basin, another Vale dam ruptured. This time, it was the B-I iron ore tailings dam at the Córrego do Feijão Mine in Brumadinho. When it ruptured, it buried two other dams: B-IV and B-IVA. This disaster released about 13 million cubic meters of tailings into the Paraopeba River. It caused the death of 272 people (including two unborn babies), the death of the river itself, and the death of vegetation and of surrounding land. To this day, 11 people are still missing. Among the victims, 240 were male and female workers employed by Vale – 123 directly-hired employees and 117 outsourced workers⁴⁹. This disaster constituted the biggest labor accident in Vale's history and one of the biggest in the history of Brazil.

Despite the official discourse after Mariana, Vale continued to make the same mistakes, neglecting the safety of its operations, and expanding mineral



Photo by: Daniela Fichino, Justiça Global

“A horrible disaster, an incomparable loss, a tremendous negligence because for two years we have been waiting for a solution and nothing. For me, everything changed, because Vale killed our river.”¹

Euler Moreira (Dom Zé), 72 years old, Quilombola from Pontinha (Paraopeba, MG) and affected by Vale

¹ Canfore and Anizelli (Folha de São Paulo, January 25th, 2021).

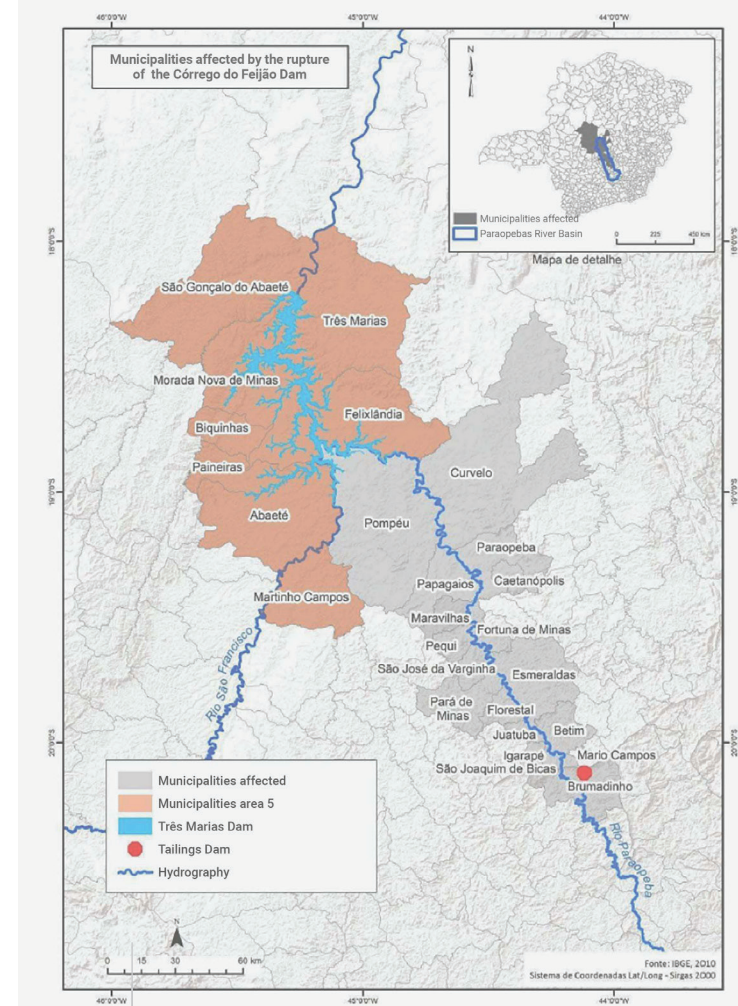
extraction at any cost, until another disaster happened. A disaster that could (and should) have been avoided. On February 26, 2021, the Federal Police

finally presented a report concluding that Vale was negligent in its control of the risk conditions of the B-I dam. Steps omitted in the process of assessing the stability of the dam ultimately caused its collapse. In October 2018, Vale contracted an external company to analyze the conditions of the B-I dam. “The contracted company delivered a diagnosis to the mining company in December of the same year [2018], but before processing and analyzing the results, Vale began vertical drilling in the dam. [...] The vertical perforations carried out 5 days prior to the breach. They were the trigger for the liquefaction that caused the collapse of the Vale dam in Brumadinho” 50. In fact, the B-I dam had already accumulated a series of structural problems since the beginning of its construction in 1976, even before being acquired by Vale in 2001 51. This accumulation of failures, not corrected by Vale over the years, along with inaction by public authorities created a situation of insecurity that culminated in the disaster.

The toxic mud buried two other dams, reaching Brumadinho and carrying with it homes, plantations, memories, attachments. The mud followed for more than 250 km through Paraopeba River gutter until it was contained in the Retiro Baixo dam (Pompéu and Curvelo). The degree of contamination of the lake at the Três Marias Hydroelectric Station is still uncertain. We still do not know the totality of people and territories affected. The map attached shows the extent of the destruction. The municipalities highlighted in orange make up Region 5, where the Três Marias Lake is located. To this day it is not recognized as an affected area by the company.

The records of a Public Civil Action (No. 5000053-16.2019.8.13.0090) of the Public Prosecution and Public Defender’s Office of Minas Gerais, and the Federal Public Ministry and Public Defender’s Office indicate that, as of April 29, 2019, there were impacts on the health of the population in addition to the most visible environmental and material damages. These ranged from dermatological diseases (skin rashes, allergies, sores), noted particularly in people living near the river, to nausea and mental disorders, such as difficulty sleeping, anxiety, depression, post-traumatic stress disorders, and collective grief.

When it comes to local economies, all forms of agriculture were affected, whether by the loss of crops, livestock, and cultivated areas or by restrictions on access to river water. This made many farmers hostages to Vale’s delivery by water tankers that were often delayed or simply did not arrive. There was also uncertainty about the contamination of the water and soil used in production which in turn raised doubts about the quality and contamination (or not) of their produce. Fishing was another activity severely affected, whether for leisure, for the generation of income for fishermen and fish farmers, or even for guaranteeing food and nutritional security and sovereignty of those who live on the river. The river water continues to be unfit for any form of use 52. In a disaster of these proportions, the affects come in many forms, as the spill into the Doce River Basin showed clearly. The above-mentioned public civil suit estimates that the socioeconomic reparations alone will cost R\$100 billion.



Map of the disaster in Brumadinho

Source: Instituto Guaicuy (2020).

50 Mansur (O Globo, February 26, 2021).

51 Milanez et al (2019) Details each one of them.

52 According to results presented in a technical report published by Mineiro Institute of Water Management.

Despite the extensive territory affected by the disaster, Vale often refuses to recognize certain groups as affected. Only those who live up to 1 km from the riverbank were entitled to receive emergency payments to carry them through the delays and virulence of the judicial process. These payments are administered by Vale, which, in the end, has the power to deny the requests of the affected people based on justifications such as “lack of necessary documentation”. Some of the strategies used by Vale to avoid paying what it owed were registration denials, lengthy document evaluations, unexpected cuts, and arbitrarily halving amounts payable. Initially planned to last from April to December 2019, these emergency payments have been extended month by month by the court, creating uncertainty and instability in the lives of those affected. Although payments were maintained throughout 2020, the cuts carried out represented a reduction of 58% of the promised payments⁵³. In the end, Vale saved R\$474.55 million with emergency payments, in a period when the company saw the price of its shares almost triple (from R\$34.10 on March 23rd, 2020, to R\$101.98 on March 11th, 2021).

Another example of environmental racism

An analysis of the racial and income characteristics of the affected population in the first 10 km of the path of toxic mud after the dam collapsed is revealing.

On the pathway from Córrego do Feijão dam to the rural community of Pires, on the outskirts of the city of Brumadinho, next to the Paraopeba River, there is a substantial black population. Black residents are 63.8% of the population, a higher proportion than the Brumadinho municipal average (52.5%) and Minas Gerais’ (54.6%), even in rural areas (59.8% and 59.5%, respectively). In Parque Cachoeira and Córrego do Feijão, the most immediately and severely affected areas, the percentages of black population reached 70.5% and 58.5%, respectively⁵⁴.

Once again, the groups affected by Vale’s crime were predominantly black and Indigenous. The traditional peoples and communities of the Paraopeba River Basin, who face historical inequalities in access to fundamental rights such as health, education, citizenship, today suffer twice as much from the damage caused by the disaster. Seven Quilombola communities registered by the Palmares Culture Foundation (Marinhos, Rodrigues, Ribeirão, Sapé, Pontinha, Beira Córrego and Retiro dos Moreiras), the Indigenous people of the Pataxó, Hã-Hã-Hãe and Kaxixó ethnic groups and other rural dwellers⁵⁵ mourned the death of the Paraopeba River. In addition to being a source of life and income, the river was also a territory of creation and recreation of their cultures, a space of communion with the sacred. Their cosmologies and ways of being and existing in the world are, therefore, damaged by the organized



Trail of destruction left by Vale’s mud in Brumadinho

Créditos: Daniela Fichino, Justiça Global



Served with mud

Créditos: Daniela Fichino, Justiça Global

⁵³ These amounts are declared by Vale in the agreement’s draft celebrated with the State of Minas Gerais in 2019, the emergency payments added to R\$ 1.124.511.707,89 in 2020 and R\$ 649.959.865,11.

⁵⁴ Milanez et al (2019).

⁵⁵ We have limited ourselves to talk about the peoples and communities that have declared themselves and the have already pleaded themselves as affected by the disaster in Brumadinho. It is possible that there are other traditional peoples and communities affected in the region.

irresponsibility of Vale, which continues its operations in a climate of tailings dam disasters foretold.

These communities are victims of the racism from the company and from the Brazilian State, which uses arbitrary criteria to deny access to reparation measures, such as emergency payments, to entire communities. Since the right of traditional peoples and traditional communities to Free, Prior and Informed Consultation and Consent was not respected, as stated by Convention 169 of the International Labor Organization and ratified by Brazil since 2002, the reparation process itself constitutes an enormous violation. This supra-legal norm establishes the right of traditional peoples and communities to previous consultation each time a project, an administrative measure, an enterprise, or even research has a direct or indirect impact on their territories and their traditional ways of life. More than two years have gone by, and such Consultations have not been carried out in the Paraopeba basin.

The pandemic of COVID-19 came to accentuate the already deep structural inequalities of access to rights in Brazilian society rooted in black and Indigenous slavery. Since the meetings between State institutions and the affected people have had to take place virtually, many of these traditional peoples and communities are excluded from the process of reparations. Most of them live in remote rural territories with little or no access to digital communication. While the Kaxixó Indigenous people are still fighting for the right to technical

assistance, quilombolas fight for their emancipation, desiring to free themselves from the tutelage of white institutions in the conduct of the reparation process. Like the Quilombola Community of Degredo, the quilombolas of the Paraopeba river also reject State tutelage and demand the right to autonomous technical assistance 56.

“Big business Brumadinho”: Good for politics and even better for Vale

As if all these violations were not enough, an agreement negotiated in secret between Vale and the Minas Gerais state government was concluded on February 4th, 2021. The agreement involved the government leaders of Minas Gerais as well as the Public Prosecutors Office, the Public Defender's Office, and the Federal Prosecutions Office, under the mediation of the Minas Gerais Court of Justice. The agreement was negotiated without any participation by those affected. It stipulates the amounts to be spent on reparations, doing so even prior to calculation of the damages. Moreover, the agreement extinguishes any possibility of producing evidence to identify the communities actually affected and determine a major part of the actual damages 57.

After five months of bargaining back and forth, Vale managed to get a reduction of R\$20 billion from the initial figure of R\$56 billion proposed by the Minas Gerais government. Vale also succeeded in settling two public civil lawsuits with a payment of R\$

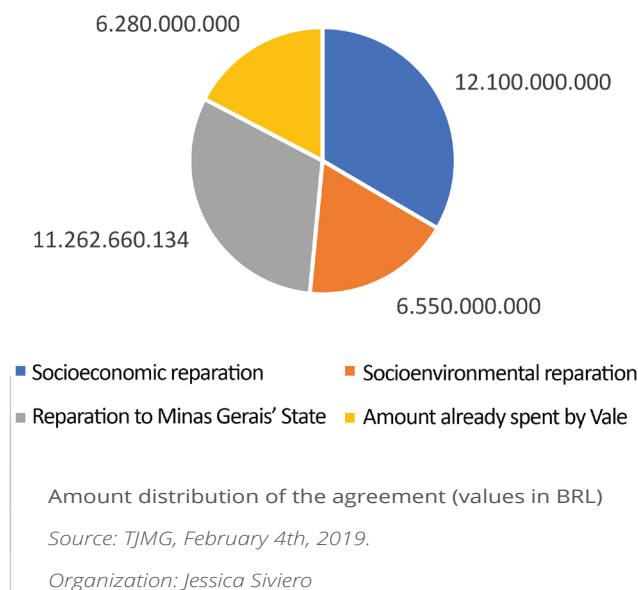
37 billion, a real bargain. In fact, Vale will disburse only 31.4 billion over the next 10 years, since 6.28 billion had already been spent in 2019 and 2020 and will be discounted from the negotiated value. This agreement considers as fully paid the amounts due for environmental remediation and everything that concerns collective rights in the socio-economic axis. Although Public Civil Action lawsuits that deal with individual damages and individual civil and criminal lawsuits continue to make their way through the courts, the agreement between the mining company and the State of Minas Gerais weakens the actions of those affected. The agreement, on the other hand, did Vale a lot of good. It saw *“its shares rise 4.3% on the day of the agreement. The image of a company discharging the commitments generated by a disaster is conveyed, bringing reassurance of Vale's reliability in the market”* 58.

In the midst of an economic crisis of unknown proportions, the State of Minas Gerais saw the Brumadinho disaster as an opportunity to raise funds and to execute “Pharaoh-like” infrastructure projects, such as the expansion of the metro line in Belo Horizonte and the ring road also in the state capital. These public works will cost R\$ 4.95 billion and will bring them political returns. This second project is *“old and questionable because it affects two conservation units and districts that live off historical and ecological tourism. It may also compromise the water source supplying in the capital of Minas Gerais. The project is also of*

56 Gomes (Brasil de Fato, April 1st, 2021).

57 As pointed in the Fundamental Action of Non-Compliance of Fundamental Action 790, presented by the Union Public Defenders on March 9th, 2021, Available at: Union Public Defenders (March 9th, 2021).

58 Andréa Zhouri in Folha de São Paulo on February 9th, 2021).



interest to the mining companies because it allows the transportation of ore from the region” 59.

The “participation” of those affected by the dam rupture is limited to indicating which public policy projects they consider a priority. They “will have a choice” between project – “implementation of skating parks” or “Local Development through Municipal Public Procurement” 60. The generous sum of R\$2 billion (!) was allocated for affected communities to define “freely” the projects they wanted in their territories. Whether these projects will be executed or not is another story. This will depend on what Vale, the government, prosecutors, and public defenders judge to be a priority,

given that the amount agreed upon is less than what is necessary for due and fair reparation.

Despite securing R\$4.4 billion to be spent in the coming months or years on emergency payments to those affected, the agreement cut in half the estimated amount (R\$9.4 billion) necessary to pay off existing liabilities (the amount owed to those who were never able to access emergency payments). This amount was also meant to be used in setting up a program of transfer payments allowing family economic reproduction.

The rights of traditional peoples and communities were particularly violated by this agreement. Convention 169 of the International Labor Organization was not applied. In addition, the provision of land regularization in the Paraopeba Basin without guaranteeing recognition and demarcation of traditionally occupied territories (none of the Quilombos of the Paraopeba River Basin have legal titles!) is problematic. It could serve to provide a short cut for legitimization of the kind of land grabbing historically practiced by ranchers, large rural landowners and local political personalities.

Vale, on the other hand, in addition to being freed from the uncertainties that accompany legal actions, will manage a good part of the resources and socioenvironmental projects stipulated in the agreement, as well as some others in the socioeconomic axis, such as the “Brumadinho Project” and the “Paraopeba Basin Projects”. As the agreement

does not provide for the management and social control of the projects and works to be executed, Vale will have enormous freedom of action in the territories, privatizing and outsourcing the process of reparations, dictating its rhythms and forms of execution. It will even be able to choose who will or will not have access to compensation.

With the agreement, Minas Gerais Public Prosecutor’s Office, and Public Defenders Office along with the Federal Public Ministry become holders and controllers of a billion-dollar fund. This conflict and its outcome, therefore, establishes an ultra-neoliberal model of management of socioenvironmental conflicts. In addition to implementing the conciliation and mediation model – there is no ordinary procedural rite, prosecutors and public defenders sit at the table to talk with Vale about the fate of the affected people, trying to reach a consensus with the company about what they should or should not receive as reparations – the Judiciary has handed over to private enterprise the power to elaborate, plan and implement public policies, which should be the exclusive prerogative of the State. “By intercepting the path of reparations to the victims in Brumadinho, political interest is married to financial interest and reveals the cruel facet of *necropolitics* (which deliberates on which lives will be sacrificed) associated to *necrocapitalism* (which defines which lives will be more profitable) in Big Business Brumadinho” 61.

