

ENVIRONMENTAL DEGRADATION IN BRAZIL

Legal and policy gaps



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OECD Watch is a global network with more than 140 members in over 50 countries. Membership consists of a diverse range of civil society organisations bound together by their commitment to ensuring that victims of corporate misconduct have access to remedy, that business activity contributes to sustainable development and poverty eradication, and that corporations are held accountable for their actions around the globe.

FIDH (International Federation for Human Rights) is an international human rights NGO federating 192 organisations from 117 countries. Since 1922, FIDH has been defending all civil, political, economic, social and cultural rights as set out in the Universal Declaration of Human Rights. FIDH acts at national, regional and international levels in support of its member and partner organisations to address human rights abuses, including ensuring corporate accountability and improve victims' access to justice through documentation, advocacy and litigation.



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1

Introduction

GLOSSARY OF ACRONYMS

ANM	National Mining Agency
CONAMA	National Environmental Council
COPAM	State Council for Environmental Policy
FUNAI	National Indian Foundation
IBAMA	Brazilian Institute for the Environment and Renewable Natural Resources
ICMBio	Chico Mendes (National) Institute for Biodiversity Conservation
PCI	Parliamentary Committee of Enquiry
SEMAs	State-level Secretariats for the Environment and Natural Resources

On 25 January 2022, the Organisation for Economic Cooperation and Development (OECD) invited Brazil along with five other countries to begin an accession process to become an OECD member state.¹ To be allowed to accede, Brazil needs to demonstrate “willingness, preparedness and ability” to “adopt OECD practices, policies and standards”.² The accession process itself is envisaged as a “powerful transformative instrument to secure a country’s convergence with the values, standards and membership obligations of the Organisation.”³ As re-stated by the OECD Ministerial Council in October 2021, these values include: the promotion of open, free, fair and rules-based multilateral trading system; government transparency and accountability; the rule of law; gender equality; the protection of human rights; and the promotion of environmental sustainability, including with focus on addressing climate change.⁴

At present, Brazil is far from being in alignment with these values, standards and obligations. The country’s record on environmental protection, deforestation and the fight against climate change, the safeguard of its civic space and protection of the human rights of workers, environmental and human rights defenders, indigenous peoples and other traditional communities make it unfit for accession.

This paper is one of five submitted by Conectas Human Rights (Conectas), OECD Watch, and the International Federation for Human Rights (FIDH) to the OECD assessing the extent to which Brazil’s laws, policies and practices in these areas meet OECD expectations. It focuses on environmental degradation in the context of business activity and its impact on human rights.⁵ It is likely of particular interest to OECD committees and divisions focused on Environment Policy, Agriculture, Chemicals, Corporate Governance Health, Industry, Innovation and Entrepreneurship, Investment, Public Governance, and Steel.

Environmental destruction is a growing threat in Brazil. Toxic waste from mining activities and dam collapses pollutes communities; mercury poisons Indigenous populations subjected to illegal gold extraction in their territories; and pesticides – many outlawed in other OECD states, or sprayed aurally in a manner prohibited by other OECD states – contaminate people, ground, and water sources. Instead of addressing these harms, the Brazilian government is dismantling relevant legal protection and institutional frameworks. These failures put into question Brazil’s “willingness, preparedness and ability” to comply with OECD values and standards, all of which constitute critical aspects of the OECD’s decision on whether or not to invite aspiring states to accede.

The accession process provides a critical opportunity for the OECD to identify and assess these gaps and prompt the necessary reforms to bring Brazil into line with OECD values, standards and obligations before, and as a condition for, accession.

Based on a brief description of 5 case studies, this paper examines existing gaps in Brazil’s protection of the environment. Based on this analysis, it makes recommendations for changes in laws, policies and practices necessary to prevent environmental degradation. **Conectas, OECD Watch, and FIDH urge the OECD, its member states and technical committees to make compliance with these recommendations a condition since qua non for accession. They also urge the OECD, member states and technical committees to take the views and observations of civil society organisations and other experts into account in their decision-making process regarding Brazil’s accession.**

The report is structured in five sections. After the introduction, section 2 presents prominent cases that exemplify Brazil’s failure to protect the environment. Section 3 analyses the gaps in Brazilian laws, policies, and practices that lead to the degradation highlighted in these cases. Section 4 discusses OECD committees, initiatives, and instruments relevant to the issue of environmental protection. Finally, section 5 concludes by identifying both the reforms Brazil must adopt to close the gaps analysed, and recommendations for actions the OECD and its member states should take to ensure rigorous terms for Brazil’s accession and a transparent and participatory review process.

2 Prominent cases



2.1 Case of Piquiá de Baixo in Açailândia, Maranhão

For decades, the communities of Piquiá de Baixo and the California settlement in Açailândia, in the Brazilian State of Maranhão, have suffered from the environmental pollution caused by solid waste emanating from the activities of pig iron plants operating in their vicinity.⁶ These plants transform into pig iron (an intermediary product to steel) part of the iron mineral which is extracted in Brazil's Carajas pole and transported to the State of Maranhão by Vale S.A. In 2011, five pig iron companies operated in Açailândia.⁷ Due to a fall in export prices of pig iron, three of them ceased to function, leaving behind deteriorating structures that are posing risks to the surrounding environment and communities.⁸ Two other companies (Siderurgica Viena S.A. and Gusa Nordeste S.A.) continue to operate.⁹

The solid residue resulting from the plants' operations contaminated the environment over a prolonged period of time, seriously damaging not only the surrounding soil, air, water, animals and vegetation but also people's health.¹⁰ As highlighted by the UN Special Rapporteur on Toxic Waste, "Studies reveal multiple cases of health problems including coughs, shortness of breath and wheezing and headaches. **Sixty five percent of community members reported respiratory problems, with others suffering from ophthalmological diseases, and various skin conditions, aggravated by the pollution.** Community members have been burnt from the slag and residues from pig iron, where the waste area was not properly fenced off, and no proper signalling of danger and the risks associated with contact with the pig iron".¹¹

“Piquiá de Baixo continues to suffer violations of the rights to life, health, information and many others from the 1970s to the present day. It is necessary and urgent that the institutions comply with the laws and guarantee the right of access to justice in Piquiá de Baixo, the right to compensation, reparation and the incorporation of effective measures for truth, memory and guarantees of non-repetition.”

— Larissa Santos, *Justiça nos Trilhos*

“Guaranteeing the right to integral protection for the families of Piquia means ensuring legal security in the democratic state. To this end, it is necessary to guarantee the functionality of the mechanisms of social control over the environmental impact studies and licences that authorise the activity of companies, as well as the creation of laws that encourage public policies of compensation/corrective and preventive measures.”

— Valdenia Paulino, *Justiça nos Trilhos*

Despite the serious health complaints of the local population, the Municipal Government of Açailândia has failed to develop a strategy designed to address the specific health problems facing the community.¹² This situation has deteriorated further with the current COVID-19 emergency, since the community is at greater risk of severe infection due to the prevalence of chronic respiratory diseases.¹³ Health care provision in the municipality has been historically limited and underfunded. **People affected by the pollution have received, at best, temporary relief to their symptoms, but this has been ineffective at solving their health conditions since they have continued to go back to the source of pollution.** In addition, the lack of technical capacity locally to diagnose pollution-related diseases and the fact that these diseases were historically not subject to mandatory reporting have kept the health problems of the Piquiá de Baixo and California communities under the radar, concealing the need for a long-term strategy.¹⁴

The steel companies have been able to operate largely unsupervised by public authorities. In 2011, competence to grant environmental licenses and inspect pig iron and steel activities was decentralized and transferred from the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA) to state-level authorities.¹⁵ In the State of Maranhão, the Secretariat for the Environment and Natural Resources (SEMA) became the authority in charge of supervising the pig iron and steel industry.¹⁶ However, SEMA's resources to regulate the industry were not boosted alongside the changes in the law and its ability to perform its new functions effectively has been hampered by limited equipment and insufficient staff. In the period between 2010 and 2017, for example, the agency was unable to produce one single technical study on the quality of air, water and soil in the area surrounding the steel plants.¹⁷

So severe has been SEMA's incapacity to regulate the industry that the steel companies were able to operate without a valid environmental licence for years.¹⁸ When their licenses expired in 2012, SEMA did not renew them because it found that the companies were not complying with environmental regulations.¹⁹ However, it took no action to ensure the companies brought their operations into compliance. As a result of an automatic renewal instrument which allows companies to continue to operate despite findings of irregularities, the steel companies continued their operations without a valid license.²⁰ SEMA claimed that it applied the pertinent sanctions but, as of 2019, no information was published regarding the types of sanctions, when they were applied and whether the companies had complied with them.²¹ These failures also expose the omissions of the Public Prosecutor of Maranhão who is also responsible for ensuring compliance with environmental legislation.²²

Capacity constraints have made SEMA reliant on the steel companies' self-monitoring and self-generated data.²³ Worryingly, data submitted by the companies (if any) or information concerning compliance with the environmental licenses more broadly, is not made public or available to community members or other interested parties.²⁴ SEMA has failed to allow access to this information even to the Public Defender and Public Prosecutor's Office of the State of Maranhão.²⁵

The public authorities' inaction pushed the community to find redress through the courts. In 2005, Piquiá de Baixo residents filed lawsuits claiming moral and material damages against Gusa Nordeste S.A. for the health problems caused by the pollution. It took eight years for the first instance judge to decide in favour of the claimants. In 2015, these decisions were upheld unanimously by an appeal court. As of 2019, 13 of the 21 judicial rulings in favour of the residents became final and were awaiting implementation.²⁶ While the outcome of many

of the legal claims has been favourable, the judicial path has not been easy for communities who have had to go through a lengthy and costly legal process while continuing to live in the vicinity of the pollution. In addition, community leaders have faced legal suits and harassment from Vale S.A.²⁷

Thanks to the constant community mobilisation, Vale S.A, the Vale Foundation and the Federal government agreed to contribute to the financing of a resettlement process.²⁸ In 2016 they signed a construction contract with the community for the relocation of over 300 families. While this came as a huge relief at the time, five years later the construction process is still underway.²⁹ In May 2021, the community signed an agreement with the State governor to re-start construction of the new homes, scheduled to be completed by June 2022.³⁰ 16 years after they launched their legal actions, 8 years since the court's favourable decision and 5 years after signing the relocation contract, the community is still living in the contaminated area and awaiting relocation to a safe place. To this day, neither the government nor the companies have acknowledged their responsibility for the harm caused to communities.



2.2 The Mariana Dam Collapse

On 5 November 2015, the Fundão tailings dam in Mariana, Minas Gerais, owned by Samarco (a joint venture between the mining companies Vale S.A. and BHP Billiton) collapsed, sending over 48 million cubic metres of mud and waste into the Doce River. On its path, the mud killed 19 individuals, destroyed several villages, left thousands of people displaced and contaminated the river's aquatic life, soil, banks and water.³¹ **The disaster decimated the livelihoods of over 3 million people who live along the 800km Doce River, including indigenous peoples who depend on its watershed ecosystem.**³² Two weeks later, Samarco announced that two other structures it owed were also unsafe and admitted that its contingency plan had failed to alert people about the disaster, even those living 10 hours away from the ruptured dam.³³ The collapse alerted the country to an impending risk of much wider dimensions, with multiple communities living near dams across the country and limited capacity of government authorities to conduct safety inspections.³⁴

Ever since the disaster, affected communities struggled to access reliable information about the nature and extent of contamination in the river and its implications for the environment and human health.³⁵ The mining companies dominated safety information before, during and after the disaster.³⁶ Control over information

allowed the companies to manipulate data, alleging for example that the waste that poured into the river was not toxic.³⁷ When health impacts from dust and heavy metals in waste piles in the Municipality of Barra Longa begun to emerge,³⁸ the foundation created to manage the remediation process (the Renova Foundation) sought to exert ownership of epidemiological and toxicological studies to suppress disclosure.³⁹ This made communities mistrust available information. For example, despite assurances from the companies that, after treatment, the water was now safe for drinking, communities did not feel confident to use it.⁴⁰

Thousands of individual and collective legal actions were filed against the companies in the aftermath of the disaster.⁴¹ One of the legal claims against the three companies was filed by the Federal Union and a large number of public authorities who, in March 2016, settled the claim with the companies. Under the settlement, the parties agreed to develop 41 remedy programs and create two entities responsible for the implementation and monitoring of these programs (these entities later become, respectively, the Renova Foundation and the Interfederative Committee or CIF). Affected communities did not participate in the negotiation of the settlement agreement and had no representation in any of the decision-making bodies within Renova and CIF.⁴² **The lack of community participation in these two critical bodies resulted in both the remedial mechanism as well as its proposed remedy programs being ineffective at addressing the needs of the affected communities.**⁴³ Over the next few years, time had to be spent negotiating new agreements to fix some of the initial defects in the design of the remedial mechanism, leading to delays in implementation of remediation and community frustration.⁴⁴ Even then, each new agreement was negotiated without community participation.⁴⁵ Four years after the disaster, none of the proposed remedy projects were on track.⁴⁶ In 2016, 21 people from mining companies were charged with qualified homicide by Brazil's Federal Public Prosecutor's Office, but the crime of homicide was removed from the process in 2019. Of the 21 people who had been charged initially, five continue to respond to a lawsuit in the Federal Court today but responding to flood and crimes followed by death, as well as environmental crimes. Also, a civil action seeks \$27.4 billion to repair all damages.⁴⁷

Other environmental fines were also imposed by the Ministry of the Environment, which issued 31 infringement notices against Samarco. After the company filed appeals, five of them were annulled. Of the rest, the mining company only partially paid one of them, in which it was fined for causing pollution and environmental degradation that resulted in serious damage to water resources and to the health, safety and welfare of the population.⁴⁸



Aerial view of Brazilian mining multinational Vale at the Corrego do Feijão mine in Brumadinho, Belo Horizonte's metropolitan region, Minas Gerais state, Brazil, on December 17, 2019. The upstream tailings dam burst on January 25, spewing millions of tonnes of minerals-laced sludge across the countryside. At least 257 people were killed – with 13 still missing – and communities in the area were devastated. © Douglas Magno/AFP

2.3 The Brumadinho Dam Collapse

On 25 January 2019, another tailings dam owned by Vale S.A. in the municipality of Brumadinho, once again in the State of Minas Gerais, collapsed. Approximately 12 million cubic meters of toxic waste poured into the Ferro-Carvão River, a tributary of the Paraopeba River. While still dealing with the devastating aftermath of the Mariana collapse, Brazil's inability to prevent another dam disaster shocked the world.⁴⁹ The dam's waste sludge killed 272 people on its path, injured many others and totally buried the Ferro-Carvão River along with more than 130 hectares of vegetation, buildings, plantations and animals. Water sources were severely contaminated, threatening the water supply of 5.5 million residents of several municipalities, destroying livelihoods and putting the health of people living along the Paraopeba River basin at great risk.⁵⁰

A Parliamentary Committee of Enquiry (PCI) of Minas Gerais' Parliament, established to investigate the causes of the disaster, found a multiplicity of administrative irregularities concerning the dam's licensing history. These included oversight failures by many regulatory bodies, including the State's Secretary for the Environment and Sustainable Development (SEMAD) and the State Council for Environmental Policy (COPAM)⁵¹ The PCI also pointed to severe budget and staff shortages affecting the capacity of many regulatory bodies to do their job effectively as part of the problem. It mentioned as examples Brazil's National Mining Agency (ANM), which is responsible for monitoring dam safety in the country,⁵² and the State System for the Environment and Water Resources, which is responsible for controlling, monitoring and inspecting mining activities, including dam operations.⁵³