59 Andréa Zhouri in Folha de São Paulo on February 9th, 2021).

60 As pointed in the Fundamental Action of Non-Compliance of Fundamental Action 790, presented by the Union Public Defenders on March 9th, 2021, Available at: Union Public Defenders (March 9th, 2021).

61 Andréa Zhouri in Folha de São Paulo on February 9th, 2021).

When profit is worth more than life

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Vale: a global company

Vale is a global company operating in 27 countries, including Canada, United Kingdom, Oman, Mozambique, Paraguay, Malaysia, Indonesia, and New Caledonia. Vale remains as one of the leading companies in the global market for iron and iron and nickel pellets. It is the largest producer of manganese in Brazil. Since it is a mineral *commodities* company, whose market depends directly on price, and since it is mainly focused on exports, Vale's operations are based on the mines-railroads-ports-ships system. This system allows the company to shorten the time between extraction and the international market (thereby reducing the cost from mine to port).

In Brazil, Vale's mining operations are focused on two main systems: the south and the north. The south system is the oldest mining area, the Iron Quadrangle of Minas Gerais. Vale has been there for more than 80 years. It is composed of four mining complexes: Itabira, Mariana, Central Mines and Western Mines (which encompasses more than 15 mines); the railroad Vitória-Minas; and the port of Tubarão in the Vitória/Terminal of Guaíba. Exploration of the north system began in the 1980's. This is where a major reserve of the highest-grade iron ore on the planet is located in the Mining complex of Carajás (between

São Felix do Xingu and Marabá). The Carajás Complex is made up of the mines, the rail spur that connects the S11D mine to the Carajás' railway which in turn connects to the maritime terminal of Porto Madeira, in Maranhão. In Brazil alone, Vale owns 1.630 mining concessions, which guarantees it the control over 53.977 km², a land surface bigger than the state of Rio Grande do Norte or a country as big as Croatia 62.

In Mozambique, Vale operates the Moatize mine, consisting of metallurgical coal used in steel production. The coal is shipped via the newly constructed Nacala railway to the Terminal of Nacala-a-Velha port and from there onto global markets. Besides that, the company owns mines and nickel operations in Brazil, Canada, Indonesia and New Caledonia. It also has a myriad of partnerships in steel industries (Ternium and Pecém), as well as operating hydro-electric power plants and wind energy plants.

In its 2019 Sustainability Report, Vale claims that "Throughout 2019, Vale worked toward its goals in the Sustainability area, through initiatives to mitigate and offset the impacts of its activities, in addition to developing environmental actions and creating value for communities". The report continues with countless stories of Vale's good deeds, presenting

data and photos that portray the picture of a company that, ahead of everything, cares about the environment and communities around it, projecting itself as an example for the mineral sector.

This, however, could not be further from Vale's "face" in the territories in which it has had a lengthy acquaintance. The poet Carlos Drummond de Andrade, who was born in Itabira, Vale's birthplace, knew the company at close hand and spent his life denouncing Vale's predatory and thieving nature in his poetry. In an excerpt from the poem "A Montanha Pulverizada" (1973), the author mourned the disappearance of the land that once belonged to him, his father and his grandfather. His lament is full of nostalgia: "(...) This morning, I wake up and can't find it. Drilled into millions of fragments, sliding down the transportation belt, filling up 150 railway cars in the 5-engine monster train – the biggest train in the world, do write it down – my mountain runs away, leaving behind in my body its landscape, vile iron dust, and this does not go away". A lot has changed since those days. The aggressive and destructive face of Vale, however, remains the same.

Privatization, financialization, technological changes and the recent regulatory flexibilities for the mineral sector have had as their counterparts the acceleration of mineral extraction, accompanied by deepening expropriation of communities from their lands (mountains and waters), complete destruction of the environment and exploitation of workers. From this perspective, the crimes in Mariana, in 2015, and in Brumadinho, in 2019, cannot be considered isolated cases and accidents. For the magnitude and visibility that they have achieved, both episodes are extreme cases that reveal Vale's truculent and predatory



Global operation

Source: Sustainability Report 2019

modus operandi, in its thirst for profit and for minerals, inside and outside Brazil. This is the story that we will tell here. We will describe Vale not as it portrays itself to its shareholders, but as the company operates in action, in the territories, in front of local communities, workers and other living beings that may cross its path and whose existence is threatened by the company's unbridled thirst for profits.



Prioritizing mining in local economies and compromising their future prospects

Mining projects, because of their weight on local economies, and their impact in demographic, economic and environmental terms promote, a pattern whereby specialization of municipalities in mining atrophies local economies. Studies have identified this phenomenon as “mining-dependency”, expressing the power that mining companies such as Vale have over the economy and upon the politics of small municipalities. Strongly connected to local government that relies heavily on the mining activities (through campaign donations and through most of the public revenues that come from mining), these companies become very powerful. They are able to define, guide and condition the destiny of these territories and their populations. The mining corporations acquire major power to intervene and mold the local reality according to their own interests.

The weight of mining is felt in these local economies particularly regarding three aspects. First, it is felt by the importance that CFEM (Financial Compensation for Exploration of Mineral Resources) plays in the local budget (this matter will be discussed further, in Chapter 5). Second, it is felt in mining’s role in

generating formal employment. Third, it is felt in the reduction of other activities, where participation wanes as mining gains strength. If on one hand, these companies have great power, on the other, the importance of mining in public revenues and in job creation ends up making the population and the government more tolerant towards mining’s negative impacts, associating local development with the mining companies’ interests. This cycle, therefore, leads to productive specialization and to the reduction of space for other activities (and the activities that were previously developed in that space). The daily actions of the mining company (overcrowding the cities, use and contamination of water, soil contamination, noise pollution) end up imposing limits on other activities, such as agriculture and tourism, among others. The ore-dependency sets up a vicious circle: these economies become increasingly dependent on mining until resources are depleted and mining companies pack up and leave in search of new mineral reserves⁶³. Since mining activities normally create jobs located in lower and non-specialized wage categories, and mining does not

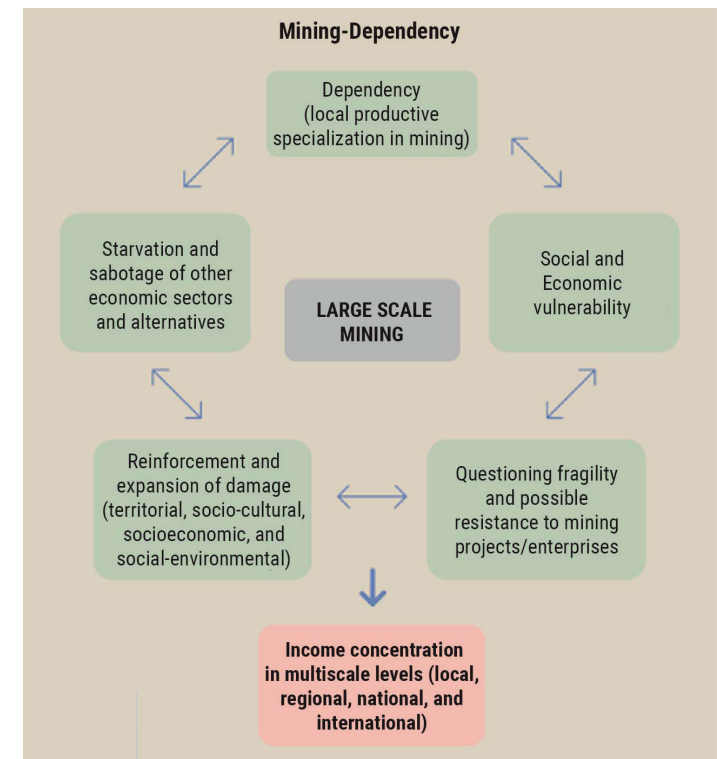
generate economic supply chains nationally, being normally focused on the export of raw materials with no value added, mining ends up contributing to the reproduction of a society whose natural resources contribute to increasing inequality and greed.

Tádzio Coelho 64, a researcher from Viçosa Federal University (UFV), has done research on the economic dynamics of Mariana and Brumadinho. Coelho highlights the importance of the mineral extraction sector in the creation of formal jobs. He points out, however, that the majority of the jobs generated were in the lowest wage range (below 5 minimum wages). In addition, studies have proven that, particularly in those areas of recent production expansion such as Vale's north system, most jobs located in higher salary ranges are not filled by the local population, but by people from other regions. On the other hand, while mining grows and becomes more important in local economies, other activities end up losing space, culminating in a productive specialization. In Mariana, for instance, as mining grew stronger in 2011 when Vale expanded its operations in the region to include the expansion of Fundão dam, the agricultural activities in the Mariana area suffered a heavy decline. Agricultural production decreased even more in 2015-16, immediately after the rupture of the dam.

Simone Contente 65, a researcher from the Federal University of the South and Southeast Pará, has studied the implementation of project S11D in Canaã dos Carajás. She shows how big mining projects controlled by Vale were gaining importance in the

local economy from 2002 to 2019. Vale's power grew so strong that it participated in the city's urban planning process, contracting Diagonal Consultancy to act on its behalf. Diagonal collaborated, with local government officials in developing the "Plano Diretor", which defines urban planning guidelines for Canaã dos Carajás. Contente also points out that despite increased production in the municipality, and improvements in its HDI (Human Development Index), a significant increase in social inequalities in Canaã dos Carajás has also been observed. While Canaã dos Carajás establishes itself as the second biggest iron ore producer in Brazil and as one of the municipalities where ore exportation is growing steadily, a significant part of the population continues with family incomes below the minimum wage, and dependent on income transfer policies to create a family allowance such as "Bolsa Família". On another front, hospitalization for respiratory and infectious diseases 66 has increased in Canaã dos Carajás, which can be linked to the proximity between mining areas, urban centers and rural villages.

Strong intervention of mining companies in local communities, therefore, tends to block economic diversification and generate very unequal societies. The dependence on mining created in small economies blocks alternatives for local economy development, compromising seriously the future of these municipalities.



Mining-dependence Cycle

Source: Coelho (2020)

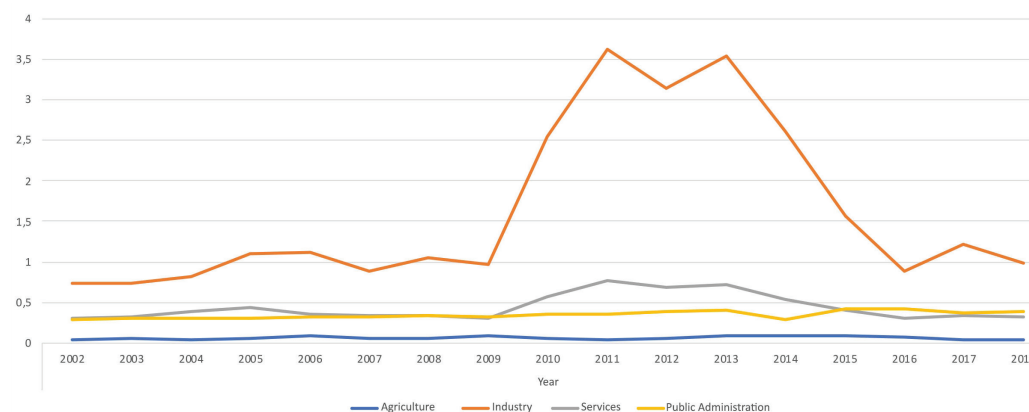
64 Coelho (2020).

65 Padilha (2020).

66 According to data from 2005 Datasus, Canaã had 33,4% more hospital admissions than the other mining municipalities.

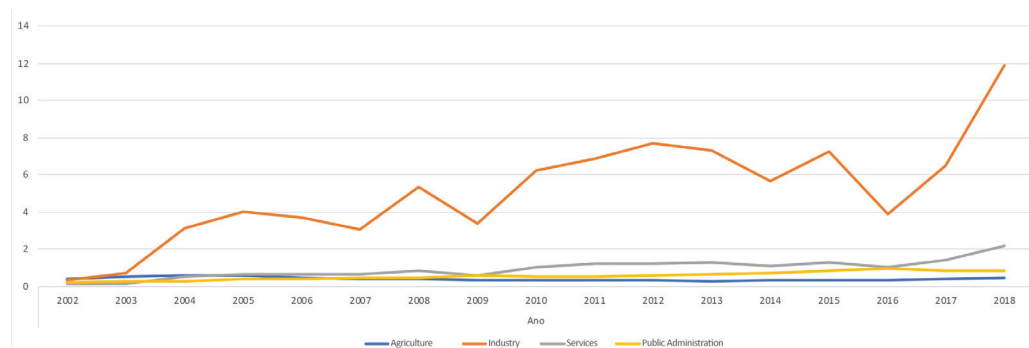
We Exchange Favors to Guarantee Vale's Interests

This economic dependency opens space for the subordination of local public authorities to Vale's mandates and abuses. As part of its consolidation and legitimation strategy, Vale exchanges infrastructure improvements in the municipalities affected by its activities in return for political support. In March 2015, Vale announced that it had donated approximately R\$ 1.5 million (out of a total cost of R\$ 1.9 million) for the construction of a bus terminal in Ourilândia do Norte. The agreement signed with the local City Hall also stipulated pavement of approximately 3 kilometers of streets in one of the city's neighborhoods. Critics point out that these "benefits" have served to shield Vale from the innumerable criticisms made about its activities in the region. The mining activities have caused serious health problems to Indigenous people from the Xikrin do Cateté Indigenous territory.



Mariana - Participation in the gross added value (current prices in %)

Source: IBGE



Canaã dos Carajás - Participation in the gross added value (current prices in %)

Source: IBGE



Anything Goes to Control the Land

As a rural environment defined by inequality and the existence of large expanse of public land, the northern region of Brazil is characteristically the stage for many land conflicts. The Greater Carajás' area holds the largest reserves of high-grade iron ore in the world (in addition to other metals like nickel, copper and bauxite). It has therefore become the focal point of Vale's attention. The importance of the northern system is reinforced by the prospects of reducing production in the southern system in the medium term. Reports indicate that the company has been working to establish and guarantee territorial domination in Carajás, reserving space for its current operations and for future expansion of its activities. Since this same region is occupied by small landholders depending directly on the land to make a living and provide for their families, land conflicts have been multiplying in the region, frequently accompanied by the use of violence.

Each area has plots of land held with distinct conditions of ownership: titled; appropriated by landowners and then regularized by obtaining titles; and areas with people resettled by the federal government (and that can only be negotiated with government

authorization). Because of the complexity of the land situation in Pará, when Vale makes land acquisitions, it negotiates directly with landowners/landholders/occupants. This makes it difficult to map out all the areas that Vale has acquired. There are indications that the company may have bought many properties, including public lands with no title, which would constitute an illegal practice⁶⁷ and making Vale a partner in illegal occupation of public lands. In the various lawsuits that are taking place in the Courts, there are indications that some of these lands were acquired illegally. The Legal Land Program (Programa Terra Legal), for example, has found 15 areas acquired in a suspicious manner. These lands were regularized by the Legal Land Program and sold to Vale before the lapse of 10 years required by law. A survey by the Union of Rural Workers of Canaã de Carajás reports that there are indications that the company had already negotiated 199 lots in the region. The president of the Union calculates that, in Canaã dos Carajás alone, Vale has already bought more than 50% of the municipality's total area⁶⁸. Vale expands its territorial domain, but most of the lands acquired are of doubtful origins.

67 Padilha 2020.

68 Bedinelli, El País article titled "Os Sem Terra Desafiam a Gigante Vale na Amazônia" on December 12th 2016.

Situations like these were common at different points during the construction process of the S11D project in Pará. To make it possible to build and operate the expansion project, Vale had to intervene and resettle the Vila do Mozartinópolis (or the Racha Placa). According to the collective negotiations with the families and INCRA, Vale made a commitment to do the resettling of Vila do Mozartinópolis in Recreio Farm (in Gleba Xikrin). This farm was bought by Vale. A large part of the land purchased by Vale was, in fact, in the public domain and, therefore, it should not have been commercialized or bought by the mining company.

How does a company offer compensation to the State for land to be used in its operations when that land is already public? In 2014, however, despite this impasse, INCRA authorized the continuation of the transfer of Vila do Mozartinópolis and União Américo Santana settlement was created.

The second case occurred with the constitution of the Iron Fields National Park (PARNA), in 2017. In order to establish an area of full protection, Vale had to donate lands from Serra da Bocaina to the State to be incorporated to the Carajás National Forest (Flona). Determined to move forward with mining exploration, the company kept on buying farming areas between 2008 and 2009 to serve as reserve areas. It was soon discovered that a good part of the São Luís Farm, bought by Vale, was a publicly-owned land. To complicate the situation, in 2015, some of these public areas were occupied by landless families who created the Dina Teixeira and Grotão do Mutum settlements. Federal Justice officials determined that these families had to leave that area. They carried out a repossession action, claiming that it was land

“It was already night when we started hearing the gun shots. Everybody ran away to hide. When the sound of the gun shots diminished, I only heard the children crying, lost in the woods. I thought I was going to die.”