Despite knowing that the dam did not meet a minimum safety threshold, in June 2018 (seven months before the collapse) the private auditing company Tüv-Süd Bureau de Projetos e Consultoria Ltda had issued a "Declaration of Stability Condition", paving the way for the mine to remain in operation.⁵⁴ Since then, Tüv-Süd also recommended a number of mitigation measures to deal with safety concerns which were quicker and cheaper than other safer, but more costly, options.⁵⁵ Tüv-Süd, was contracted by Vale as an external technical advisor, yet it was at the same time also working for Vale as an internal consultant.⁵⁶

Similarly to the Mariana disaster, **affected communities and public authorities were deprived of critical information before, during and after the disaster. Before the collapse, Vale withheld vital information concerning the safety of the dam from public authorities.**⁵⁷ The company also failed to disclose safety information to its employees and contractors.⁵⁸ The lack of capacity of administrative bodies to conduct inspections and generate their own information also meant that authorities were reliant on company information

based on self-monitoring.⁵⁹ Even then, the same resource constraints meant that regulatory bodies could not verify corporate information.⁶⁰ Once again, Vale is believed to have kept health and safety studies concerning the toxicity of the waste mud secret.⁶¹

While significant improvements were made in relation to participation of affected communities in the remediation process relative to Mariana, **communities were still excluded from important decisions.** For example, the PCI noted that community representatives were not consulted in relation to an agreement reached in July 2019 between the Minas Gerais' Public Defender and Vale.⁶² In February 2020 a Brazilian court charged a number of corporate managers and employees, including Vale's former CEO, with wilful homicide and environmental crimes.⁶³ However, proceedings came to an end in February 2021 when Vale struck a deal with prosecutors and the state of Minas Gerais that settled the matter.⁶⁴ Once again, affected communities were left out of the negotiation and are now petitioning the Federal Supreme Court to overturn the agreement.⁶⁵ Efforts are now underway to re-examine the terms of the agreement, reproducing the same unnecessary delays, additional costs and community frustration described in the Mariana case. **In agreeing to end the criminal prosecutions, public authorities crushed affected communities' hopes for criminal convictions and full knowledge of the truth.** In November 2018, the environmental agency granted the authorisation to Vale for the expansion and adaptation of their extractive activities in the Jangada iron ore mine. Nevertheless, these permits were cancelled after the 25th January 2019 the dam close to the Corrego do Feijão burst killing more than 300 people.⁶⁶ While the mine suspended its operations after the Corrego do Feijão burst, the activity was reinstated afterwards soon after, as a result of a decision of Minister João Otávio de Noronha. However, in April 2021, the activities were suspended again, after a decision of the Special Court of the Superior Court of Justice (STJ), due to the existing risks related to the operation of the dam, especially in relation to the stability of the structure and the danger of collapse.⁶⁷

2.4 Pesticide Poisoning in Limoeiro do Norte, Ceará State

In January 2019, the Legislative Assembly of the Brazilian State of Ceará passed Law 16,820/2019, also called the Zé Maria do Tomé Law, banning aerial spraying of pesticides.⁶⁸ This law is a tribute to the community leader and environmental and human rights defender, José Maria Filho (also known as Zé Maria do Tomé), who was killed in 2010 as a result of his fight against aerial spraying of pesticides in his city, Limoeiro do Norte, in Ceará⁶⁹ (for a fuller description of the situation of human rights defenders in the country, see the separate paper "Threats to Environmental and Human Rights Defenders (EHRD) and the increasing erosion of Brazil's civic space").

José Maria Filho was a family farmer who, in 2008, begun complaining about large fruit-exporting companies (Del Monte, BANESA, Nólem and Frutacor)⁷⁰ overusing aerial spraying of pesticides.⁷¹ **A key problem of aerial spraying is the pollution caused by "pesticide drift", which can affect the environment and people surrounding the crops area.**⁷² José Maria noticed problems on his daughter's skin which he feared were caused by contaminated water.⁷³ He commissioned a study to a group of scientists from the Federal University of Ceará on the quality of water on the plateau where he lived and worked. The results of one of the group's studies showed residues of at least three of the pesticides tested, and up to 12 in certain cases, in the water of the local canals and household faucets.⁷⁴ The scientists also documented serious health impacts resulting from pesticide exposure: "in addition to acute intoxications, there are also long-term effects, such as abortion, and others that are still being studied, such as cancers, congenital malformations, endocrine diseases, immunological diseases (...) with a 38% higher incidence of cancer than in other regions where there are no agribusiness companies."⁷⁵

Despite nation-wide regulation prohibiting aerial spraying within a buffer zone of 500 meters from cities, communities, neighbourhoods and water sources, Ceará State was failing to monitor and enforce the buffer zone.⁷⁶ As a result of continuing pressure from José Maria Filho, community organizations, researchers and other supporters, the City Council passed in November 2009 Law 1,278/2009 prohibiting aerial spraying in the municipality. **Five months later, in April 2010, José Maria was shot 25 times a few meters from his home. A month after his death, Law 1,278/2009 was repealed.**⁷⁷

While an investigation was launched right after the murder, lawyers acting for José Maria's family denounced many irregularities, including non-preservation of the crime scene, delays in carrying out the ballistics exam and in bringing forward prosecutions. Thanks to social pressure as well as the involvement of the National Commission for Combating Violence in the Countryside (CNCVC), the National Council for Human Rights (CNDH) and the Secretariat for Human Rights of the Presidency of the Republic, the investigations moved forward. In June 2012, charges were laid against Frutacor's owner, a Frutacor manager and other individuals.⁷⁸ However, in 2017, the 2nd Criminal Chamber of the Ceará Court of Justice dismissed all charges, including those against the two Frutacor individuals, maintaining the process only against one suspect.⁷⁹

Meanwhile, José Maria's daughter continues to complain of health impacts derived from pesticides exposure. She also alleges that her own daughter has been suffering from precocious puberty since she was a baby. Research has established a link between precocious puberty and exposure of parents to toxic pesticides.⁸⁰ In addition, the Water Resources Management Company, the state entity responsible for managing water resources, has confirmed the contamination of water in Ceará State derived from pesticide spraying.⁸¹

The case mentioned above is not an isolated one. Aerial spraying of pesticides was used in April 2020 as a "weapon of war" by a company against farming communities living between the municipalities of Jaqueira and Maraial, in the State of Pernambuco⁸². The use of pesticides as a weapon to expel residents is not an isolated episode in Pernambuco. In April 2021, residents of the rural community of Araçá, municipality of Buriti, State of Maranhão, reported symptoms of intoxication, such as itching, fever and stains on the body after an agricultural aircraft overflight. The same poisoning occurs in the municipality of Pau D'Arco in State of Pará, to expel families who occupy the Santa Lúcia farm⁸³.

2.5 Illegal gold mining and mercury contamination in indigenous peoples' land

Brazil's indigenous Yanomami reserve is in the heart of the Amazonian rainforest, and it is being increasingly affected by illegal gold mining.⁸⁴ Illegal gold miners use mercury, which is highly toxic, to explore for gold. Liquid mercury mixed with gold-rich sediments dredged from river bottoms and streamside hills binds to the gold, making it easy to identify and separate from the waste material. The alloy is then heated, and the mercury evaporates, leaving gold nuggets. The vaporized mercury then condenses back into its solid form, falling to earth and washing into streams. The mercury pollutes the water in rivers and streams and enters the food chain by contaminating the fish. Indigenous communities who live alongside these rivers and streams intake the mercury when drinking the water or eating the contaminated fish.⁸⁵ **Since gold mining in their land is illegal, these activities fall totally outside the radar of environmental, health and other regulatory agencies and are not subject to any environmental requirements or oversight.** In these circumstances, environmental degradation is much more likely and many indigenous communities are suffering the consequences.

The Yanomami reserve currently concentrates more than 15 thousand illegal gold miners.⁸⁶ Many studies have found dangerous concentrations of mercury in large proportions of Yanomami people, including up to ninety percent.⁸⁷ Exposure to mercury can cause damage to the nervous, digestive and immune systems, as well as problems with the heart, lungs and kidneys.⁸⁸ The impacts of illegal mining on Yanomami villages goes further. In addition to polluting the rivers and damaging fish stocks, illegal miners also cut down the forest and scare away the animals that the Yanomami hunt.⁸⁹ The Yanomami peoples are also frequently subject to violent attacks from armed goldminers, with little action from the authorities to stop or investigate the perpetrators.⁹⁰ (For risks to indigenous leaders in the country, see our separate submission on "Threats to Environmental and Human Rights Defenders (EHRD) and the increasing erosion of Brazil's civic space." For a fuller description of the situation of indigenous peoples in general, see "Brazil: Threats to Indigenous Peoples rights.")

Mining in indigenous reserves is currently prohibited under Brazilian Law.⁹¹ However, Brazilian authorities are not enforcing the law in practice and are failing to curtail illegal mining on indigenous Yanomami lands. To protect the Yanomami territory from illegal mining, the government established four army monitoring bases in the 1990s,

but by the end of 2018, three had been closed due to budget constraints. The closures resulted in renewed influxes of illegal miners. Although the National Indian Foundation (FUNAI) announced in May 2019 that the bases would be reopened in 2020, it is unclear whether they have been re-established.⁹² FUNAI's capacity to protect indigenous territories is being severely curtailed by the current administration, which has drastically cut its budget and filled in managerial positions with people with little or no knowledge of indigenous peoples.⁹³

The Munduruku Indigenous Reserve in the Brazilian Amazon state of Pará has also been heavily affected by pollution from illegal gold mining.⁹⁴ **A recent study by Fiocruz and WWF-Brazil found that six out of every 10 indigenous Munduruku participants to a study presented mercury levels above the maximum safety threshold established by health agencies.**⁹⁵ The study also showed adverse impacts on the environment, the forests and the rivers, pointing out, for example, that mercury levels in fish "were 4 to 18 times higher than the safe limits recommended by the North American Environmental Protection Agency (EPA)."⁹⁶

“Recent studies provide clear evidence of how critical the issue has become for some indigenous communities. For instance, the Munduruku people have been severely contaminated, notably with the boost on illegal mining activities during the Bolsonaro's administration. Food security and sovereignty are threatened and Munduruku communities are at serious risk of harm as a result of ingestion of mercury-contaminated fish once our findings indicate fish consumption is not safe. There is a need for immediate responses from the government, starting with: An immediate halt to mining activities and expulsion of miners, equipment, and machinery from indigenous lands affected by illegal goldmining; Development of a plan to stop the use of mercury in ASGM, following the recommendations of the Minamata Convention on Mercury, to which Brazil is a signatory; Development of a primary care protocol for people with mercury levels above the reference values to be implemented by the Ministry of Health; and Improvement, strengthening and support of intersectoral actions designed to tackle illegal gold mining and trading activities and mercury smuggling across Brazil.”

Marcelo Oliveira, Conservation specialist from WWF-Brazil

Illegal gold mining has increased since Bolsonaro came to power, especially since he promised to legalise their activities⁹⁷ (see below). As of February 2020, "nearly 3,800 requests had been submitted to the Brazilian government for mining-related activities inside indigenous territories or protected areas".⁹⁸

Thus, there are some circumstances that worsen the picture of environmental degradation, putting the health and lives of the affected populations at risk, which are better developed below, such as: (i) the difficulty in combating organized crime and corruption⁹⁹; (ii) the lack of studies on the status of implementation of the Minamata Convention in Brazil;¹⁰⁰ (iii) the inefficiency in the control of the origin of gold inserted in the market; (iv) the lack of control over the effects of extraction on affected populations and the environment;¹⁰¹ and (v) the absence of care protocols in the unified health system for the diagnosis and treatment of mercury contamination.¹⁰²

3

Legal and policy gaps

The cases described above as well as investigations conducted by UN bodies such as the UN Special Rapporteur on Toxic Waste and the UN Working Group on the issue of human rights and transnational corporations and other business enterprises (UN Working Group on Business and Human Rights), show a distinctive pattern of regulatory failure as well as shortcomings in access to information, participation in decision-making, public health provision, accountability and access to remedy for environmental degradation. The current administration has accelerated and deepened these shortcomings, as described below.



3.1 Weak Environmental Monitoring and Enforcement

Brazil's inability to safeguard communities from the harmful effects of environmental degradation described in the cases above is emblematic of the state's systemic failure to oversee and enforce compliance with environmental regulations across the country. The situation of the communities of Piquiá de Baixo is not unique or unprecedented. Throughout Brazil, factories and plants are located in close proximity to communities without the necessary levels of governmental control and oversight, exposing residents to serious risks to their health and other human rights.¹⁰³ The regulatory failures preceding and following the Mariana and Brumadinho dam collapses are not isolated cases either. Authorities have identified 47 other dams that pose immediate stability risks in the country (Samarco itself confessed to safety concerns involving another two of its dams).¹⁰⁴ Inexplicably, instead of tightening controls over dam safety after the Mariana disaster, Brazil's government expedited licensing and failed to ensure adequate monitoring and oversight of mine operations.¹⁰⁵ In some cases, licences for high risk dams, such as Brumadinho's have actually been extended.¹⁰⁶ Failure to control illegal exploitation of natural resources and environmental degradation in indigenous reserves such as those of the Yanomami and Mundurucu peoples is historic and endemic in Brazil. The background to many of these cases is one of undue closeness between state authorities and businesses and convergence of their commercial and economic interests which do not include regard for the environment and human rights.¹⁰⁷

Many failures in environmental protection stem from the privatization of environmental monitoring. As described in the Brumadinho case, critical environmental and safety checks were delegated to the private auditing firm Tuv Sud, which did not act impartially and with the interest of the environment and human safety at heart.¹⁰⁸ The system of private auditing is entrenched in the law. COPAM's Normative Deliberation (Deliberação Normativa) no. 87 of July 2005 requires dams to be audited by independent professionals. ANM's Portaria 70.389 of March 2017 establishes, in turn, that private auditors must issue, at least once yearly, dam safety declarations. However, the state's regulatory incapacity means that inappropriate client-auditor relationships are not monitored, faulty audits and certificates are not detected and certificates' underlying studies and data are not scrutinized. The Brumadinho case demonstrates the serious consequences for the environment and human safety of an auditing industry that lacks independence from its corporate clients and puts its business interests ahead of professional integrity within a context of an absent or indifferent state.¹⁰⁹

Regulatory deficiencies are also rampant in relation to pesticide use in the country. The Limoeiro do Norte pesticide case is emblematic of a broader pattern throughout the country of unregulated and unsupervised use of pesticides resulting in serious environmental degradation and health impacts. A study produced by Human Rights Watch in 2018 documenting serious health impacts of pesticide exposure on seven Brazilian communities confirms this pattern.¹¹⁰