Viviane de Oliveira’s declaration, president of FETRAF to Repórter Brasil ¹

¹ Ângelo (Repórter Brasil, article from June 27 th, 2020).

designated for environmental purposes; therefore, it could not become a rural settlement. INCRA was left with the task of resettling the families in new areas to be donated by Vale. The public area, illegally bought by Vale, which had been occupied by these families (who had to leave by Court order) was used by Vale as part of the compensations for the S11D. Given the irregularities related to the land offered by Vale, which was acquired illegally and soon reverted to the State, the process of expropriation of the São Luís Farm was closed. The Federal Government designated the land for the constitution of the Park, with settlement of Vale’s environmental conditions (even though the “donated” areas were already owned by the Federal Government!). ICMBIO was also responsible for resolving pending conflicts and indemnities. According to a CPT document, in a formal complaint from the Federal Public Ministry, Vale claims to have designated 12,000 of the total 79.029 hectares of ARNA (Iron Fields National Park, as a portion with environmental protection. However,

the data demonstrates that 5,000 hectares of that amount were from public lands illegally purchased by Vale. Vale publicity on the S11D project, however, omits this detail and continues the claim that Vale has donated a large environmentally protected area to the municipality and to the country.

Is it possible to donate something to someone that already belonged to them? Is it acceptable that the environmental constraints are lifted? By accepting this kind of transaction and “relieving” Vale from its constraints, the Brazilian State legitimizes land grabbing and the company’s illegal activities.

Such cases are not rare. They involve many conflicts. In June 2021, with the COVID-19 pandemic raging, Vale and Prossegur (private security company employed by Vale) attacked a group of farmers encamped in the Lagoa Farm area of Parauapebas. The area where the encampment was located had been disputed in Court between farmers and Vale. Vale won a court injunction in its favor. Since the injunction was not definitive, Vale could not proceed with repossession and eviction of the families. Nevertheless, in June 2020, in the middle of the pandemic, Vale’s security guards attacked the farmers who were occupying that area, while they were trying to set up a clandestine electricity connection. In the attack, the private guards used rubber bullets and tear gas bombs, injuring at least 20 of the 150 farmers and causing widespread terror. Vale and Prossegur claim that their guards acted legitimately, in self-defense, even though none of them were injured. In an interview for a local TV, the police officer in charge of the case at that time stated that there was an excess on the part of the security company,

a disproportional reaction and that the security guards would be indicted for bodily injury 69.

This is not the first nor the last conflict between Vale's security guards and landholders in the region. In March 2017, in Canaã dos Carajás, two men were attacked with punches, kicks, pepper spray and rifle butts by at least eight security guards from Prossegur, Vale's security company. A father and son were repairing a fence that separated their land from the mine property when the attacks began. Vale claimed that the two farmers were trespassing and, once again, claiming that the security guards acted in self-defense. Thus, violence is a permanent feature of Vale's operations in the territory.



Woman injured by Vale's security guards in Parauapebas

Source: Sales (2020)



Rubber bullet injuries of a farmer after Vale security guards' attack

Source: reproduction Twitter/MST

Violence as a Method

The use of violence as a way of controlling the territory control and “disciplining” people is a recurring trait in Vale's operations. It was on April 17, 1996 in the state of Para, 25 years ago, that 21 rural workers were murdered by Military Police in Eldorado de Carajás. More than 60 were injured and 7 are still missing. Investigations into the massacre indicate that Vale supported and funded the action of the Military Police. The mining company had an agreement with the police that involved the transfer of funds by the mining company to better structure the police. Troops were taken to the crime scene in buses provided by the company. Additionally, Vale collaborated with the police by passing on information about social movements and leadership of the rural workers movement active in the region. Since Vale feared that land conflicts and organization of rural workers were on the increase in their operational areas, the mining company infiltrated with spies who had obtained privileged information that Vale passed on to the Military Police.



“Sitting on a Mountain of Money”: when mineral extraction is worth more than life

Mining projects are characterized by their great magnitude and by the major impacts they have on the territories in which they are implemented. Especially noteworthy are the negative impacts on the environment (water pollution, deforestation, soil contamination, dust, destruction of soil and mountains, death of animals, etc.) and on the population (pollution of ground water, river and seas, sound pollution, dust, damages to health, forced resettlements, etc.). We cannot limit ourselves just to the impacts and destruction observed at the site of extraction and industrial processing (explosions, contamination of water courses and the water table, dust, deforestation, death of animals, soil destruction, increased social inequality, etc.). Since the extraction is mainly focused on mining for export, Vale's projects need an efficient logistics structure that connects to global markets. This logistics structure includes the mine, the railway, ports, and ships. Today Vale has logistic structures in Brazil, Indonesia, Mozambique, Oman, Malaysia, and China.

In Açailândia, in the state of Maranhão, along the Carajas railway, the community of Piquiá de Baixo can be found. This community lives under a covering of dust from iron ore and pollution caused by

an adjacent pig iron plant fed by iron ore from Vale. There are about 300 families who live daily with the dust emitted by five steelmakers (Viana, Fergumar, Pindaré, Simasa and Gusa do Nordeste) who began operations in the 1980s. The steelmakers receive and process the iron ore produced by Vale in Carajás, which makes Vale partly responsible for the impacts on the lives of these families. Since the arrival of the steel plants, the residents have registered complaints about the increase in the incidence of respiratory, ophthalmological, and dermatological diseases; the occurrence of serious and fatal burns resulting from poor treatment residues from the pig iron production process (coal fines) that are often located very close to their homes; the difficulties in accessing specialized health care services; the lack of basic infrastructure; and the constant fear of accidents. At the same time, they live with a lack of access to information on the pollutants that are present in their daily lives, in addition to facing restrictions to their freedom of expression. The power of Vale and the steel companies makes it difficult to protest against environmental pollution and to criticize the actions of these companies. Throughout many years of struggle of the Piquiá de Baixo community, however,

almost nothing has been done by companies and the State to meet the demands of the families.

After years and years of living with pollution and disregard, in 2010 the case was heard in court and the Public Ministry of the State of Maranhão began negotiations between the Communitarian Association of Piquiá Residents (ACMP) and Vale and the steel companies. This culminated in the signing of a conduct adjustment term, so as to make feasible the collective resettlement of the entire Piquiá de Baixo community—an important step towards justice. In 2018, after great struggle and the constant denial from Vale and the local steel companies regarding the pollution, the resettlement process entered its final stage, and the construction of the new neighborhood of Piquiá da Conquista began. The steel companies bought land eight kilometers away from the settlement in Piquiá de Baixo. The construction started with funding through a *Caixa Econômica Federal* housing program called *Minha Casa Minha Vida* (My Home My Life). The construction began in November 2018 with most of the funding from the Brazilian Federal government. Only 28% was contributed by Vale, whereas the steel companies transmitted their donation through the Pig Iron Industries Union of Maranhão State (SIFEMA). The companies keep on systematically denying their responsibility for the damages caused to the community of Piquiá de Baixo. The resettlement construction has currently been halted due to budget reductions of the *Minha Casa, Minha Vida* Program and the price gap as a result of inflation. The approved budget is from April 2017, but the building began only in November 2018.

“The Carajás Railway runs in front of our houses, there are pig iron industries in the surroundings, and beside us we have Vale’s ore warehouse. It is sad to live in a place where practically the entire population might develop lung and throat diseases and respiratory problems.”

Speech of Piquiá de Baixo resident¹

¹ Ortiz (2014, article titled “Piquiá, um povoado coberto por pó de ferro na Amazônia” in “O Eco”).

The funding gap is due to the difference between prices charged and the reference table (SINAPI). In order to cover this gap, the Residents Association of Piquiá de Baixo estimates a shortage of millions of reais (R\$), an amount that is being negotiated with both Municipal and State Governments and with Vale itself. In November 2020, on the 45th Ordinary Session of the Human Rights Council (CDH) of the United Nations Organization, the Brazilian Government was held accountable for the human rights violations in Piquiá de Baixo, just as it was held accountable for measures taken that contributed to environmental crimes in the communities of Brumadinho and Mariana. All of those crimes were committed by Vale. Nowadays, the communities continue to wait for compensation and environmental



Piquiá de Baixo community: the pollution is already part of the landscape

Photo by: Francesco Natali, *Justiça nos Trilhos* archive

remediation. Vale, with an army of lawyers, keeps on trying to delay, minimize or elude fair compensation payments for those who have lost everything due to the company’s predatory and truculent behavior.

Mozambique finds itself in a situation very similar to the one in Brazil. Vale arrived in the country in 2004, when it signed a memo of understanding with the government of Mozambique to explore mineral coal in the mine of Moatize (in Tete). Vale obtained a concession of almost 24,000 hectares of land under an exploration license was granted in 2007, and the construction of the mine took place in 2008.

The Moatize mine started operating at the end of 2011, with an annual extraction capacity of 11 million tons of ore; in 2014, the project was expanded

(Moatize II), reaching productive capacity of 22 million tons yearly. The expanded operations began in 2013. In 2018, the Moatize mine produced around 12 million tons of coal and Vale had plans to expand the production to 15 million in 2020. The production flow depends on two railway lines that carry coal to the ports: Sena Line that connects the mine to the port in Beira (transport began in 2011); and Nacala Corridor which was restored and connects the mine to the Nacala-a-Velha terminal, at the port in Nacala. The Nacala railway line runs through the entire north of Mozambique and passes through neighbouring Malawi. Operations began in 2016. The implementation of the Nacala Corridor line resulted from a partnership between Vale and CFM (Mozambican Ports and Railways), a public company. This partnership resulted in a 30-year concession for the Nacala Integrated Logistics (CLN) and the Northern Development Corridor (CDN).

Vale's arrival brought massive changes to the daily lives of the communities that lived in the concession area allocated to Vale. The land in Mozambique belongs to the State. In 2007, a deal was made between Vale and the Mozambican government that guaranteed the exploration of coal for 25 years (renewable for the same period of time) 71. Hence, began the removal of families living in the area where the mine was going to be constructed. Mozambican NGO JA (Environmental Justice) presented a report during the People's Permanent Tribunal in Johannesburg, in 2018. JA recounted an interview with a Mozambican farmer stating that the government and Vale arrived in her community saying that she and her family had

Home Sweet Home

The beginning of construction in the new neighborhood Piquiá da Conquista brought great relief to the ACMP and to the families from Piquiá de Baixo. As the years pass, however, the wait for the resettlement has become cruel and dramatic 1. The settlement still exists only on paper while the families continue living together with pollution and the risks imposed by the steel companies and by the productive chain of pig iron.

Besides the air pollution and the lack of measures to contain residues from the productive process, these families have to coexist with the constant traffic of trucks loaded with industrial waste and pig iron glowing at a temperature of 1.300°C. The trucks pass through areas dangerously close to people's home, which makes the residents apprehensive about the possibility of accidents. In 2016, Civil Public Inquiry nº 02/2016, submitted to the Public Prosecutor's Office of Maranhão, got a response concluding that the emergency plans for this kind of transportation were "generalist and superficial", without stipulating procedures to be adopted in case of accidents. An example of this is an accident that occurred with a truck owned by Gusa Nordeste company on April 4th, 2018: The truck broke down in a public location, loaded with incandescent pig iron. The burning pig iron perforated the vehicle and drained out onto the BR-222. In another situation, on January 27th, 2018, a truck loaded with toxic waste from the production of pig iron (lama) broke down in front of the Piquiá School. Environmental technical report number 000/2018 from the Environmental Secretariat of Maranhão characterized this episode as an environmental crime derived from "transportation of dangerous residues without proper authorization" that exposed the population and the environment to risks.



Accident with a truck transporting pig iron (April 4th, 2018)

Photo by: João Paulo (Acervo Justiça nos Trilhos)

71 CIP (2021).

to vacate their land because “they were sitting on a mountain of money” 72. And that is how it was done.

During the mine construction, 1,365 families were removed: 716 went to a rural settlement in Cateme and 289 to an urban settlement called 25 *de Setembro*. The resettlement process, carried out between 2009 and 2010, was filled with problems and cases of disregard towards the families. The main complaints were: separation of families; arbitrary identification of families allocated to rural or urban areas, lacking both transparency and justification; location of families in areas with insufficient land, land infertility, and lack of access to potable water ; food insecurity due to the impossibility of food production on these lands; non-compliance with the size of the lots and the house design; and the poor management of the projects promised by Vale to support production and generate income.

The biggest complaint, however, was related to the quality and design of the houses provided by Vale, as well as the location of the settlements. Regarding the houses, there were many complaints that they had infrastructure problems: cracks, defective plumbing, no electricity and their model did not respect the families’ habits and culture: the houses had indoor bathrooms, which bothered the families that believe outdoor bathrooms were more hygienic, and the houses didn’t have verandas or free areas, important for the families sociability (many people said they felt trapped, as if they were in jail, since the houses were closed like a box). Concerning the location, there were many reports that the lands granted for production were infertile or unsuitable for production; the families had no access to

water or local markets where they could sell their produce. Also traumatic to the families was resettlement in places far removed from the cemeteries where their ancestors were buried. Furthermore, due to Vale’s lack of dialogue when carrying out the resettlements, tensions and conflicts increased among communities resettled and families that were already living in the location where the resettlements were built. These resettled families organized many protests. In practice, however, Vale did nothing to meet their demands. There were many reports made and surveys carried out with promises of responses from Vale, but in the end, few changes were made. It was common for police to be called during the protests to “contain” the manifestations, which they did with extreme violence..

The steel companies from Açailândia that process Vale’s ore do not have valid operating licenses. According to information of the Maranhão government, the companies do not fully comply with the conditions required by the environmental agency. The company Gusa Nordeste, for instance, operates with an environmental license that expired on July 24th, 2012. Nevertheless, the majority of these steel plants continue to process the ore received from Vale. This finding goes against Vale’s own institutional policy norms, in which the company’s own Human Rights Policy states that the company respects and promotes human rights, preventing impacts and violations, in the company’s activities and throughout its production chain.

“The Vale resettlements show disregard for the important cultural customs practiced by these families, denying spaces for their ceremonies and rites of passage and destroying the cemeteries in which these communities buried their ancestors.”

Antônio Zacarias, from Ação de Apoio e Assistência Jurídica às Comunidades (AAAJC)¹

1 International Articulation of those Affected by Vale (AIAAV) (2020)

Vale is a minefield

On November 27th, 2020, in Cateme, a child died, and four others were seriously injured while playing in their grandfather's farm, inside the resettlement established by Vale. The children were playing next to the location where their mother and grandmother were planting when they saw a buried object: it was an old land mine from Mozambique's civil war. Local organizations say that, contrary to what Vale claims, no assistance was given to the victims and their families. The tragic accident makes clear Vale's total lack of commitment to these families: when organizing the resettlements, the company paid no attention to the need for demining the territory. This should have been a serious concern, since the existence of old land mines, vestiges of the civil war, is very common in rural Mozambique.



Cateme Resettlement

Source: AAAJC Archive



Cateme Resettlement

Source: AIAAV Archive



Railroad next to Cateme resettlement

Photo by: Karina Kato (GEMAP/UFRRJ)



A Deadly Neighbor

If the situation for the resettled families has not been easy, the situation of families defined as ineligible for resettlement has been even worse. They live face-to-face with mining. Vale and the Mozambique government claim that even though these families live within the concession area granted to the mining company, they do not live in its operational zone. They therefore do not have the right to be resettled. This is the case for Bagamoyo, Nhantchere, Porto Seco, Primeiro de Maio and Liberdade. Vale acknowledges that about 1,349 families find themselves in this situation. Mozambican organizations estimate that the number could be higher. Living among clouds of dust, mine waste and explosions of dynamite in the mine, the daily lives of these families have been hell⁷³. They are forced to live day-by-day with the negative impacts of open pit mining: dust that remains suspended in the air, blocked access to areas they used formerly for grazing their cattle and farming, as well as for water and firewood. There are blockades of old paths they had used for moving about.

At the same time, these families are not able to get access to any health services geared to dealing with diseases and clinical features typical of living

with coal and coal dust. (There is no mechanism in the health sector to interpret the relation between respiratory diseases and exposure to mining residues)⁷⁴. Furthermore, the houses in which these families live are covered with cracks and infiltrations, as a result of the proximity and tremors from dynamite explosion performed daily by Vale. These families feel insecure in their own houses. Therefore, the tensions and social conflicts in the communities close to the mine have intensified. Not only does Vale deny the provision of information about pollution levels, the company also does not follow through on its promises for jobs, indemnity, and compensation.

The Bagamoyo neighborhood, for instance, is located right next to a Vale repository for sterile material. This has caused diseases in families due to the circulation of the material through wind and water contamination etc. The Nhantchere community had its access to water denied when Vale polluted the river that supplied the community. Vale also fenced off the area, blocking access to important country roads. Vale promised to provide water and firewood for these families, but it has not done so in a sufficient quantity. This had led these families to lose many animals

73 Oliveira (article from Observatório do Carvão in Mozambique, June 3rd, 2020).

74 Zacarias (article from Deutsche Welle, March 9th, 2019).

from thirst. In February 2021, a Mozambican Court sentenced Vale to pay an indemnity of R\$ 1 million to the farmers that live in the surroundings of the Moatize mine, after the company had built a barrier around the mining complex that made it impossible for the population to reach their houses ⁷⁵. The judge said in the sentence that the fence caused the blockade of country roads used by farmers and people making clay building blocks. The fence also prevented them from reaching their work areas and put the food security of these families at risk. Vale claims it will appeal. Meanwhile, people keep on suffering from the impacts of mining in their lives.