Despite many studies confirming the serious health impacts of pesticide use of the sort found in the Limoeiro do Norte community,¹¹¹ pesticides use in Brazil has actually increased significantly in the last two decades. Moreover, taxes on polluting products or activities like pesticides do not exist¹¹². Many of the pesticides approved for use in Brazil have been prohibited in other countries because of their risks to the environment and health.¹¹³ Because of the danger of "pesticide drift", the EU has also generally banned aerial spraying.¹¹⁴ However, aerial spraying is both legal and widely used in much of Brazil. As illustrated by the Limoeiro do Norte case, while the law establishes a buffer zone of 500 meters for aerial spraying, this is often not enforced in practice. Notably, national law does not prescribe buffer zones for ground spraying, and while some states have established buffer zones in this context, oversight and enforcement is once again poor in practice.¹¹⁵ States and municipalities sometimes attempt to pass laws to ban or restrict the use of some pesticides, but their efforts are often undermined by fierce corporate opposition. As described in the Limoeiro do Norte case, after a first frustrated attempt at banning aerial spraying in 2009, the State of Ceará finally managed to pass a law in 2019 prohibiting the practice. However, the law is once again under threat as it is being challenged through a constitutional action by the Confederation of Agriculture and Livestock of Brazil.¹¹⁶

While regulation and control of pesticide use is poor, monitoring for pesticide residue in food and drinking water is also extremely limited. This is partly due to the fact that the agencies tasked with doing this monitoring do not have the capacity to test for all active ingredients or all pesticides used in the country¹¹⁷, including some of the most commonly used and most dangerous, such as glyphosate and 2, 4-D.¹¹⁸ Municipalities are equally ill-equipped to do the regular testing and reporting required of them by law.¹¹⁹

In 2016, the UN Working Group on Business and Human Rights noted that the federal government's Growth Acceleration Programme¹²⁰ which promoted investment in large-scale development projects had not been accompanied by a boost in the state capacity to regulate these projects' environmental and human rights impacts.¹²¹ It pointed out that regulatory agencies such as IBAMA¹²² needed strengthening to be able to independently monitor the adverse human rights impacts of large-scale development projects.¹²³ Unfortunately, this continues to be a characteristic throughout the country and across industry sectors today. **The heavy emphasis on large-scale industrial and infrastructure projects has not been matched with the necessary regulatory infrastructure to prevent and control adverse environmental and human rights impacts.** As will be described below, far from addressing this historic shortfall, the current administration is going out of its way to deepen it.

3.2 Lack of access to information on the environment and other matters of public interest

The Piquiá de Baixo, Mariana and Brumadinho cases exemplify the multiple detrimental impacts that lack of reliable information, misinformation and corporate control over information can have on the effective protection of the environment, health and other human rights. Access to information concerning the environment and other matters of public interest is itself a human right. In addition, it is necessary as a means of ensuring effective public participation, consultation and stakeholder engagement in these areas. Access to reliable information relating to the environment and public health is also indispensable for public authorities to be able to perform their roles effectively, for example, to prevent environmental disasters of the nature of the Mariana and Brumadinho dam collapses and to respond appropriately when incidents occur. As described in the Mariana and Brumadinho cases, on both occasions the companies withheld information that was essential to understand the extent and degree of environmental and health impacts of the toxic waste. In the case of Brumadinho, adequate and timely disclosure could have helped prevent the disaster altogether.

Shortcomings in access to information in Brazil are largely a result of lack of capacity of public institutions to generate their own information and an over-reliance on, and deference to, corporate information. Tellingly, Maranhão's SEMA explains its own failure to provide Piquiá de Baixo communities with information concerning the steel plants' environmental compliance on its lack of resources: "the difficulty in keeping [the database] updated and easily available happens only because we do not monitor Piquiá de Baixo only, but we monitor the entire state."¹²⁴ This once again speaks to the severe resource constraints affecting environmental agencies across the country. The problem is also a result of a lack of willingness on the part of some agencies to disclose information that they do have, as the Piquiá de Baixo case also exemplifies. As concluded by the UN Special Rapporteur on Toxic Waste after visiting Brazil in December 2019, "unavailability of information is a recurrent concern" in Brazil.¹²⁵ This pattern has been fuelled in recent years by a number of proactive measures by the current administration which have had the effect of further curtailing people's access to information on environmental matters (see below).

3.3 Inadequate health monitoring and health-care provision

Lack of adequate diagnosis, health monitoring and provision of health care for pollution-affected people is another concerning pattern across the country. As the Piquiá de Baixo case exemplifies, pollution-related diseases such as respiratory problems are often not diagnosed or registered as such.¹²⁶ The UN Special Rapporteur on Toxic Waste reports this same problem in relation to pesticide-related poisoning, explaining that medical professionals and health services in rural areas are ill-equipped to identify pesticide poisoning or fail to report incidents.¹²⁷ The Ministry of Health has recognised the historical problem of under-reporting pesticide poisoning cases, especially in relation to chronic intoxication, which "leads to invisibility of the problem and a low access to information by workers and exposed populations."¹²⁸ Mercury-related poisoning is also difficult to detect, as the symptoms are generic. If not trained to identify it, health professionals are likely to suspect of anything but mercury contamination.¹²⁹ The lack of adequate diagnosis and underreporting affects the ability of public health authorities to understand the prevalence and magnitude of pollution and pesticide-related health problems and put in place adequate responses.

The Piquiá de Baixo case also illustrates the challenge that many people living in remote areas of the country face in accessing adequate health care to treat their pollution-related illnesses because clinics and health centres are too far or severely underfunded. This is a problem that the Special Rapporteur on Toxic Waste also raised in relation to pesticide poisoning cases.¹³⁰ If people receive any treatment at all, this tends to be temporary in nature, focused on providing immediate relief of symptoms without examining and tackling the underlying cause of the diseases. As described in the Piquiá de Baixo case, as long as the source of pollution is not addressed and affected people continue to go back to their homes in pollution-affected areas, their health conditions not only will not heal but are likely to deteriorate over time.

Where indigenous peoples are affected, their access to health care might be affected by the fact that the

government has not recognised their land as indigenous. Where this is the case, the indigenous communities cannot use the dedicated health agency CASAI (Casas de Apoio à Saúde Indígena) and must use the Unified Health System (SUS) which is chronically underfunded.¹³¹

Despite the chronic underinvestment in Brazil's SUS, the current administration proposed a budget reduction of R\$ 35 billion for 2021 (close to US\$ 7 billion). This comes on the back of a devastating constitutional amendment in 2016 (EC 95) which established a cap on social spending, including on health.¹³²

3.4 Impunity and lack remedy for environmental degradation

Environmental polluters in Brazil often escape punishment, while innumerable communities up and down the country are forced to live with the harmful effects of environmental degradation without adequate remediation. The cases featured in this report illustrate this pattern well. Protracted judicial proceedings in the Piquiá de Baixo case led to impunity of environmental offenders and denial of justice. After 16 years of litigation and 8 years since obtaining a favourable court decision, the communities are still living in the contaminated area and most of their judicial awards remain outstanding. The remediation process put in place after the Mariana disaster shows Brazil's inability to ensure a fair and equitable process to remedy large-scale environmental harm.¹³³ Shockingly, the occurrence of a dam collapse of the magnitude of Brumadinho only four years after Mariana, involving the same company, in the same state, is glaring evidence of the State's utter incapacity or unwillingness to guarantee non-repetition, a critical element of effective remedy. **In both cases, the Brazilian judicial system has been unable to hold the companies and/or their senior managers accountable for environmental crimes.**

Remedy is also difficult for people affected by pesticide exposure. As explained by the Special Rapporteur on Toxic Waste who examined this matter, showing a link between exposure and ill health is extremely challenging. This is compounded by the lack of official data described above.¹³⁴ However, nowhere is the failure of the justice system to deliver remedy starker than in the case of Jose Maria Filho's murder in 2010. Eleven years after the event, nobody has been brought to justice.