There are reports that these communities have been presenting many respiratory diseases that can be related to the excess of particulates (especially fine particulates) suspended in the air. The amount of coal dust emitted in the air is one of the biggest problems faced by communities that neighbor the mine. According to information provided by Maurício Simbine (environmental engineer that works with Vale), during the first months of 2019, Vale even suspended the mine activities for 96 hours due to the high level of air pollution. For the expert this “is one of the biggest environmental challenges” of the open-air coal extraction in Mozambique ⁷⁶. It is also one of the biggest problems faced by the communities that live in the surroundings of the mine. Vale, however, continues denying its responsibility in polluting and in permanently violating these families’ rights to a safe and healthy environment. On October

4th, 2018, after unsuccessful attempts at negotiation, a group of Nhantchere, Bagamoyo, Primeiro de Maio and Liberdade residents, invaded the Moatize mine and stopped its activities for around 14 days.

These communities are very apprehensive about the future and demand that the company provides resettlement and worthy compensations for all the trouble they have gone through since the beginning of the operations in the mine. These measures become even more urgent since Vale recently announced a production boost in Moatize to 15 million tons (which would increase the impacts on neighboring communities) and the interest to sell the plant to another mining company. In October 2018, Nhantchere and Bagamoyo residents paralyzed the mine to claim their rights, and to denounce the unacceptable levels of pollution and the health degradation to which they have been subjected. These residents are still waiting to be resettled by Vale.

Another group that has been heavily impacted by Vale’s activities is the brick producers (potters), who had used the land taken by the mine to produce bricks (they had their shops and extracted the soil on location). The company destroyed their livelihood, because they cannot work anymore. Around 900 potters received compensation, but they claim that the amount paid by the company was not enough (around US\$ 1 thousand). There are, however, around 450 potters that have not received any compensation for the loss of their right to work and to the land. The potters have been protesting a lot.



Mining is part of the daily life of the families from Bagamoyo Community

Source: AAA/C

They demand a raise in the value of indemnity and the inclusion of potters that were excluded from the deal. Furthermore, they demand to have access to rivers and locations where they used to produce bricks. Vale has not been open to dialogue.

⁷⁵ Oliveira (article from Brasil de Fato, February 2nd, 2021).

⁷⁶ Oliveira (article from Brasil de Fato, February 2nd 2021).



On April 1st, 2021, 86 potters from Primeiro de Maio community, in Moatize, invaded Vale's territory to protest after the company had forbidden their access to the Moatize River. In a meeting with the municipal government and Vale representatives, it was agreed that Vale would indemnify them. The company, however, continues to set numberless meetings, without actually compensating them.

“Vale’s activities remained the same with the COVID-19 and the coal exploration didn’t stop either; we, the residents, had to keep inside our cracked houses due to the mine’s explosions, always afraid it was going to collapse.”

Félix Manuel, resident of neighborhood Bagamoyo in Moatize

Potters lost their right to work
Source: Karina Kato (UFRRJ/GEMAP)



Cracked houses
Source: AAAJC



The proximity of Bagamoyo Community to Vale's operations in Moatize
Source: AAAJC

Whom does the development train serve?

The rights' violations and Vale's crimes are not limited to the mining extraction locations. The Carajás Corridor cuts through communities and leaves a trail of destruction in its path. There are more than 100 communities damaged, directly or indirectly, by the transport of ore done by the trains from the mines of Canaã and Paraupébas (PA) to Porto Ponta Madeira in São Luís (MA). The constant flow of trains harms the life in these communities that are literally cut in half by the railroad. In many cases nothing separates the railroads, with its hurried trains, from the communities. There is very little signaling and no safe passages, which causes many accidents, some fatal. In March 2017, residents from Vila Fufuca protested when a train ran over and mother and her 11-month-old baby. The baby had one of its arms cut off and the mother lost three fingers of one hand. In 2019, manifestations on the Carajás Railroad paralyzed trains for 16 hours. Normally Vale ignores the protests.

For some segments, Vale has built wall and fences throughout the railroad. This measure affects the communities' mobility. For these communities,



The life of many communities alongside the Carajás Railroad is crossed by Vale's trains

Photo by: Marcelo Cruz, Justiça nos Trilhos archive

normally a level crossing, walkway or bridge is constructed. Many times, the residents must wait around 7 minutes for the train to pass (trains with 330 wagons) on the level crossing. In some situations, the trains literally park in the communities to make an operational procedure, remaining there for hours or days. This happens too often in the community Vila União. The continuous flow of trains, day and night, results in a huge sound and air pollution, leaving iron ore dust everywhere. The trains transit throughout the night. The vibration caused by movement of heavy trains on the railroad



▲ Communities' proximity to the Nacala Corridor Railroad

▼ Boy crossing the railroad

Source: Karina Kato, AIAAV Archive



has also caused cracks in nearby houses. In the village of Auzilândia, around 60 families sued Vale for damages to their residences and businesses (cracks) after the railroad duplication construction had begun. Two years ago, Vale inaugurated the Nacala Integrated Logistic Corridor (CLN) with the promise that the railroad would take development to the North of the country 77. It includes a railway line and a deep-water port specialized in mineral coal exportation in Nacala-a-Velha and, it is a central piece in the Moatize mine viability. According to Vale's data, the CLN installation, implied the resettlement of more than 1,816 families and compensation of 13,733 families whose housing and production activities were altered by the Corridor's construction. Even though the resettlements had been posterior to those in Cateme and 25 de Setembro, the same rights' violations observed in the first settlements were repeated. Families reported dissatisfaction with the houses they were given due to structural problems, such as absence of electrical wires and deficiencies in the access to water. Moreover, they reported that the houses given were different from the original project presented by CLM and approved by the communities. Besides the bad quality, the houses came with cracks and infiltrations. Reports mention that the houses are too closed, preventing families to continue with their habits of sitting in front of their houses, in open areas, to talk or work. The method of selecting families that would or would not be able to receive compensation and the calculation applied to define these compensations are also highly questionable. Until today, there are families that have not received their houses, nor have they



▲ Women waiting for the train to cross the road

▼ Corridor Nacala Resettlement

Source: Karina Kato, AIAAV Archive



been compensated. Vale offers no justification whatsoever for the exclusion of resettlements. The rural workers have been organizing themselves to write letters to Vale and provincial governments in order to seek the guarantee of their rights.

The prioritization of coal transportation on the railway heavily affected the life of the rural workers in the north of the country 78. Since the privatization of the corridor, the trains move day and night, without stopping, causing a lot of noise and disturbance in the dynamic of the community. According to CLN, its fleet counts with 85 locomotives and 1962 wagons for the transport of coal. Along the Carajás Railroad in Brazil and in the Nacala Corridor, the trains frequently stop and remain parked in the communities for long periods of time. This obstructs the transit of families that need to wait until the train starts moving again so as to continue on their path. There is no flyover or underground passage. As a consequence, people need to wait a long time to go from one place to another, places where they often have family members, or where there are schools, health centers, tillage and access to water. Since there are no fences, there are many accidents with children and animals.

In addition, the trains transit with uncovered wagons, so the coal dust leaves a trail of pollution, causing extensive damage on the daily lives of these people. By constantly breathing coal dust, many residents have complained about the increase in respiratory, ophthalmological and dermatological diseases, most of which are chronic, in the communities cut by the Nacala Corridor.

The rehabilitation of the railway and Vale's arrival represented a worsening in transportation for the communities. Before the concession, the train served as passenger transportation. Since then, the number of passenger trains has been drastically reduced. Many rural workers have been struggling to reach bigger regional markets (like the one in Nampula), health centers and hospitals (that are usually in the cities), because they face difficulty in accessing the trains. Pregnant women have trouble reaching hospitals. Many end up having birth on the roads while walking to health centers. The journey to secondary schools (in the urban zones) is also limited for many young people. Some communities face more dramatic situations: they suffer with the reduction of passenger trains, but they also had nearby stations closed (17 were closed from a total of 35). For these farming communities, the stations were important not only for the access to trains, but also because they were an important market to sell surplus produce and to buy various products. Since the stations were closed, the farmers had to close their stands and the possibility of selling their produce was reduced. The railways, therefore, serve to transport coal, leaving families and their needs behind.



Train with uncovered coal

Picture: Vale's Twitter page



Stations and stops closed along the Nacala Corridor

Picture: Aguiar e Kato (2020)



Prosecute and Pursue: Vale's dialogue strategy

Between 2013 and 2017, at least 57 lawsuits (criminal and civil) were filed by Vale in the Pará and Maranhão state courts, an average of 11 a year, according to study carried by Pública 79. Only one of the lawsuits resulted in an unfavorable preliminary injunction for Vale. In this 5-year period, more than 170 people responded to lawsuits filled by Vale for taking part in protests or public acts that denounced illegalities or irregularities that affected their lives. Social movements, Indigenous people, quilombolas, farmers and researchers are victims of Vale's judicial persecution.

Among the 57 lawsuits, 25 were prohibitory interdicts, used preemptively by Vale to obstruct, the Carajás Railroad paralyzation. This has been Vale's main response to protests and claims from numerous communities that are cut by its trains. Moreover, there are 17 lawsuits for ownership repossession.

Pública identified six criminal lawsuits filed by Vale against stricken communities, protesters and activists, in which the appeal "used by Vale was a criminal complaint [prosecution of a private criminal

"Never in my life have I been called to a precinct or forum. Not even when I was younger, and today, at 60 years of age, I am being accused by Vale of something I do not owe."

Dona Nicinha, retired farmer, resident of Alto Alegre do Pindaré (Maranhão), attacked and prosecuted by Vale¹

¹ Domenici (article published by A Pública, on November 23rd, 2017)

action] for 'arbitrary exercise of their own reasons', a term used for those who take justice in their own hands with imposed penalty of detention from 15 days to a month, or a fine, in addition to the penalty corresponding to the violence" 80.

In 2015, one of the leaders that had nothing to do with the protest was criminally prosecuted by Vale after a protest against the construction of safe passage in Buriticupu, in Vila Concórdia and in Vila

79 Domenici (article published by A Pública, on November 23rd, 2017).

80 Domenici (article published by A Pública, on November 23rd, 2017).

União. This characterizes the retaliation and threatening of those who dare to protest the company.

In 2016, the villagers from Pedrinhas, in Anajuba (Maranhão), also decided to organize a protest to demand the construction of a bridge over EFC. A banner was placed in the village informing about the scheduled action. Vale anticipated itself by filing a lawsuit with a prohibitory interdict action and managed to get a decision forbidding the protest and stipulating a R\$ 50,000 fine for those who failed to comply.

On June 2016, in Auzilândia, the biggest rural community in the direct EFC influence area, in the municipality Alto Alegre do Pindaré (Maranhão), the population blocked an intersection in Carajás in protest against the health problems caused by the railroad's duplication: the excess of dust from the construction was causing respiratory problems. One single resident was chosen by Vale to face criminal suits. The farmer was working in his land at the moment of the protest. In the following year, in July, Vale used a prohibitory interdict to prosecute the "Residents of Auzilândia Village".

The protest organized in Vila Fufuca, municipality of Alto Alegre do Pindaré (Maranhão), on March 2017, demanding the construction of a safe passage over EFC – the absence of which caused a baby to lose its arm— Vale responded by criminally prosecuting 12 people, among them, a popular communicator that only registered and posted the protest on his social media. Vale filed a criminal suit despite acknowledging the community's right to build a bridge at the location.

Another persecuted individual by Vale was professor Evandro Medeiros from the Federal University of the South and Southeast Pará (Unifesspa) in Marabá (Pará). He was prosecuted within civil and criminal law for participating in a protest in November 2015 in Marabá (Minas Gerais). According to what was exposed by *Pública*, the lawsuits "are political instruments to demobilize those who criticize" the company. In every single one of those cases, Vale lost

the lawsuits because it could not substantiate the alleged facts to demonstrate authorship of crimes.



Credit: Justiça Global



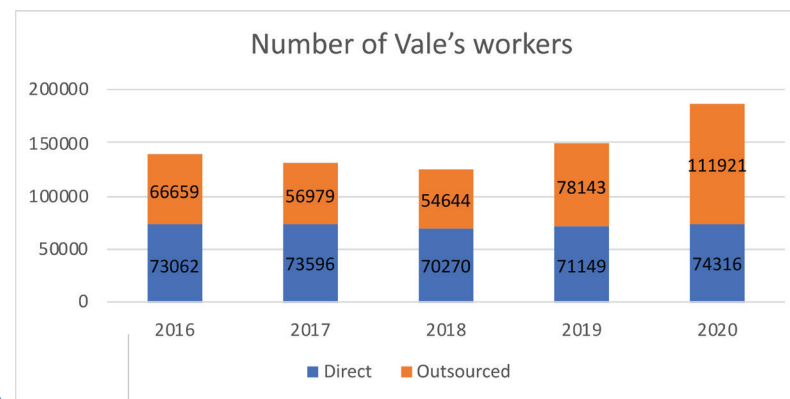
Outsource to better exploit

Vale engages with its workers by promoting a policy of mass outsourcing, which reduces rights and increases the risk of accidents.

Vale adopted a mass dismissal policy between 2016 and 2018, firing almost 15,000 employees over the period; as of 2019, new employees started being recruited as outsourced. In 2020, 60% of the Vale work force was outsourced. The company used this resource to reduce unionization and labor costs, since outsourced workers had many rights cut back.

In Canada, where Vale's biggest nickel operations are located, even with growing profits throughout 2020, the company kept its dismissal policy. In the two Manitoba mines in Thompson, the hired workers were reduced by half in comparison with the year 2017⁸¹. As narrated by the president of the miners' union (Steelworkers Union – SWU) from Thompson, Warren Luky, "It's been a pretty hard time for everyone at the plant and these layoffs are a real punch in the stomach for our members. [...] At a time when Vale is making big profits, these layoffs are appalling. It's horrible for all the people affected

by the layoffs, especially amid a global pandemic. Now is not the time for a company to be laying off workers"⁸². The work, however, is not over. Vale has been replacing former hourly workers with "contractors", an outsourced work force, as described by Winterton (SWU member). Hand-in-hand with mass outsourcing are fatal work accidents. In Mozambique, from 2018 to 2020, the number of outsourced workers grew 44%. In January 2020, a worker died and another was injured while doing maintenance of a transport conveyor belt in the Moatize mine (Mozambique). As informed by Vale, "the fatal victim worked for Leebert Belting, a company that provides services in the Moatize coal mine"⁸³.



Fontes: Relatórios da Administração 2019 e 2020

⁸¹ United Steelworkers – Métallos. Article on October 30th, 2020.

⁸² Available at: <https://www.usw.ca/news/media-centre/releases/2020/steelworkers-elimination-of-156-jobs-at-vale-is-appalling>. Acced on August, 10th, 2021.

⁸³ <https://www.cmjornal.pt/mundo/africa/detalhe/um-morto-e-um->

In Brazil the situation is quite similar. From 2018 to 2020, the number of outsourced workers grew 125%, while the hired employees grew only 5%. The precariousness of work is followed by lower investments in security and health for workers. On December 13th, 2020, Cláudio Sales Maia Júnior (23 years old) died during a maintenance service he was performing in the Salobo mine in Marabá (Southeast Pará). He worked for Komatsu, a contractor hired by Vale for maintenance and assembly of mining equipment 84. On December 18th, 2020, the worker Júlio César de Oliveira Cordeiro (34 years old) died, buried while operating a backhoe loader in Vale's residue pit in Brumadinho, the same location where the dam ruptured in 2019. Júlio was hired by the company Vale Verde. Vale was alerted about the risks of the operation in the area, which was even paralyzed. Júlio's co-workers were moved by what occurred and manifested their fear to keep on working at the location 85. The answer they received was: "you need to know that you work in mining, in an area with risk of rupture, and each of you need to know that, just like Júlio, you might not go back home anymore" 86. On February 7th, 2021, the truck driver José Luiz Aragão (68 years old), died after being pressed by a truck's side dump in Mina Urucum courtyard in Corumbá (Mato Grosso do Sul). José Luiz was hired by the company Lenarge that also provides services to Vale 87.

Vale was sentenced to compensate outsourced worker attacked by a jaguar while working in Carajás (Pará)

In 2012, Vale outsourced a worker in Pará, hired by the company TopGeo Topografia e Serviços Ltda. as a general services assistant, she was attacked by a jaguar while walking to the cafeteria with a coworker. "The path of around 300 meters, was in the middle of a forest and there was no side fence or protection. She requested her supervisor a car, but since there were none available, they went on foot. The attack lasted around two minutes, damaging her head, face, neck, back and arms" 1. Sentenced to pay R\$ 700,000 ins moral damage and R\$ 300,000 for esthetic damage in the Labor Justice of Parauapebas (Pará), Vale appealed, alleging "[the company] could not be cited in the lawsuit, since it was not the assistant's employer." The case reached The Federal Labor Court (TST), the highest court of decision on the matter, which ended up condemning Vale to pay an indemnity of R\$ 300,000 2. At the time, Vale's biggest mineral extraction center the project S11D, was under construction.