IBAMA has an important role in investigating and punishing environmental offenders. However, its enforcement record is appalling. **A study of 2015 found that only 3.33% of the fines applied on companies for environmental infractions since 1980 had been effectively paid.**¹³⁵

The government's abysmal record in preventing environmental degradation and associated impacts on health and other human rights is compounded, and fuelled by, its inability to hold environmental offenders to account and guarantee appropriate reparation. The low prospects of punishment provide very little incentive for private actors to comply with environmental regulations, and this perpetuates the cycle of abuse and impunity.

3.5 A deepening environmental and human rights crises

While Brazil's difficulties in protecting the environment and human rights in the context of extractive and other business activities go back many years, it is in recent years that a series of proactive measures have brought the country's environmental and human rights protection frameworks to a state of virtual collapse. After his visit to Brazil in December 2019, the Special Rapporteur on Toxic Waste rightly concluded that, instead of building capacity, the Brazilian Government was defunding institutions responsible for identifying environmental and health problems.¹³⁶ Below is a list of some of the most concerning policies and measures.

◉ Weakening environmental laws and regulations

The government is currently pushing a package of legislative reforms which include bills that, if passed,

would lead to an even greater deterioration of the country's legal and institutional framework for the protection of the environment and human rights.¹³⁷ This so-called "destruction package" includes Bill 191/2020 which would allow mining and other large-scale exploitation of natural resources in indigenous territories with the consequent impact on both the environment and indigenous peoples' rights. It also includes Bill 3.729/2004 which would dismantle the current environmental licensing process, including environmental impact assessment requirements.¹³⁸ Additionally, Bill 6.299/2002 on pesticides, termed the "poison bill" by critics, seeks to ease the requirements for approval of new pesticides and allow the use of pesticides so far prohibited.¹³⁹ The bill is highly criticised by environmental and health experts, including UN Special Rapporteurs who in 2018 wrote to the government to express their concerns.¹⁴⁰

Dozens of international and national non-governmental organizations signed a letter to the OECD expressing concerns about these bills and Brazil's environmental policies more broadly.¹⁴¹ Despite criticisms, the federal government is pushing for an accelerated vote, counting on the reduced civil society participation in monitoring bodies (see below) as well as restrictions on public hearings due to the COVID-19 crisis to expedite approval with minimal resistance.¹⁴²

The Bolsonaro administration has already passed a large number of executive decrees amending or revoking existing environmental protections. For example, it revoked Resolution 302/2002 which protected artificial water reservoirs to open them up for commercial exploitation and Resolution 284/2001 which required environmental licensing for irrigation projects and it passed Resolution 499/2020 to permit the incineration in furnaces of toxic waste, including pesticides, without regard for the risks to the environment.¹⁴³ Many of these measures were in part facilitated by the restructuring of environmental bodies and reduction of civil society participation in them which eliminated or minimised critical voices and objections (see below).

Rather than tightening control of pesticides in response to mounting evidence of their serious impacts on the environment and health, the government has promoted greater pesticide use as it strives to expand agricultural production and it should be noted that Brazil does not apply any taxes on pollution caused by pesticides.¹⁴⁴ In 2019 alone, Brazil permitted the introduction of 474 new pesticide products.¹⁴⁵ In 2020, the number increased to 493, the highest number of approvals in the country's history.¹⁴⁶ Despite this alarming growth, the government has not sought to increase its capacity to monitor for negative environmental or health effects.¹⁴⁷

• Political appointments

Since President Bolsonaro took office in 2019, his administration has sought to restructure regulatory bodies or amend their composition to render them more subservient to the executive's demands. Qualified staff in high level posts have been substituted with political appointees without the required technical qualifications.¹⁴⁸ For example, in February 2019, the Minister for the Environment removed most of IBAMA's regional directors¹⁴⁹ and replaced them with new appointees, many of whom did not meet the minimum requirements for their new positions.¹⁵⁰ In 2020, the same Minister dismissed two IBAMA heads of inspection who were responsible for operations against illegal mining in indigenous lands in the state of Pará.¹⁵¹ He also ordered the restructuring of National Institute for the Conservation of Biodiversity (ICMBio), appointing several military police officers to top positions.¹⁵²

• Understaffing and budget cuts

The Bolsonaro administration has also cut the budget of many environmental agencies, further undermining their ability to perform their monitoring role. Budget cuts have affected IBAMA¹⁵³, ICMBio, CONAMA (National Environmental Council) and SEMAs (environmental agencies at the state level) among others.¹⁵⁴ In addition, Presidential Decree 9759/2019 dissolved the multi-stakeholder National Council for Food and Nutrition Security responsible for advising governmental bodies on policies related to the control of pesticides in food and drinking water and composed of two thirds of civil society representatives and one third of government representatives¹⁵⁵. The same year, the Bolsonaro administration brought the number of IBAMA

inspectors from 780 to 667, severely undermining the agency's capacity to monitor and enforce compliance with environmental protections.¹⁵⁶ **The OECD itself noted in a December 2020 assessment that "vacancies at the federal enforcement agency, IBAMA, have been left unfilled for years and enforcement staff has fallen by 55% since 2010."**¹⁵⁷ This situation is not bound to improve any time soon. The federal government's proposed 2021 budget for its environmental agencies is the lowest in 13 years, and represents a drop of 5.4% from the previous year.¹⁵⁸ In August 2020, while all eyes were focused on the COVID-19 crisis, the government reduced ICMBio's staff from eleven to five (though the body is responsible for supervising 335 conservation units).¹⁵⁹

• A dwindling enforcement capacity

IBAMA applied fewer fines to environmental offenders in 2019 than in the last 24 years.¹⁶⁰ To make matters worse, the current government introduced in October 2019 new procedures to review environmental fines at "conciliation hearings". In these hearings, a commission can offer discounts or eliminate fines altogether. At the same time, the Environment Ministry suspended all deadlines to pay outstanding fines until such hearings could be held. Between October 2019 and November 2020, only five such hearings were held.¹⁶¹ In its December 2020 assessment, the OECD also noted with concern the government's failure to impose or enforce dissuasive sanctions for environmental crimes.¹⁶² The delay in holding hearings and the very purpose of these hearings represent a virtual guarantee of impunity.

While environmental enforcement has been scaled back, so has protection of vulnerable communities. In recent years, government oversight of isolated communities such as the Yanomami and Mundurucu peoples has been scaled back or abandoned altogether.¹⁶³ Protection of the environment and indigenous peoples' rights go hand in hand and are often mutually reinforcing. Scaling back on one represents an automatic deterioration on the protection of the other. Put it differently, some of the best-preserved natural areas in Brazil are protected indigenous territories. Dismantling protections to indigenous peoples' rights will automatically lead to environmental devastation (see our separate paper on Indigenous Peoples' Rights).

• Further restrictions in access to information and public participation

Unsurprisingly, civil society questions access to information and participation in the environmental licensing process for projects with significant social and environmental impacts. During this process, obligatory public hearings, in theory, could provide the environmental agency and civil society with other information about the risks of intervention. Instead, public hearings are often suppressed or carried out only in a formal manner, without enabling the effective and informed participation of civil society¹⁶⁴. It is not rare for social and environmental damages to occur because the entrepreneur omits relevant information from the impact studies and the State, through environmental agencies, only becomes aware of it when it receives a complaint of such damage.

Instead of rectifying shortfalls, the current administration has taken a large number of measures to restrict access to information and public participation in relation to environmental matters. A recent study has shown that only 15% of all requests for environmental information to government agencies under Law No. 10,650/2003 were fully granted in the 2019/2020 period compared to 59% in the 2017/2018 period.¹⁶⁵ This has affected civil society's ability to monitor the government's environmental policies and actions¹⁶⁶.

Civil society participation in environmental monitoring and decision-making has also diminished significantly as a result of multiple executive decrees which either eliminated collegiate bodies (such as the National Council for Sustainable Rural Development) or severely restricted participation of civil society actors in environmental bodies.¹⁶⁷ Both CONAMA (federal agency responsible for establishing environmental licensing criteria and standards for environmental quality control) and CONABIO (the body which promotes and monitors Brazil's implementation of commitments under the Convention on Biological Diversity), have seen the percentage of civil society participation drop significantly as a result of government restructuring.¹⁶⁸ These changes have made it easier for the federal government to introduce detrimental changes to environmental protection rules, as stated above.

Other reforms with severe impacts on access to information and civil society participation have included lifting restrictions on the sharing of personal data of people submitting access to information requests, suspending the obligation to respond to access to information requests during the COVID-19 pandemic, forbidding IBAMA from responding to queries from the media and ICMBio from disclosing studies, opinions and research without prior authorisation and temporarily restricting the publication of information concerning environmental crimes.¹⁶⁹

4

Relevant OECD committees, initiatives, and instruments

Brazil's failures to address severe environmental degradation and pollution are causing it to fall short of OECD expectations and best practice standards in the area of environmental protection.

The OECD's priorities on environment and sustainability are outlined in accordance with the Sustainable Development Goals (SDGs) of the Agenda 2030.¹⁷⁰ The OECD emphasizes the promotion of investment in sustainable development; support to inclusive growth and well-being; use of partnerships to strengthen data availability and data management capacities; and the monitoring and review of public policies on environmental issues.¹⁷¹

Further, the concept of green growth guides the design and implementation of the Organization's work regarding the environment.^{172 173} Green growth prioritizes economic development that enables natural assets still to provide the resources and environmental services required for well-being.¹⁷⁴

Altogether, the OECD has more than six dozen legal instruments in force that discuss sustainability and the environment. Most of them stem from proposals by the Environmental Policy Committee and the Chemicals and Biotechnology Committee. However, there are legal instruments originating from other committees (such as the Public Governance Committee) that discuss the environment and sustainability in connection with other topics. The issues of pollution and environmental degradation represent common points between these different instruments. These instruments cover topics such as the "polluter pays" principle, environmental assessments, integrated pollution prevention and control, the environmental performance of governments, the environmental use of economic instruments, environmental information and transparency, water resources, biodiversity, energy, waste, the use and control of chemicals, and responsible business conduct including as regards the environment. The OECD's focus on each of these issues is examined in more detail below.

The polluter pays principle is one of the most relevant legal achievements of the OECD, which led the international drive towards consolidation of the principle. In 1972, the Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies¹⁷⁵ chose the polluter pays principle as a mechanism enable the internalization of a polluting entity's harmful externalities on the environment in the production process. It was an attempt to encourage the rational use of environmental resources so that the polluter should bear the cost of measures to prevent and control pollution.¹⁷⁶

The Organization subsequently adopted the Recommendation of the Council on the Implementation of the Polluter-Pays Principle to restate the application of the principle in environmental affairs. The principle establishes structures for institutional mechanisms for the allocation of pollution prevention costs and control measures taken by public authorities.¹⁷⁷ The application of the principle to accidental pollution stemmed from the Recommendation of the Council concerning the Application of the Polluter-Pays Principle to Accidental Pollution,¹⁷⁸ which contains recommendations on accountability, prevention, and compensation for damages.

The polluter pays principle became a principle of international environmental law after the United Nations Conference on Environment and Development (Rio-92), whose Declaration expressed it in Principle 16.¹⁷⁹ Through its work in clarifying and converting the economic idea into a legal rule, the OECD was a pioneer in the study and implementation of this principle, which was eventually disseminated through international agreements and national laws in several countries.

Brazil is an example of a country that has formally adopted the principle into its legal system.¹⁸⁰ Constitutional and legal provisions allow companies to be directly responsible for accidents and environmental damages (including progress towards strict liability), and provide them with a primary duty in adopting accident prevention

actions, as encouraged in paragraphs 4 and 5 of the 1986 Recommendation. However, Brazil's actual application of the polluter pays principle is weak. In 2021, the OECD published a report titled *Evaluating Brazil's progress in implementing Environmental Performance Review recommendations and promoting its alignment with OECD core acquis on the environment*.¹⁸¹ The report points out problems in Brazil's effective application of the principle. The report mentions, for instance, the public support for the production of pesticides, the scarce planning of public actions for environmental cleaning after the occurrence of disasters, and the lack of an adequate policy for environmental recovery and reparation for parties harmed by environmental accidents.¹⁸²

On the subject of environmental assessments, the OECD is concerned with the planning and implementation of environmental policies, as expressed in the Recommendation of the Council on the Assessment of Projects, Plans and Programs with Significant Impact on the Environment.¹⁸³ The Organization promotes use of environmental impact studies and strategic environmental assessment of public plans and programs, as these are aligned with its goal of improving public policies on environment. Under OECD standards, the evaluation of projects must contain, in addition to impact forecasts, proposals for alternative measures and ample societal participation, especially regarding stakeholders directly impacted by a project.

Again, however, Brazil's compliance with these OECD expectations is weak. The OECD's 2021 report highlighted several concerns in Brazil related to environmental impact assessments and licensing. The report noted, for instance, Brazil's failure to rationalize the environmental impact assessment process and the environmental licensing requirements among various administrative bodies. The report also noted the lack of differentiation between compensatory actions with socio-environmental goals and those with social goals, as well as the absence of procedural guidelines for licensing technicians and the deficiency of subnational rules on environmental assessments, especially regarding the use of land.¹⁸⁴

On the subject of general pollution control, the main legal instrument of the OECD is the Recommendation of the Council on Integrated Pollution Prevention and Control,¹⁸⁵ which contains guidelines for addressing the effects of pollutants in all environments (air, water, soil) throughout their entire life cycle. Again here, although the regulatory framework in Brazil is relatively up to date, the substantial cuts to the IBAMA inspection team are practically preventing inspection activities and in-loco work, and recent budget restrictions for environmental agencies are equally worrisome.¹⁸⁶ As this paper has shown, environmental authorities find it difficult to monitor and enforce the (pollution) conditions established in the environmental licenses.

The government's own environmental performance is the subject of two legal instruments by the OECD. Both broadly integrate the way the Organization develops and applies public policies. The Recommendation of the Council on Improving the Environmental Performance of Government¹⁸⁷ and the Recommendation of the Council on Good Practices for Public Environmental Expenditure Management¹⁸⁸ are emblematic examples of the OECD's standard approach to public policy, promoting changes primarily in sectors that are directly within the government's reach. Further, Many of the OECD's recommendations are based on rationales derived from economic theory and make use of economic instruments for their implementation.¹⁸⁹ One of the fundamental arguments in the formulation of public policies by the OECD derives from the economic idea that agents react to incentives and penalties. In the case of the environment, the Recommendation of the Council on the Use of Economic Instruments in Environmental Policy¹⁹⁰ urges adherents to adopt economic mechanisms and instruments (eg. taxation, progressive rates, tax exemption) to adopt sustainable practices and abandon environmentally harmful conducts. For the OECD, economic penalty incentive mechanisms can be, in the long run, more efficient than pure legal prohibitions.

Regarding Brazil's alignment with these above instruments, on the subject of public environmental expenditure management, the OECD's 2021 report recommends that Brazil should periodically update the catalogue of sustainable products for green public procurement and that it should optimize the funds dedicated to environmental projects, in order to ensure their transparency and cost-effectiveness¹⁹¹. On Brazil's use of economic incentives to encourage adoption of sustainable policies, the 2021 report contains a general criticism of the scarce and unsystematic use of such economic instruments by Brazil, although it acknowledges that some

of these mechanisms are occasionally used. The document criticizes, for instance, the absence of specific environmental taxes on certain goods (eg. fossil fuels), as well as the lack of inclusion of environmental costs in the prices of services provided by the State.¹⁹²

The OECD also values transparency and the provision of environment-related information to society. Three legal instruments pertain to the subject: the Recommendation of the Council on Reporting on the State of the Environment;¹⁹³ the Recommendation of the Council on Environmental Indicators and Information;¹⁹⁴ and **the Recommendation of the Council on Environmental Information.**¹⁹⁵ The Recommendations support the construction of an environmental intelligence in countries, which is crucial for the efficient direction of public policies.