1 News published by UOL, "Atacada por onça, funcionária grávida da Vale deve receber R\$ 300 mil".

2 Freitas (2015).

ferido-em-acidente-numa-mina-de-carvao-em-mocambique

84 Maia Junior (article from O Liberal on December 14th, 2020).

85 Angelo (article from Observatório da Mineração, on Decemner 23rd, 2020).

86 Haucke (article published by CEDEFES on December 21st, 2020).

87 Cabral (article from Diário Corumbense, published on February 8th, 2021).



"Voice of the Miners"

14/11/2020 | INFORMATIVO DO METABASE | TRABALHADORES DA VALE

VALE BACKS OFF UNDER THE UNION'S PRESSURE, BUT KEEPS THE ATTACKS ON OUR JOBS!

Vale gives its employees freedom as long as they do not protest

On October 19th, 2020, the Metabase Inconfidentes Union organized an action to talk to Vale's workers, its union base, about the ongoing negotiations related to salary adjustment. Vale's proposal was below inflation. In this action, Union representatives stopped a bus with workers at the entrance of Timbopeba mine, in Antônio Pereira (Ouro Preto, Minas Gerais) to distribute informative reports. They kept the bus parked long enough to have a dialogue. This was an alternative found by the Union to talk to the company's workers, since Vale, generally, does not allow the Union inside its gates to distribute pamphlets and dialogue with its base. This was also an alternative to assemblies, since it was in the middle of the COVID-19 pandemic and crowds were to be avoided. Vale responded to this action with a "prohibitory interdict" ¹, asking that the Union representatives be forbidden to organize protests of any kind inside the mining domain of the Mariana Complex (Minas Gerais). The company requested the presence of the Military Police to deal with future protests. The Minas Gerais Court denied Vale's request.

1

Prohibitory Interdict 0010992-03.2020.5.03.0069, Tribunal Regional do Trabalho da 3ª Região.



Terrify to Appropriate: new strategies to expand mining complexes

After the rupture of the dam B-I in Brumadinho, throughout the month of February, a number of communities located in the *Auto-Salvamento* Zones – areas immediately impacted in case of dam ruptures – were evacuated when, apparently, more rigid criteria were being adopted by the Mining National Agency to define the stability condition of the dams. These community's extraction occurred, in general, without defined schedule to return these families to their houses and without presenting any concrete corrective action plan. Entire communities were removed from their houses in Barão de Cocais, Nova Lima and Ouro Preto, all of which are located in Minas Gerais 88.

This evacuation process of people and the emptying of territories proceeded throughout 2020, the case of Barão de Cocais being exemplary. In addition to the four removed communities in 2019, in November 2020, the São José de Brumadinho church and some residents received an “urgent eviction notice” for living 300-meters away from the Norte Laranjeiras dam, supposedly at risk of rupture. This dam is part of the Brucutu Mine complex,

“This represents a story, a life, a past, and there is no word to describe it to you. This eviction that is being talked about, to abandon this place here, is taking our lives away.”

Márcio Gonçalves, farmer from Barão de Cocais and affected by Vale ¹

¹ Quoted extracted from MGTV's story, from March 4th, 2021, named: “Famílias de Barão de Cocais temem que a obra da Vale aumente o risco de rompimento de barragem”.

the second biggest mine operation in Brazil, and that is being amplified. Less than 100-meters from the Norte Laranjeiras dam, Vale is building another dam, Torto, already licensed by the environmental agencies 89. If the risk of rupture is real, how is it possible to keep the construction and operations of

88 Milanez et al (2019).

89 Story from MGTV on March 4th 2021 titled ‘Famílias de Barão de Cocais temem que obra da Vale aumente risco de rompimento de barragem’.

Brucutu mine working? This case indicates that Vale has been using the fear of entire communities of a possible dam rupture in order to empty and appropriate new territories, truly a terrorist practice.

To support this strategy, Vale has been treating the residents as trespassers in their own houses. In Barão de Cocais, the company was able, through legal action, to prevent residents from entering the evacuated areas, regardless of the reason. If they trespass, they might answer for the crime of disobedience, and Vale is authorized to call for police backup when necessary⁹⁰. The families are impeded to enter in their communities since August 2020. Vale has already bought some properties of Vila de Socorro, one of the evacuated districts, but some residents are still resisting.

São José do Brumadinho Church, Barão de Cocais, location where supposedly a miracle happened in 1742 is today destination for pilgrimage of the faithful. On the upper right corner, it is possible to see the dam Norte Laranjeiras, on the left, the dam Torto

Source: MAM



Barão de Cocais, on first plan, sign indicating escape routes in case of dam ruptures

Source: Flávia Cristini/TV Globo



Evicted communities by Vale for supposedly rupture risk in Minas Gerais

Socorro, Tabuleiro, Piteiras and Vila Gongo (Barão de Cocais)

On February 8th, 2019, 492 residents from Socorro, Tabuleiro, Piteiras and Vila Congo were forced to leave their houses due to an alteration in the stability condition and rupture risk of the Dam Sul Superior of the Gongo Soco Mine, property of Vale 1. People were evacuated from their houses during the night. They live temporarily in houses rented by Vale, in hotels or relatives' houses.

São Sebastião das Águas Claras and Rio do Peixe (Nova Lima)

On February 16th, 2019, 215 residents were removed from São Sebastião das Águas Claras, Nova Lima district, better known as Macacos. The community is located in the ZAS of the dam B3/B4 of Mar Azul mine. Less than a week later, on February 20th, 2019, Vale evacuated 100 people more in the community Rio do Peixe (Nova Lima) that is located in the ZAS of Vargem Grande dam.

Engenheiro Correia (Ouro Preto)

On February 20th, 2019, Vale also evacuated other 25 people in Engenheiro Correia, Ouro Preto that lived in the ZAS of Forquilha I, II and III dam, and of Grupo do Complexo Fábrica dam.

A series of trainings and evacuation simulations took place in the Secondary Safe Zones (ZSS) – regions also impacted by mudslides in case of rupture. Overall, around 8,000 residents from Nova Lima, Raposos and Itabirito were forced to participate in these simulations 2.

1 Laboissière (article from Agência Brasil on February 8th 2019).

2 Milanez et al (2019).



Vale destroys Women's Lives

Women are disproportionately affected by mining, and by Vale, in the territories. Most of the impacts of these projects fall on women: they are the ones that are usually responsible for the house chores, in charge of the cleaning and care of elderly and children; they are the ones that fetch water and prepare food. Additionally, as part of a sexist community, they are less considered for job offers created by these endeavors; and when they are considered, they usually stay in more precarious work posts (normally cleaning services), generally hired as outsourced work force and are subject to riskier and unsafe work conditions.

A publication from PACS 91 highlights the main impacts that fall on women in Vale's operation area

- a .** The strengthening of the sexual division of labor: extractive projects are characterized by masculinization and little adaptation to female work.
- b .** Increased violence against women: the hiring of outsiders and the overgrowth of the cities where the extractive projects are installed are normally followed by increased violence that affects more women.

c . Precariousness and contamination: as women often take care of the cleaning, the problems derived from pollution and dust affects them more.

d . Increased reproductive work: women carry the greatest workload when taking care of the family, including the overload by higher chances of respiratory diseases due to pollution.

e . Increased domestic violence.

f . Loss of food security: both mining and the reallocation of communities (resettlements) compromise families' capacity to produce food (normally women's capacity, since they take care of the crops and vegetable gardens), putting these families at risk of food insecurity.

g . Women's greater economic dependency and loss of autonomy: besides unequal salaries, women are prone to be less "incorporated" in extractive projects. In addition, the men usually tend to be acknowledged as the ones responsible for the house and the family.

Vale suffocates us

Since it was installed in Santa Cruz and started operating in 2011, TKCSA (Vale and Thyssen Krupp's

plant, later sold to Ternium) has made the population ill with its “silver rain”, result of a productive process from the steelmaker. In this long story, the women, especially black women, are the ones that suffer the most and that are most exposed to the toxic materials emitted by the steelmaker. These are also the women that most feel the deterioration of public health system and social assistance in the region, since women take care of the sick, particularly the elderly and the children that suffer more from pollution. Until today, these women, mostly the heads of their families, fight in court against Vale for the damage caused to their families’ health.

The fear as a Company

Throughout the Carajás railroad, which was duplicated to accelerate the extraction and exportation of natural resources, Anacleto Pires, a quilombola leader from Santa Rosa do Pretos in Maranhão, says that the Carajás Corridor runs over communities, disregarding their lives in the territories, destroying igarapés and livelihoods. The fast and violent pace of the railroad increases women’s insecurity, particularly in communities closer to railroads, roads, mines, and ports. Besides the increase in violence, including sexual violence, the logistic endeavors are usually followed by private security guards that walk around communities and threaten those who criticize or denounce the companies’ operations.

The different impacts of dam rupture on women

The rupture of the dams in Mariana and Brumadinho have also produced different impacts on women, many of which are made

invisible during the long process of reparations that the communities have been facing. When it comes to recognizing who was affected and measuring reparations and/or compensation programs, women are especially hit and excluded.

The Getúlio Vargas Foundation (FGV), while analyzing the situation of women affected by the disaster in the Rio Doce Basin 92, demonstrated some of these different impacts along gender, such as:

- a. Higher difficulty for women participating in collective discussion and decision-making processes, given the inadequacy of the form of consultation;
- b. Higher difficulty in accessing financial aid and compensations since, when paid, the men are responsible for receiving it, since they are the “head-of-household”;
- c. Domestic work overload;
- d. Non-recognition of damaged production activities such as sewing, crafts, domestic agriculture etc.;
- e. Increased rates of violence against women and girls;
- f. Negligence towards special necessities of pregnant and lactating women, in addition to no guarantee of attention to mental health and domestic violence.

In the Paraopeba Basin, as described above, Vale has taken the responsibility for registering people hit by the disaster, keeping its right to deny

“Even in the dark, we can walk in our territory, but when it is impacted, when other things are put in it, you become afraid of walking at night... In ours there are 5 electroducts, 3 railroads, 1 BR 135 (road), 1 resettlement, there’s the issue with the lack of water, and there are the landowners, also.”

Speech from resident of Santa Cruz, Maria Regina de Paulo (in 2020)¹

1 Speech from Anacleto Pires, quilombola leadership from Santa Rosa dos Pretos.

requests of mitigation measures, such as emergency payments. Since the documents required to prove residency are usually bills, many women had their rights denied, because most bills are in their husband’s names. These women also suffer from the disconnected families: since many jobs were extinguished as a result of the rupture, many husbands had to migrate to seek new jobs.

“I speak as a woman. The train made it easy, if a mother had to give birth, the train made it easier to go to the hospital. Since it was canceled, there are serious problems for women. They are realizing that it was on the stops that markets worked, they bought rice, oil. [Today] it is necessary to go to Malema to buy salt—a very long distance. We used to get money here, with our products, but so far, we don’t even have money to enroll our children at school. Our market was here, in this corridor.”

Farmer from Tui, in the Nacala Corridor, Mozambique

Women from Nacala Corridor

Picture: Karina Kato (UFRRJ/GMAP)



Disengagement with the planet

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Surrounded by Vale: the destruction of all forms of living in Xikrin do Cateté Indigenous Territory

Surrounded by six of Vale's mines (S11D, Sossego, Mina do Azul, Carajás, Salobo and Onça Puma) and the starting point of the Railroad Carajás, the *Xikrin do Cateté* Indigenous Territory (IT) is an outstanding portrait of how Vale relates to the Indigenous people in Brazil. In all, fourteen Vale developments affect the Xikrin to Cateté IT, some of them already implemented, others in the implementation phase 93.

According to research conducted by Instituto Socioambiental (ISA), 100% of the land corresponding to the Xikrin do Cateté IT is affected by the incidence of mineral processes, including requests for research or concessions for cultures 94. Vale alone has 37 requests overlapping the Xikrin to Cateté IT 95.

In this IT, live the Mebêngôkre Indigenous people (the "people of the waters", self-denomination of the Indigenous people more commonly known as Kayapó),

the Xikrin do Cateté (close relatives of the Mebêngôkre, separated by waters) and some other isolated Indigenous people 96. With 439,000 hectares, the Xikrin do Cateté territory was declared an Indigenous land in 1977, but its demarcation was only completed in 1991. In this process, 13,000 hectares were subtracted by the original territory claimed by the Indigenous people, part of them in the mountains of Puma and Onça (the latter also houses an Indigenous cemetery) 97

In those mountains, Vale extracts nickel. Its plant is 6 kilometers away from the Indigenous area. With Onça Puma, Vale has become the world's largest nickel producer. Since the operation started in 2011, the mineral tailings contaminate the Cateté River.

In response to the many protests and actions carried out by the Xikrin do Cateté people, in 2015, Reginaldo Saboia, professor at Universidade Federal do Pará

93 Ministério Público Federal (Federal Prosecutions Office), on November 10th, 2020.

94 Instituto Socioambiental (2013).

95 Amazon Watch (2020).

96 "Terras Indígenas no Brasil" Website.

97 Hofmeister and Cicero (article in "A Pública", on December 5th, 2017).

(UFPA), “measured the presence of heavy metals in the [Cateté] water, finding levels above the recommended by the Conselho Nacional do Meio Ambiente (National Environment Council – CONAMA) – the data for dissolved iron in the water was 30 times superior to the limit accepted by the agency. They also found chromium, copper and nickel in high volume and concentration 98. Conforming to Saboia’s report, there were no high levels of nickel, chromium, and copper in the stretch of the river Cateté before it passed through Onça Puma, “the contamination occurs after Puma” 99.

The contamination of Cateté River by heavy metals has led to the emergence of a series of health problems among the Xikrin do Cateté: intestinal diseases, dermatological problems (such as itchy skin), burning eyes after the contact with the river’s water etc. Diabetes and fetal malformation have become recurrent. The physician João Paulo Botelho Vieira Filho, professor at Escola Paulista de Medicina and medical consultant of Porekô Indigenous Association, stated in 2015 that “the [Cateté] river is dead. If nothing is done, we are on the border of a chemical ethnocide” 100.

An analysis of soil collected in lands near the Xikrin *aldeias* (villages) by University of São Carlos laboratories in April 2015 also identified that the highest levels of metal concentration were in the *aldeias* closest to Vale’s premises. Aluminum was one of the metals found in those sites, a chemical that can cause neurological alterations and also associated with Alzheimer’s disease.

In spite of having profoundly affected the lives of 1.300 Xikrin do Cateté and the Mebêngôkre, Onça Puma Mining has not yet presented studies on the impacts caused by the enterprise on the Indigenous people. While still negotiating the purchase of Onça Puma, Vale had access to an anthropological report that dealt with the impact on the Indigenous people. Regardless, the company concluded its acquisition in 2005 101.

Important battles have been fought by the Xikrin ever since. On three occasions, the Indigenous people got Federal Justice to stop the activities in Onça Puma. On August 6th, 2015, Federal Justice ordered the project closed. However, on August 31st, 2015, Vale was able to get an injunction that restored the mining operations in Onça Puma. But, on October 9th of that same year, the Indigenous population achieved a new judicial order to shut down those operations. On December 11th, though, Vale was authorized to continue part of its operations in the plant; however, the mining is still prohibited.

In September 2017, Vale was, once again, obligated to cease its extraction activities in Onça Puma. After complaints by Indigenous Associations that stated Vale continued to carry out nickel exploration activities, Federal Justice ruled, one more time, that on October 5th, 2017, the enterprise’s mining activities would be interrupted. Onça Puma carried out its function by the power of injunctions, obtained by the company until November 2020, when the Xikrin do Cateté and Mebêngôkre Indigenous people struck a deal with Vale, brokered by the Federal Prosecutor’s Office (*Ministério Público Federal* – MPF). Several agreements on the decontamination and depollution of Cateté River were made and a deadline was established to verify and repair the socioenvironmental damage caused. If there is no consensus on the damages and its reparation, the lawsuits will proceed again. Vale must transfer more than R\$ 26 million directly to the Indigenous people, by their representative associations.

Who is interested in liberating Indigenous lands for mining?

According to report written together by Brazil’s Indigenous People Association (Associação Brasileira de Povos Indígenas – APIB) and Amazon Watch, “Vale has hundreds of requests to explore inside the Indigenous Lands in Amazonia. Among the 236 requests, some stand out: the ones that focus on the Indigenous Territory (IT) Trombetas-Mapuera, which is located between the states of Roraima, Amazonas and Pará, with 68 requests; the IT Mundukuru in Pará, with 52 requests; the IT Xikrin do Cateté (Pará) with 37; Kayabi (Pará) with 35; and Menkragnoti/Baú (Mato Grosso do Sul/Pará) with 26.”¹

1 Amazon Watch (2020).

98 Hofmeister and Cicero (article in “A Pública”, on December 5th, 2017).

99 Hofmeister and Cicero (article in “A Pública”, on December 5th, 2017).

100 Conflicts Map, involving Environmental Injustice and Health in Brazil (Fiocruz).

101 Hofmeister and Cicero (article in “A Pública”, on December 5th, 2017).

The Xikrin do Cateté have filed at least 15 lawsuits in Federal Court against Vale. They are grounded on administrative proceedings for licensing, marked by the absence of Indigenous component studies and/or the infringement of socioenvironmental conditions during the process of implementation or already in the operation phase. *Ibama* (Brazilian Institute of Environment and Natural Resources), *Funai* (Indigenous People National Foundation), *ICMBio* (Biodiversity Conservation Institute), *ANM* (National Mining Agency) and *BNDES* (National Social and Economic Development Bank) also figure as defendants in some of those lawsuits. The company also disobeys and disregards the principles of ILO 169 Convention by not consulting the Indigenous people before implementing their projects.

In addition to Onça Puma, the copper operations of Mina Salobo have also been denounced by the Indigenous people for causing socioenvironmental damage in Xikrin do Cateté IT. As determined by *Pública*, “by opening up glades for the power transmission lines, the slurry pipeline and the runoff road pass, Vale took down nearly 300 nut trees, alongside with the rest of the forest that was on these paths, an information that was confirmed by ICMBio” 102. That territory, in addition to being an important one for Xikrin’s material reproduction, is a site with ancestral and cultural recreation usage (as the place where youngsters become warriors). The S11D and Ferro Carajás Projects, together with all Vale enterprises that surround the Xikrin do Cateté IT, also create impacts on the traditional Xikrin ways of life. Nevertheless, “there is no calculation on the joint

THE S11D

- ◆ S11D (South Mountain)
- Canaã do Carajás
- ★ Plant
- ★ Transfer House
- ★ Piles

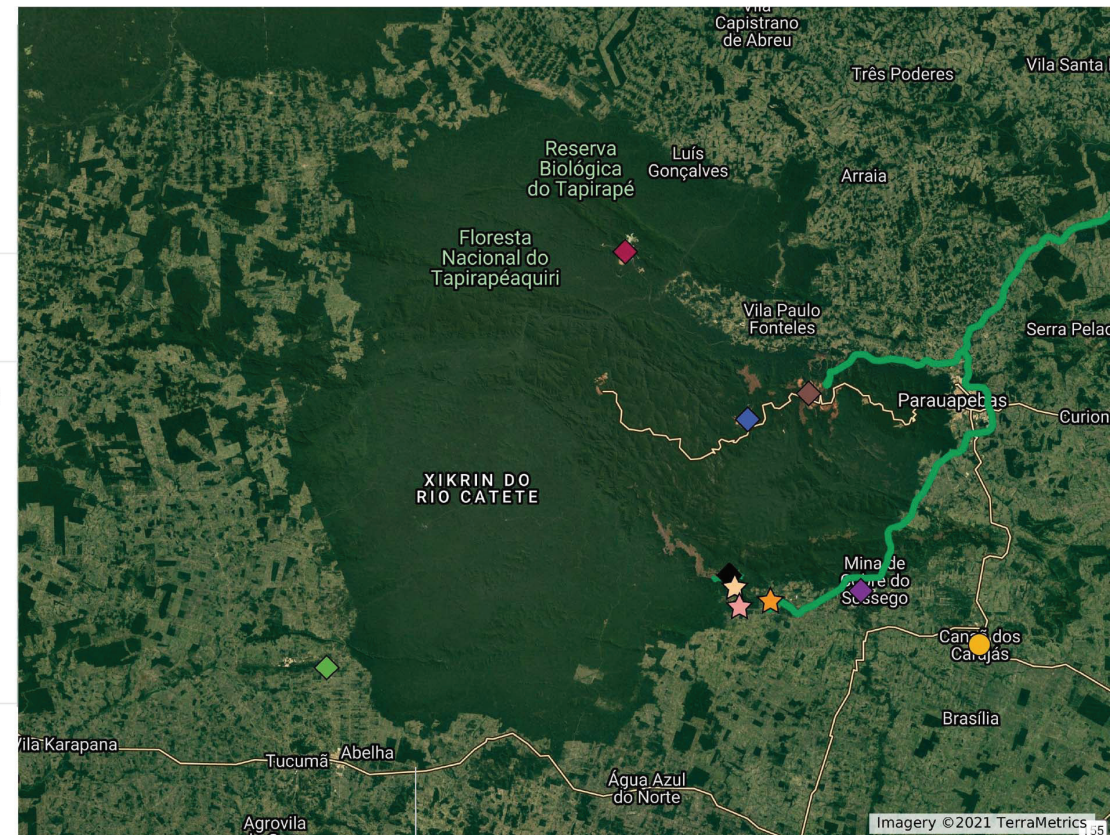
Carajás Railroad

- All the items

Other projects by Vale in the region

- ◆ Sossego (Canaã dos Carajás)
- ◆ Mina do Azul
- ◆ Minas de Ferro de Carajás (North Mountain)
- ◆ Salobo (Marabá)
- ◆ Onça Puma

The S11D includes mine, plant, rail, and port logistics; and it is the largest mining project in the company’s history.



Vale’s enterprise in Pará, alongside Xikrin do Cateté IT.

Source: Jorge Clésio (2017)

action of these projects on Indigenous life”. In Onça Puma’s case, besides the Indigenous conflict, the setup of the enterprise, entailed the ejection of land workers families, in the settlement projects of Tucumã and Campos Altos, it is estimated that three thousand families have been inflicted by the project. 103

102 Hofmeister (article in “A Pública”, on July 30th, 2018).

103 Conflicts Map, involving Environmental Injustice and Health in Brazil (Fiocruz).



The dust that sickens the people

In its Sustainability Report, Vale affirms that it follows aspersation procedures that use dust-suppression products, enclosed conveyor belts and transfer points, and wind fences in the product storage yards, as well as slope revegetation among other measures to reduce diffuse emissions. The company alleges, without any evidence, that it has reduced the emission of particulates from 10.4 tons in 2017 to 3.7 tons in 2019. According to Vale, each one of its operational unities have their own targets and emission reduction plans and are obligated to quarterly report their monitoring data. This data, however, is not released, neither to the governments nor to the communities.

Conforming to Vale's data, the operations with the highest levels of impacts caused by particulate matters are the Moatize mine (in Mozambique) and the Tubarão Complex (locates in municipality of Vitória, Espírito Santo state) and the railroad Vitória-Minas (*EFVM* – Acronym in Portuguese). In Moatize mine, since the beginning of its operations in 2011, there are communities that live alongside the mine and inside the concession area granted by the Mozambican government (but outside

Photo released by the Federal Police by the interdiction in January, 2016

Source: Reproduction from "TV Gazeta" (Nobres et al, 2016)



the operational area, according to the company). The families have not been resettled, according to an unilateral decision from Vale, and they have been living with pollution for about ten years.

Neither Vale nor the Mozambican government reveal the content of the particulate matter. Vale has been shown to be incapable, all this time, of offering a plausible and effective solution to the problems of its productive process. The emissions are not only constant, but also permanent and growing ¹⁰⁴. They impact all the inhabitants of the mine's surroundings, especially the communities of Nhantchere, 01 de Maio, Liberdade, Porto Seco and Bagamoyo. The fine particulates are the worst. Mozambican legislation does not have legal limitations for PM_{2.5} particulates (the finest and the worst). International Health Organization recommends a 25 micrograms per cubic meter of air concentration limit. In Moatize,

the average in August 2018 was 104 micrograms, as reported by Source International and Zitamar News 105. There was an emission of 35 micrograms per cubic meter, during eight months of the year and an average of 51 micrograms per cubic meter in the remaining months. The Mozambican legislation determinates the total of suspended particles (TSP) that have higher dimensions: a maximum of 60 micrograms per cubic meter. In Moatize, in 2018, the annual average was 90 micrograms per cubic meter of air (1.5 times the legal limit!). According to information provided by Vale itself, in August 2018, the TSP emission reached 209 micrograms per cubic meter, three times more than the limit imposed by law.

The dust, however, is not limited to the communities surrounding the mine. As stated by Ana Piedade, researcher at Zambeze University, “both the ones that are near [the mine], as well as those who are here, in the city [of Tete], as the time goes by, will suffer from these [respiratory] diseases [caused by the exposure to the coal dust]” 106. The complaints regarding the coal dust are also present in the Nacala Corridor. The communities that live near the railroad complain that the coal dust is caused by the intense flow of filled trains, the wagons of which are completely uncovered. The train passes by and leaves traces of black dust and illness along the way.

The ports operated by Vale are also a source of constant pollution. The Tubarão Port, managed by Vale, has been accused for years of being the source

of pollution in the Greater Vitória, Espírito Santo 107. The port’s activities are responsible for a dust emission on the sea and into the air. The black dust is derived from the charcoal that arrives at the port and the ore that is exported. The nonstop pollution has generated a lot of distress on people, who report an increase in respiratory diseases and impacts on the environment (the marine environment, in particular). Since 1990, there have been complaints of Vale’s actions in the state. In that year, Espírito Santo’s governor, Max Mauro, came to partially interdict Vale. In 2015, Espírito Santo Legislative Assembly established a Parliamentary Inquiry Commission (CPI – Acronym in Portuguese) to investigate the origin of air pollution in Vitória. The CPI concluded that the main culprits of the air pollution in the state were Vale, Samarco and Arcelor Mital. In 2016, Vitória’s monitoring stations reported that in four of five units, the established limits for emission had been exceeded, which led to a 5-day interdiction of activities with iron ore and coal in Tubarão Complex. In that same year, many lawsuits against the company were filed by the inhabitants. In 2019, the port was, once again, shut off for a week and Vale was fined R\$ 35 million by the city of Vitória for dumping mining waste into the sea. In January 2019, Guaíba Terminal was also interdicted, and Vale fined by the city of Mangaratiba in the amount of R\$ 20 million. According to the mayor of Vitória, Luciano Rezende, Vale did little to end the environmental crimes that it keeps on committing:

“we are here since I took office, in 2013, dialoguing, fining, appealing, and nothing changes” 108.

Nothing seems to change, really. In 2020, in full pandemic, the black dust emission increased again in Greater Vitória (the black dust concentration increased in 8 out of 10 monitoring stations when compared the months of April 2018, 2019, and 2020). To worsen things out, on January 23rd, 2020, Vale expelled an immense red cloud of iron ore 109 into the air, from the Tubarão Complex that left Vitória’s population worried.

“My house is near Vale [we live side-by-side]. When they bomb the rocks, all that dust enters our flour. Once, I asked my wife to get some pumpkin leaves to serve as curry and they were completely dirty with coal dust. We washed and ate them, even though we knew it was bad for our health.”

João Tomo, Nhantchere community (Mozambique) member, and impacted by Vale¹

1 Oliveira (article in “Observatório do Carvão” on June 3rd, 2020)..

105 Zitamar (article on October 30th, 2019).

106 Oliveira (article in “Observatório do Carvão”, on June 3rd, 2020).

107 Nobres, Arpini, Rezende and Machado (article published on January 26th, 2016, in “O Globo”).

108 Brasil Econômico (article published on February 8th, 2019).

109 Portal Novo Tempo (article published on January 22nd, 2020).



Water: a good that must be destroyed

From the mine until the ports, Vale pollutes and destroys a common good essential to life: water. Groundwater, streams called *igarapés*, rivers, seas where ore and its waste flow in Brazil or elsewhere. In Minas Gerais, in the municipality of Catas Altas, Vale intended to expand its extraction activities in Fazendão Complex, where the São Luiz Mine is located. This expansion would hit a water source area, lowering a water table by up to 200 meters, decreasing 40% its water volume, besides impacting Água Quente Hill, where thermal waters can be found. Caraça Mountains, a natural monument, protected by the Minas Gerais Constitution, is also endangered. However, at the beginning of 2020, the Catas Altas population achieved an important victory against Vale: under pressure from inhabitants, the Municipal Council of Environment Development (*Codema* – Acronym in Portuguese) revoked an authorization for the expansion of the mining company's activities 110. Afterwards, Vale also had its request for reactivating its operations in the Tamanduá and Almas mines denied 111.

In New Caledonia in February 2019, Vale was sentenced to pay 11 million francs CFP to EPLP

(Ensemble pour la Planète) for moral and environmental damages, due to two situations that took place in 2011 and 2014. The first one involved the abnormal decline of oak trees, an endemic species, in a forest located in one of their plants' surroundings (the South plant). The second was an acid solution leakage, in May 2014, in North Bay Creek, which resulted in the death of fish and crustaceans. Vale Nova Caledônia had already been sentenced, in 2017, to compensate Província Sul. According to EPLP, "Vale NC is considered guilty of negligence". As reported by *Época Negócios*, Vale has been the target of massive protests in the country, which had led the company to disband its business in the island 112.

Ports also cause much trouble to the populations that live with its structures in the land (in connection with railroads and roads) and with the coming and going of ships. Often, these structures have direct impact on fishing coast communities. With the settlement of ports and the traffic of big ships, these small fishermen and their boats are prohibited from accessing the fishing areas (fishing exclusion areas), from where they earn their livelihoods. Moreover, accidents are not uncommon, such as the sinking of ships and

110 Article in "Brasil de Fato", on February 19th, 2020.

111 MAM (article on March 7th, 2020).

112 Mourenaux and Souche (article published on February 12th, 2019).

the leakage of the ship loads, contaminating seas and putting coast ecosystems and oceans at risk.

On February 25th, 2020, the Stellar Banner ship, filled up with iron ore from Vale (145 million tons), leaving for China, suffered two cracks in its hull, right after it left the Ponta da Madeira Port Terminal in São Luiz. After three months stuck, the ship was sunk into Maranhão's coast. In September 2020, the Wakashio ship from Mitsui hit a coral reef in the Mauritius Islands, causing the spillage of about 1,000 tons of fuel oil. The ship had left China heading to Brazil, where it would dock in the Tubarão Port, managed by Vale, to be loaded with ore. The oil leakage put at risk an ecosystem formed by corals and a diverse range of fish species (the Blue Bay ecological park). Little was said in Brazil about the relation Vale had with that ship, or that it had been retained by one of the mining company's main owners, Mitsui, and that it was coming to Brazil to pick up iron ore extracted by Vale.

Nacala Port in Mozambique

Picture: Karina Kato (UFRRJ/GEMAP)





Brazil in the mud: Vale's tailings dams and the risk of imminent rupture

As presented in research carried out by the Environmental Justice Atlas and *Justiça nos Trilhos*, Vale owns 162 ore tailings dams in almost every state in Brazil. Among them, there are 65 classified as high potential for damage 113. These dams are represented in the map below.

Conforming to these inventories and analysis of the National Mining Agency (AMN – Acronym in Portuguese) for the year of 2020, Vale has 36 dams with no guaranteed stability from a total of 45 dams at rupture risk in the country 114, most of them located in Minas Gerais.

Considering the integrity of the enterprises and dams that belong to Vale and that present a high risk to the lives of people and to the environment, the Federal Prosecutor's Office (*Ministério Público Federal de Minas Gerais* - MPMG, in Portuguese) filed a public civil suit 115 in September 2020, demanding the judicial intervention upon Vale, in order to create and execute internal security plans and policies.

The main goal of the lawsuit was the reorganization of Vale's governance to place it on par with recognized international standards, in terms of preventive measures for disasters, transparency and responsibility. This lawsuit also demanded the suspension of the dividend payments to the shareholders.

As stated in the public civil suit, the ruptures of Mariana and Brumadinho dams are not exceptions, rather a repeated form of behavior from Vale, which adopts a systematic risk management policy that aims profit exclusively, instead of safety. "A real system of corporative irresponsibility prevails in Vale: what, at first sight, can be seen as only omission, regarding the procedures and the handling of entrepreneurial activities, a closer investigative look reveals an infinity of illegalities committed repeatedly, within one of the largest mining companies in the world. Who pays the bill? The people affected, the State and Brazilian society. Who must be shielded

113 Saes (2019) in Vale's Conflict Map in Brazil.

114 Angelo in article on October 15th, 2020, from the Observatório da Mineração.

115 ACP nº 1035519-02.2020.4.01.3800

from responsibility? The members of the high-level administrative offices (organized irresponsibility)” 116.

After the disaster in Brumadinho in February 2019, the Court of the State of Minas Gerais ruled that Vale stop discarding tailings at 8 dams in Minas Gerais: Laranjeiras (Barão de Cocais); Menezes II (Brumadinho); Capitão do Mato, Dique B and Taquaras (Nova Lima); Forquilha I, Forquilha and Forquilha III (Ouro Preto) 117. This decision had an impact on the activities in Brucutu Mine (located in São Gonçalo do Rio Abaixo, Vale's second largest iron ore extraction point that uses the Laranjeiras dam) in Vargem Grande Complex (Nova Lima). In Paraopeba Complex (Brumadinho) and Fábrica Mine in Ouro Preto. All of these mines had their activities suspended.

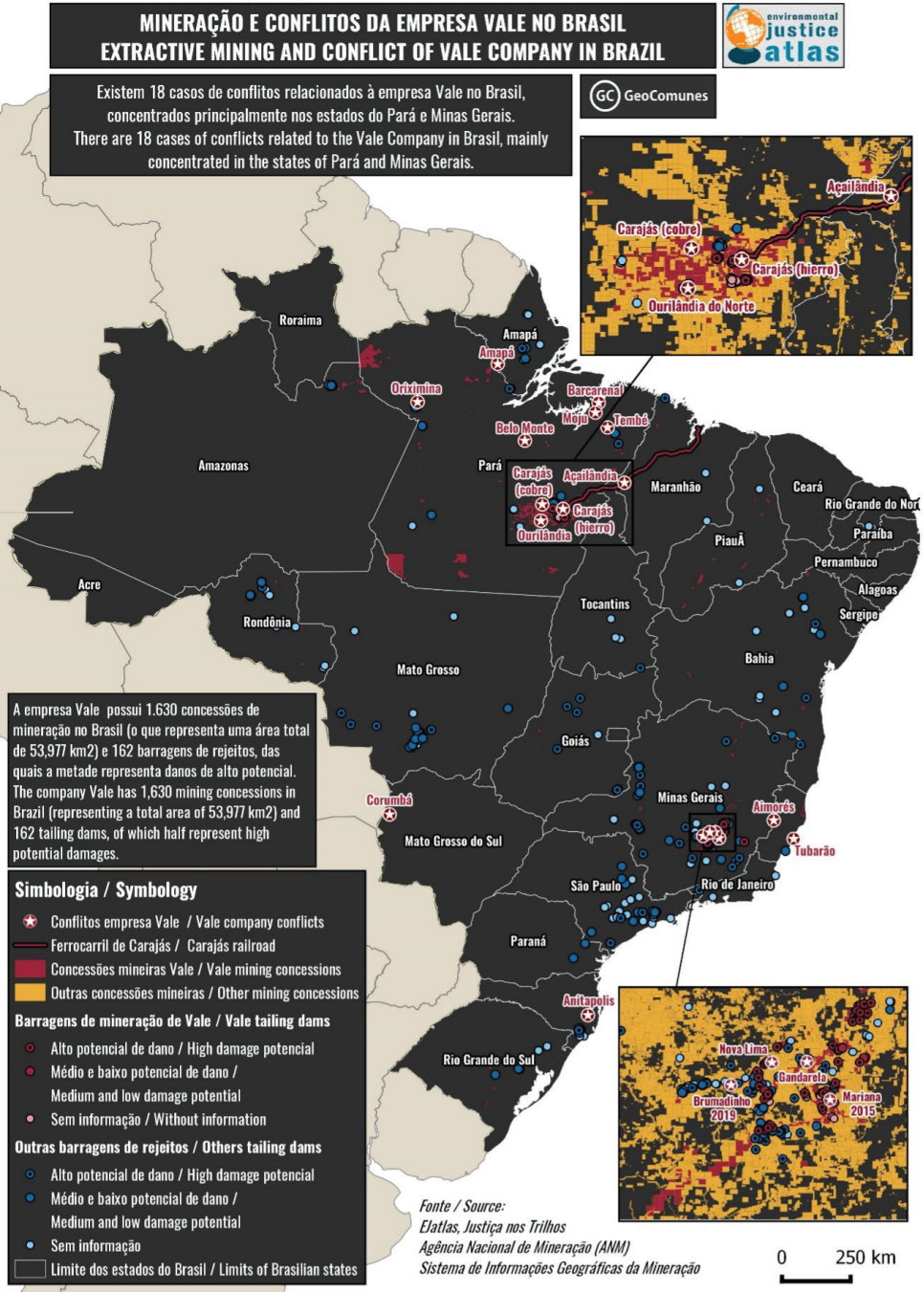
A lawsuit from MPMG also led to the interruption of the activities at the Timbopeba mine (Ouro Preto) in March 2019. Even though 174 families 118 have already been removed from their houses due to the high risk of rupture at the Doutor dam (one of the dams that form the Timbopeba Complex), Vale was authorized to resume its activities at the mine in April 2020 119. Only by August 2020 did the company start the construction work of decommissioning in Doutor dam 120.

Although these condemned dams have not been decommissioned and the risk of rupture remains

116 Federal Prosecutor's Office, article on September 3rd, 2020.
 117 Article in G1, on February 4th, 2019.
 118 Article in G1, on February 10th, 2021.
 119 Article in G1, on April 29th, 2020.
 120 Article in Estado de Minas, on August 24th, 2020.

Vale's Conflicts and Mining in Brazil

Source: National Mining Agency (ANM)
 Organization: Environmental Justice Atlas and Justiça nos Trilhos (Saes, 2019)



high in several of them, Vale has been able to obtain clearances to resume its activities in most of them. In June 2019, Vale resumed the activities in Brucutu mine. In July 2019, ANM also authorized the restoration in Vargem Grande Complex activities. The enterprises in Alegria mine interrupted in March 2019 were cleared by ANM in November 2019.

After Brumadinho, Vale was fast to announce that it would decommission, as an emergency, 9 dams until the end of 2019. However, until December 2019, only one of the dams had been decommissioned, the 88 dam in Nova Lima (Minas Gerais). In 2020, another 2 dams would be dismantled: Dique Rio do Peixe (Itabira, Minas Gerais) and Pondes de Refeitos (Paraúpebas, Pará). Vale also informed that the dams 2 Kalunga and 3 Kalunga, both sited in Paraúpebas (Pará), have been decommissioned 121. In other words, from nine dams, four have yet to be dismantled.

121 Even though the mines appear in the 2020 report as if they had been dismantled in 2019, this same information hadn't been issued in the 2019 report.



At the center of the picture, the Doutor dam. The sign contains instructions to be followed by to the population, in case of a rupture.

Photo by: Lui Pereira/Agência Primaz

“Vale comes and say that we are not at risk. The Civil Defense, on the other hand, says that we are at risk. So, our lives stopped, the minutes are only a few if the siren goes off between today and tomorrow. A siren that we have here but we can’t hear. How do I put myself at ease, how do I have peace, knowing that the mud will stop right there? Who has guarantees? Who is Vale?”

Lucilene Santos Matias, member of Antônio Pereira community (Ouro Preto, MG) and affected by Vale



I owe it, I deny it and won't pay for it: when Vale moves out and leaves its liabilities behind

In August 2017, ThyssenKrupp Companhia Siderúrgica do Atlântico (TKCSA), originally a joint venture established between Vale and ThyssenKrupp, was sold to Ternium. Vale took itself out of the project in 2016 but remains until this day as the only provider of iron ore of the company. TKCSA started its operations in 2010. Since the beginning, it presented a mistake in the project, more specifically in its production line. The plant operated for six years without a license, with wide-open operational, environmental, and social problems. There was illegal deforestation of the mangroves; illegal use of Chinese labor; allegations of labor in regimes analogous to slavery; allegations of accidents and death at the construction site; pollution etc. Once the operations were initiated, it was expected that the steel plant would, alone, the carbon gas emissions in Rio de Janeiro's metropolitan region by 76%.

All these impacts and violations were soon to be felt by the communities surrounding the plant. Since its opening in 2010, these families live daily with silver dust that invades the houses and the bodies

that are close to the plant: fisherman have lost their access to the bay and to the rivers, because of the intense ship traffic, houses have cracks in its walls, families are bothered by a constant sound pollution, derived from the MRS trains that carry the iron ore from Vale to the steel plant and port terminals in the region. Even if this "silver rain" has thinned over time, it still bothers the population daily, increasing the cases of allergic rhinitis, headaches, and sores of the skin, eyes, and ears, not to mention the constant fatigue and exhaustion. The composition of the silver dust, according to the Environmental State Office from Rio de Janeiro is aluminum, cadmium, calcium, carbon, lead, copper, chromium, sulfur, iron, phosphorus, magnesium, manganese, nickel, etc.

The local residents' and fishermen's fight against the company has been lingering. There are, today, lawsuits from fishermen associations still in court, demanding compensation for the damage causes to the artisanal fishermen in Sepetiba Bay by the steel plant since 2007. There are also in course 238 lawsuits filed by the Public Defender's Office in the 1st

and 2nd circuit courts of Santa Cruz, for damages caused by TKCSA operations on the residents of the steel plant surroundings. The main damages cited are: the impacts of the MRS railroads operations that take the ore to TKCSA on the houses and life of the families that are close to the railroad (vibration, cracks, pollution from ore dust, sound pollution); impacts from the silver rain on the health of Santa Cruz's residents (in Reta da João XXIII, in particular); and floods caused in São Fernando housing complex by the changes TKCSA provoked in the rivers of the region (São Fernando canal, in particular). At the beginning of its operations in 2010, the enterprise came to be the defendant in two lawsuits filed by Rio de Janeiro's State Prosecutor's Office for environmental crimes, calling for the punishment of their executives. Those lawsuits, however, expired.

The damage caused by the company continue, but with its sale (disinvestment), the responsibility for them has been diluted: in the end, who answers for the damage caused and who will be responsible for compensating them? That was exactly what happened in Sepetiba Bay: both Vale and TKS left the business, passing on the plant to Ternium, which does not currently admit liability by the damage caused in the first years of operations. The life of both the families that live in the surroundings of the plant (in Reta João XXIII) and the Sepetiba Bay fishermen, nevertheless, remains deteriorated, and their basic rights, violated.

Vale, on the other hand, continues to be responsible for the socioenvironmental crimes committed

“We were caught off guard. We must know if the group that bought [the company] will afford the losses. The dust continues, everybody is sick, the fishermen without work. And now what?”

Maria Regina, Resident in Santa Cruz (Rio de Janeiro) and affected by Vale¹

¹ Article in PACS's website, published on February 24th, 2017.

in Sepetiba Bay. It is important to remember that TKCSA was built by Vale and TKS. Both are responsible for the damage caused to the residents and fishermen upon the plant's installation and operations. Vale is the main provider of iron ore. The railroad operations still cause much damage and disturbance to the families whose houses are close to the railroad. The intense iron ore transport by the trains causes the vibration that has literally cracked houses, leaves a trail of black dust from the uncovered wagons, and bothers the residents with the intense noise caused by the trains. Vale, therefore, is still liable for the current impacts on Sepetiba Bay and the families that live there, because the company has joint liability for being the only ore supplier and shareholder of the railroad.

In Bahia, in Cotegipe district, residents have been dealing for 55 years with constant soot from the processing of manganese by Vale Manganês steel company. These families report that their houses

and bodies are filled with a dark dust and “medicine smell” that has caused many health issues, such as coughing, shortness of breath, nausea, allergic reactions, and pneumonia. Vale affirms that the steel plant would be closed until the end of the year (2020). Today, the residents of the plant's surroundings wonder if Vale, after shutting off the company, will solve the enormous social and environmental liabilities left in the area. In 1999, when Vale took over the steel plant, a Conduct Adjustment Term (TAC – Acronym in Portuguese) was signed, together with Bahia's State Prosecutor's Office and the City of Simões Filho Municipal Office that forced the company to allocate funds to compensate the environmental damage caused by the plant. In that agreement, a consultant company (Vereda) was hired to evaluate the contamination in the environment and in people. It concluded that the manganese dust was not something to worry about. Nevertheless, an evaluation elaborated by the Federal University of Bahia (UFBA) Medicine School, upon request from Simões Filho Prosecution, brought several critics to Vereda's report, affirming that the report was not based on a solid methodology. In the evaluation, UFBA's researcher and his team reported that, under investigation, they detected a high concentration of manganese in local residents' hair (50 times more than the reference values), which could have severe psychological impacts, especially on children. Nonetheless, nothing else was done at the time and Vereda's report is still valid. Nowadays, UFBA's team is investigating the impacts

of pollution on pregnant women and the possibilities of occurring intrauterine contamination¹²².

A similar situation occurs in Mozambique. In January 2021, Vale announced a deal with Mitsui withdrawing the Japanese company from the Moatize mines and Nacala Logistics Corridor. According to the company, this is the first step for Vale's continuous disinvestment from coal extraction in Mozambique. In a 2021 study, the Public Integrity Center of Mozambique, alerted that Vale announced the intention to disinvest from Moatize mines and Nacala Corridor just as the extensive fiscal benefits granted by the Mozambican government come to an end¹²³. As reported by Extractive Industry Transparency Initiative, since the beginning of its activities in Mozambique, Vale failed to pay about 4.6 million *meticals* (or about 64,000 dollars at March 2021 exchange rates) to the Mozambican government. Moreover, the company had also been granted relief from custom duties (VAT on construction material, machinery and equipment importation), and a reduction on the Collective People's Income Tax (IRPC) rate, among others. According to CIP, Vale came and settled itself in Mozambique, took advantage of the coal and the fiscal benefits that the Mozambican State had granted them and, afterwards, as in the many cases observed in this report, the company intends to exit the business, leaving a trail of liabilities and destruction behind.

The announcement of the intention to sell the mine and its participation in the Nacala Corridor leaves

many questions and fears. Although it is certainly insecure, the workers—most of whom are outsourced—do not know what their situation will be. The communities surrounding the mine, who fight for resettlement, fear the mine will be sold and the damages caused by Vale will remain unrepaired: these families live until today with severe damage caused to their health by the pollution derived from the operations in the mine; they had their mobility jeopardized by the fences set up by Vale, having their access to the water sources and country roads denied. The potters, who had their access to the land impaired, preventing them from continuing to work as they have always done, do not know if they will be compensated. Families resettled, who fight for improved housing and also for compensation from the losses they had with the resettlement process (farmland, houses and other improvements) do not know if their requests will be answered. Alongside the Nacala Corridor, there are also many families that have been resettled and who fight for transparent and decent compensation as well as improvements to the housing provided by Vale with many infrastructure problems. At the same time, other families not appointed as entitled for resettlement struggle to be recognized and to have their rights guaranteed. Mozambican society, in general, also wonders if it was worth granting such a large area for the exploitation of natural resources and guaranteeing so many tax exemptions for multinationals such as Vale, which has no commitment to the country's development. These questions are still open and

await answers from Vale. At this moment, according to the information we could access, Vale speeds towards disinvestment, leaving its liabilities behind.

In Latin America, Vale also sold mining projects without committing to the environmental and social liabilities left behind, as in the case of its exploitation of copper in Chile, the phosphate in Peru, and the potassium in Argentina. In Peru, "the local community expose the illegal land appropriation and the fishermen protest against the sea and air pollution"¹²⁴, two of them were even killed in 2012 during the protests.

"Vale never told us anything about its sale. People here in the community only hear rumors all around, that the company will leave, but nobody clarifies anything for us. Not even the government."

Fatima Lenade, resident of 1 de Maio neighborhood, in Moatize

122 Barba and Rocha's article in *Repórter Brasil*, on October 1st, 2020.

123 Public Integrity Center of Mozambique's research, published on January 27th, 2021.

124 Saes (2019), Brazil's Environmental Conflicts Map.

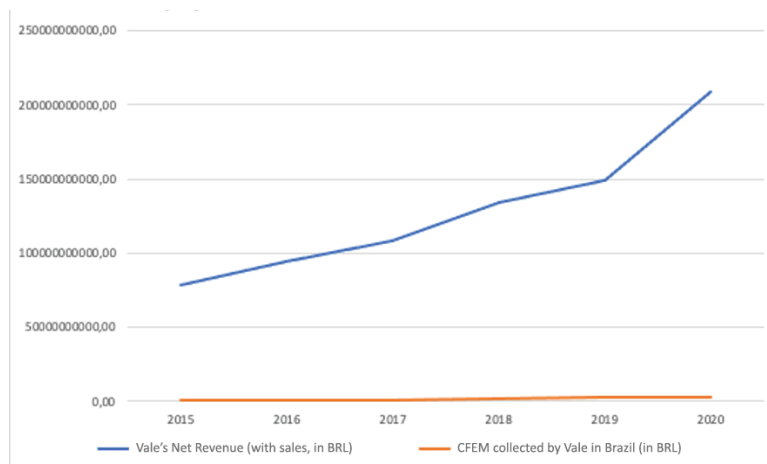
Enriching the few at the expense of destroying the many

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What does Vale leave in the municipalities?

If the collecting of Financial Compensation for Mineral Resources Extraction (CFEM – Acronym in Portuguese) has a large impact on the economies mined municipalities, the payment of that tribute by Vale is insignificant when compared to the mining company's revenue (the CFEM is assessed upon the company's net revenue, the revenue minus taxes and transport and insurance costs). The company gains billions in profit with the sale of natural resources that it extracts, leaving to the municipalities a short pay-back, in terms of taxes, besides all the countless social and environmental impacts.



Comparison between Vale's revenue and the collecting of CFEM

Source: Vale Administrative Reports (several years) and National Mining Agency's website.



What's the value of Vale?

The number 1 in destruction

Not even two ruptured dams shook Vale up. By the end of 2019, the company appeared at the top of the largest companies in Brazil ¹²⁵. Throughout 2020, with the world paralyzed due to the COVID-19 pandemic, its market value more than doubled, reaching almost R\$ 500 billion ¹²⁶, as can be seen in the graphic below.

Despite the oscillation of ore prices in the international market (with a growth tendency since 2016) and that many activities have been interrupted, as determined by Brazilian Justice in response to the dam ruptures or non-compliance with environmental conditions or disregard for Indigenous people rights, Vale's net revenue has grown strong since 2015.

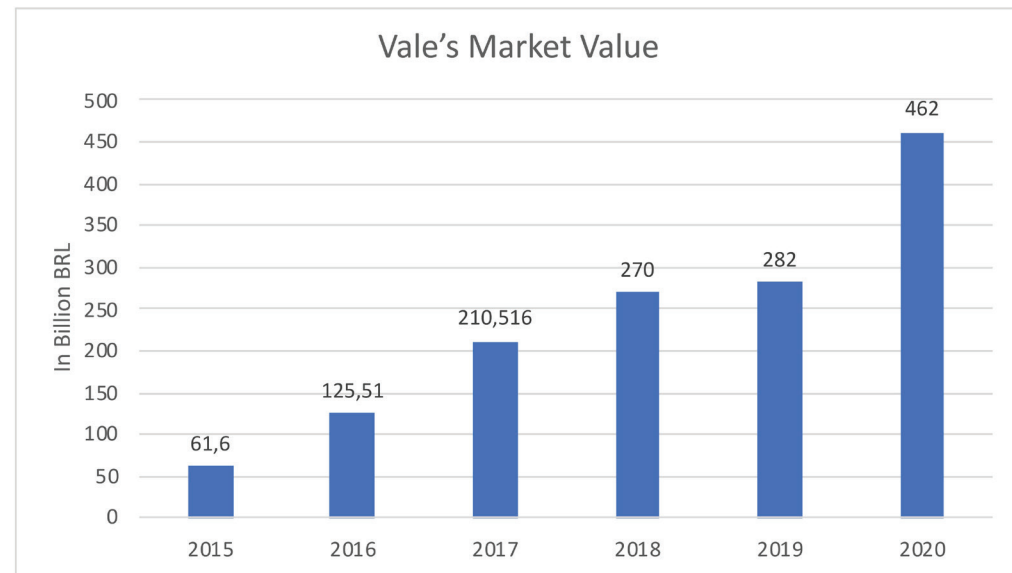
Even so, Vale spends a massive amount of money with lawyers and refuses to pay for the damage and the harm that it causes to population of the territories where it operates and for the environmental destruction that it causes. The company refuses to pay to finalize the resettlement of Piquiá de Baixo community (Maranhão); it refuses to solve the problems in the resettled community's housing in

Mozambique and to pay all compensations for the *machambas* (croplands) destroyed; it does not recognize entire families that live today in the surroundings of the Moatize mine and that have seen their health deteriorate by the mine's dust; and it is still reluctant to compensate all the potters that have lost the possibility to work and guarantee their income and living. In Brazil, Vale is one of the champions of collecting environmental fines, which are hardly ever recognized or even paid by the mining company.

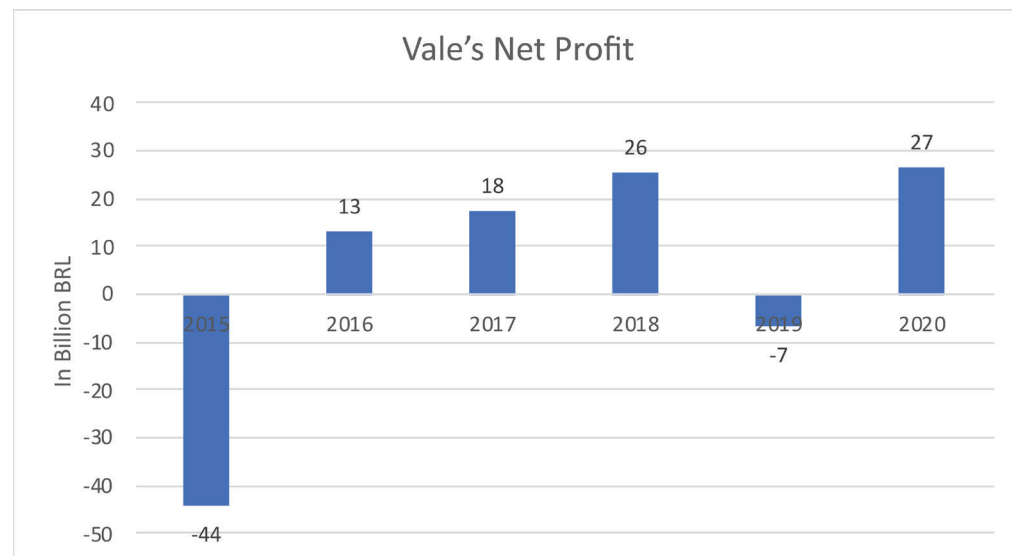
The graphic below shows the growing profits, obtained at the cost of destruction of many lives and territories. Even though Vale registered in its financial impairments in the years of 2015 and 2019, when the company would have lost R\$ 44 billion and R\$ 7 billion, respectively, these numbers are deceiving. Vale did not come to actually lose money in either of those years. For example, in 2019, Vale "discounted" from its profit the amount of R\$ 28 billion as expense provisions for Brumadinho. However, Vale did not spend that money or compensate the families, for it is only a "provision", or some kind of reserved money.

¹²⁵ Bona (article on July 22nd, 2020).

¹²⁶ According to information in 2020 Vale Inc. Administrative Report.



Source: Vale Inc. Administrative Report for the years of 2017, 2018, 2019, 2020



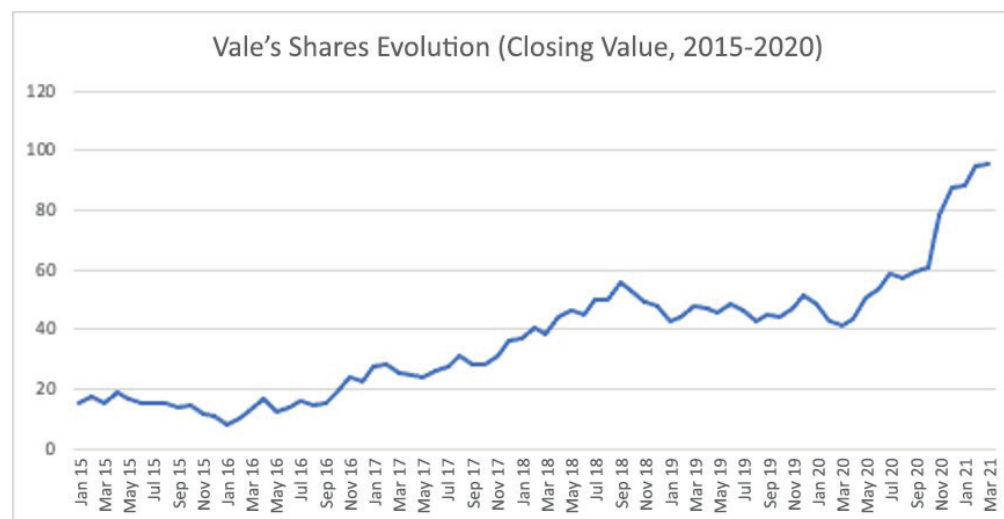
Source: Vale Inc. Administrative Report for the years of 2017, 2018, 2019, 2020



When deaths generate profit

Within three years, Vale committed two huge environmental crimes, killing rivers and destroying entire cities, an enormous trace of destruction and caused the death of over 290 people. While the victims try to restore their lives and wait, without success for fair compensation, the mining company continues to profit, rendering disasters a good deal. Following ore price movements on the international market and the exchange rate valuation in November 2015 (when the Mariana crime occurred), Vale's stocks (closing value) rose 748% by December 2020.

The following graphic shows the progress of Vale's stocks in Brazil, revealing the ongoing growth in the company's market value. Between November and December 2015, right after the rupture of Fundão dam, Vale's stocks dropped, but soon reversed. In February 2016, the company's shares rose again. In January 2019, when the rupture of Córrego do Feijão dam happened, Vale's shares dropped sharply at first, causing the loss of over R\$ 70 billion in market value. Nevertheless, the fall did not last long. In the next month, the mining company's stocks rose again. The increase of the company's shares accentuated, starting March/April 2020, during the pandemic, when mining became an essential activity, and after January 2021, when the company closed a billionaire settlement with the government of the state of Minas Gerais.

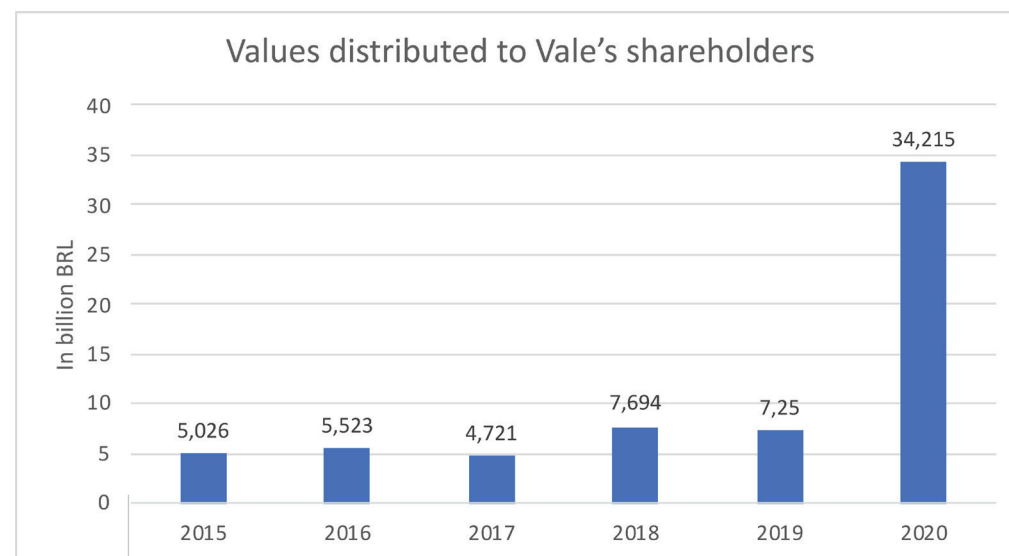


Source: Investing.com



Extinguishing life and distributing interest

Between 2015 and 2020, Vale distributed to its shareholders more than R\$ 64 billion, among interest payments, own capital, and dividends. Money accumulated at the cost of destruction and suffering of thousands or millions of people, for whom Vale denies rights to fair reparations. Meanwhile, since the rupture of the dam in Mariana in November 2015 until March 2021, the Renova Foundation spent R\$ 12.22 billion in all its reparation actions ¹²⁷ (it is important to point out that Vale is responsible for only half of that value, namely, around R\$ 6 billion). As a result of the rupture of the Brumadinho dam, from January 2019 to February 2021, Vale spent a measly R\$ 6.28 billion ¹²⁸, compared to the more than R\$ 34 billion that will be distributed to their shareholders, for their outstanding performance in 2020, as shown in the graphic following.



Source: Information present in Vale Inc. Website, in section "Investors", subsection "Dividends" and JCP. April 2021

¹²⁷ Renova Foundation's website.

¹²⁸ As informed by the company in the agreement reached with the government of Minas Gerais. Justice Court of Minas Gerais, February 4th, 2021.



Corruption, Bribes and Power Games: Vale's main policy

Private jets and fishy schemes are the moto of Vale when it comes to grabbing territory to be exploited. The Rio de Janeiro Office for the Repression of Organized Criminal Actions (*DRAECO*, acronym in Portuguese), opened an investigation into crimes committed by Vale's executives, involving the negotiations on Simandou Mine in Republic of Guinea. The negotiations that led to the entrance of Vale as one of the owners in the mine are surrounded by corruption accusations, compromising the current CEO of Vale, Eduardo Bartolomeu, who, at the time, was the logistics director (other executives of the company may also have been involved) ¹²⁹. The investigation will determine whether Vale violated capital market rules by not informing their shareholders properly on the risks of the business Vale was getting into (the arrival in Guiné happened on April 30th, 2010).

Vale and the former owner of the business, Beny Steinmetz (from BSGR) have been dueling with an intense judicial dispute in different courts. The last decision from the London Court of International Arbitration (LCIA) ruled that Steinmetz pay billions compensation to Vale, claiming that Vale was

unaware that there was corruption in the purchase of the Simandou mine. Steinmetz is accused of forging, bribing and corruption in the acquisition of the rights to explore iron ore in Guiné.

However, Steinmetz has tried to reverse the fine owed to Vale. In 2020, the executive presented recordings of former Vale directors (such as José Carlos Martins, Alex Monteiro, and Denis Thirouin) in the Court of New York, proving that the Board of Directors, the Administrative Council, and the Presidency were aware of the corruption involving the mine's concession. José Carlos Martins, former iron ore director, stated in the recordings that the Administrative Council knew about everything. At the time, he recommended that the directors sign the agreement "holding their noses because it smells bad". The Anti-corruption Policy of Vale stipulates that employees and director are to have "zero tolerance" for bribes and corruption. If such suspicions of and evidence against the Board or even on Vale's CEO himself, we can only wonder about the real limits of this anti-corruption policy, in terms of their adherence to organizational practices.

¹²⁹

O Globo (article on March 25th, 2021)

New mining code was written by Vale and BHP lawyers

In December 2015, the complaint was made public that the official document of the bill proposed in the Chamber of Deputies of the Brazilian Congress for the new Mining Code was drafted in the computers of the Pinheiro Neto law firm, which has the mining companies Vale and BHP among its clients. In spite of being signed by Congressman Leonardo Quintão (MDB-MG), encrypted data reveal the origin of the document ¹. The bill that originated the New Mining Code started in 2013 and was approved in 2017, right after the approval of a set of Provisory Measures by former President Michel Temer.

Vale's Unsustainability Indicators

In 2020, Norway's Sovereign Wealth Fund, the largest in the world, excluded Vale from its portfolio for the lack of commitment with the mitigation of climate change and deforestation.

In 2019, after pressure from the civil society, Vale withdrew itself from UN's Global Pact, the largest social and corporative responsibility network in the world.

In 2019, the trader in São Paulo's stock market (B3) excluded all stocks from Vale from the Corporate Sustainability Index (ISE).

In 2019, Vale was suspended from the board of associates of the Ethos Institute, for the non-compliance with the Institute's Letter of Principles, over concerns with its Commitment to Social Responsibility, Reliability, and Integrity.

1

Senra (2015).



For Vale, it is not necessary to be socially and environmentally responsible, just looking it is enough...

Under the label of “social investment”, Vale affirms making voluntary social, cultural, and scientific investments. Unattached to the impacts of their operations, these actions are carried out with their own resources or come from mechanisms of tax exemptions (such as the Rouanet Law). The researcher Raquel Giffoni, in the book *“Conflitos ambientais, corporações e as políticas do risco”* 130 (2019) understands that the growth of these corporate social responsibility programs reflects the professionalization of “social risk management” among companies—whereby “social risk” is not that which the company offers to the people and the environment, but rather the risk the communities mobilized for their rights can inflict on the companies’ profit.

These initiatives have been institutionalized in corporations, as principles and norms that the companies should follow and that are not simply “philanthropy” or “good intentions”, but rather market strategies aimed at controlling the risk factors that may stand in the way of the production process. These social responsibility programs face “social risks”, seeking to neutralize the demands of

the parts interested and affected by the company’s activities that come to be seen as “threats” from the corporate perspective. In the case of extractive industries such as Vale, the social responsibilities programs are mainly directed to cool off disputes and to guarantee its dominance over natural resources, turning public opinion to the company’s side.

Vale, therefore, has invested heavily in propaganda and green marketing, whilst trying to reinforce its communication initiatives with communities, professionalizing itself in the management of local stakeholders and guaranteeing the engagement, identification, and monitoring of relations with the public. According to its sustainability report, Vale has, today, teams that work specifically with that purpose, engaging 147 professionals, subordinated to the Executive Board of Sustainability, Institutional Relations and Communication. In face of all that structure directed to their goals of social responsibility, it is interesting how Vale has yet continued to present so many problems, complaints, and occurrences of activities stoppage due to protests from communities, Indigenous people, and workers. Either

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“Environmental conflicts, corporations and the risk policies”, in free translation.

the work is poorly coordinated and done, which does not seem to be the case—hence all the resources and people involved with—or the goal of such activities is merely to monitor the critics, while the company carries on with their operations, seeking greater profits while incurring serious social and environmental impacts and operational risks.

The Vale Foundation must be included in this strategy. The foundation was created to promote integrated development (economic, environmental, and social), and, according to Vale, the Foundation reached more than 770,000 people in 2019, through social projects in 68 municipalities of six Brazilian states. Reports from the territories in which those projects are conducted, however, inform that the company has used those social projects to neutralize the critics made towards their operations. These projects in small cities have worked, in practice, as a decisive power instrument by Vale, because they allow the company to “award” groups and municipalities that do not criticize their operations and do not push the company to correct its social and environmental impacts, making it easier for the company to operate and divide the communities.

However, the magnitude of Vale’s impacts on the territories, on the other hand, means that criticism of the mining company’s activities is also growing and, increasingly, on a global scale. Many communities, social groups, unions, and NGOs continue to maintain their autonomy and critical capacity, implementing actions that seek to unmask Vale and circumvent all the corporate investments to neutralize criticism.



In a public hearing held in the Chamber of Deputies on February 15, 2019, Fábio Schvartsman, president of Vale at the time, refused to get up during the minute of silence held in honor of the victims of the tragedy in Brumadinho/MG

Picture by: Reproduced by Câmara TV

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