In Brazil, unfortunately, the agencies responsible for this intelligence are precisely those that are currently suffering financial and political constraints.¹⁹⁶ Regarding these transparency-related instruments, the OECD's 2021 report provides a series of criticisms regarding Brazil: fragmented environmental information; lack of coordination of institutions in the collection, provision, and analysis of data; and non-publicity of periodic reports on the state of the environment (even despite applicable legal requirement).

On water resources, the OECD approved the Recommendation of the Council on Water¹⁹⁷ in 2016, which contains a broad set of provisions on sustainable water management. In its assessment of the situation of water resources in the country, the OECD in its 2021 report suggests Brazil's creation of river basin management committees, the expansion of the National Water Agency's efforts to guide and monitor the implementation of user rates by states, the establishment of priorities and criteria for water allocation, and management of intensifying water demand, even by charging for the use of water.¹⁹⁸

Biodiversity is another prominent topic on the OECD's environmental agenda, exhibited for example by the Recommendation of the Council on the Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity,¹⁹⁹ adopted in 2004. As mentioned above, the OECD considers that taxes as well as positive financial incentives (for environmental services, for instance) can be used to support conservation of biodiversity. The OECD's 2021 report finds that Brazil could do much more to support conservation of biodiversity. The report recommends that Brazil pass a federal law on payments for environmental services and improve consistency between state regulations and programs. On the subject of control over land use, the report mentions obvious inaccuracies in the current Rural Environmental Registry (CAR) and in its validation procedures: for example, several states have areas registered in the CAR that extend beyond their officially stated territories. Regarding forest protection, the report highlights the significant increase in deforestation and fire rates (even in legally protected areas), as well as the correlated weakening of responsible environmental agencies (for example IBAMA, ICMBio).²⁰⁰

The issue of energy also receives considerable attention from the OECD. The various dimensions of the topic are dealt with within the scope of the International Energy Agency, which has a functional and budgetary link with the OECD.²⁰¹ Regarding the relationship between energy and the environment, the Recommendation of the Council concerning the Reduction of Environmental Impacts from Energy Production²⁰² and the Recommendation of the Council on the Reduction of Environmental Impacts from Energy Use in the Household and Commercial Sectors²⁰³ stand out. Assessing Brazil's compliance with these Recommendations, the OECD's 2021 report suggests improving energy efficiency through the introduction of energy standards for buildings and appliances, integrating them into social housing, fuel economy, and fuel labeling programs. The report also recommends developing an effective country-wide air quality monitoring system, with consistent methodologies and data collection in all states.²⁰⁴

Waste management has increasingly received attention from the OECD. Its direct relationship with the circular economy and with the decarbonization process of the economy give increasing relevance to the topic, whereas the OECD's focus on the issue was previously limited to addressing management of hazardous substances under the responsibility of the Chemicals Committee. The oldest non-chemical

related legal instruments are the 1976 Recommendation of the Council on a Comprehensive Waste Management Policy²⁰⁵ and the 1978 Recommendation of the Council concerning the Re-Use and Recycling of Beverage Containers.²⁰⁶ In addition to these two, the OECD adopted, in 2004, the Recommendation of the Council on the Environmentally Sound Management (ESM) of Waste.²⁰⁷

As with several other environmental concerns, Brazil's main challenge with respect to waste management lies in its failure to implement existing legal provisions. The priorities and goals of Brazil's National Solid Waste Policy have not yet been sufficiently reflected in waste management practices, as this type of management continues to focus on non-selective collection and final disposal in open-air landfills. Selective collection, a precondition for recycling and reuse, is increasing at a very slow pace. Most Brazilian municipalities still display low levels of technical, administrative, and financial capacity to improve systems for the collection, disposal, and reuse of materials. In order to stimulate the circular economy, it would be relevant, among other actions, for Brazil to introduce taxes on waste (on packaging materials, for instance), and apply progressive fees for the use of waste collection services.²⁰⁸

The OECD also has instruments on the use and control of chemicals, including mercury, and it promotes responsible business conduct via the OECD Guidelines for Multinational Enterprises and associated due diligence guidance.

The five cases in this report expose deficiencies in Brazil's environmental policies that are the focus of several OECD instruments, including many discussed above. The case of Piquiá de Baixo in Açailândia highlights the deficiencies in Brazil's solid waste management policy, particularly in regards to hazardous waste. Additionally, the case highlights problems on integrated pollution control, observance of the polluter pays principle, and the effective use of economic instruments for environmental purposes. The Mariana and Brumadinho dam collapse cases highlight information deficiencies on the causes of the accidents, as well as and deficiencies in the risk assessments, including via the participation of a foreign certifying authority that was supposed to ensure the quality and safety of mining activities. The cases of pesticide poisoning in Limoeiro do Norte and illegal mining in Yanomami villages highlight concerns on the inadequate control of agricultural pesticides, poor water resource management, poor remediation of environmental and biodiversity damages, and poor control of the chemical mercury. All of the cases also exemplify how the failures of governance by the Brazilian government help generate or enable irresponsible business conduct by companies who are able to use the loopholes or gaps in law or enforcement to carry out activities harmful to the environment.

5

Conclusion and recommendations for Brazil and the OECD

The gaps and failures described above have not occurred only under the current Bolsonaro administration; many of them go back many years. **These gaps and failures are not only contrary to OECD instruments, standards and commitments, but an affront to the organisation's foundational values of respect for human rights, democracy and the rule of law.**²⁰⁹ Crucially, commitment to upholding these values demonstrate what the OECD calls "like-mindedness" of candidate countries, an important consideration during accession.²¹⁰

Brazil's failure to prevent and address environmental degradation and pesticide poisoning has also led to multiple human rights violations. These include violations of the rights to life, health, clean water, adequate food and housing, information, participation, a healthy environment and effective remedy in breach of Brazil's obligations under international and regional human rights law and standards. This is contrary to the OECD's commitment to human rights, a fundamental value embedded in the OECD's 50th Anniversary Vision Statement. The government's abysmal record on holding perpetrators accountable and ensuring remedy for environmental degradation, pesticide poisoning and other serious human rights abuses also shows contempt for the rule of law, another fundamental OECD value.²¹¹

In April 2021, 15 US Senate democrats wrote to President Biden to raise concerns about Bolsonaro's environmental record, noting that Bolsonaro's ability to effectively fight deforestation and environmental crimes would determine whether they supported Brazil's bid for accession to the OECD.²¹² The OECD itself has, as recently as December 2020, put into question Brazil's commitment to environmental protection and noted the serious deficits in environmental enforcement as a result of cuts in budgets and staffing of environmental agencies.²¹³

Recommendations for reform in Brazil

To address the gaps and failures on environmental protection described above, Brazil should as a matter of priority adopt a number of immediate reforms as well as abandon detrimental measures. The following is a non-exhaustive list of recommendations on reforms actions Brazil should take.

Human Rights

- Comply with its obligations under international and regional human rights instruments by respecting, and ensuring respect for the human rights to life, health, clean water, adequate food and housing, a healthy environment, information, participation and effective remedy of individuals and communities exposed to the harmful effects of environmental degradation and pesticides.
- Comply with ILO Convention 169, the UN Declaration on the Rights of Indigenous Peoples and other international and regional instruments protecting the rights of indigenous peoples and other traditional communities.
- Fully implement the UN Guiding Principles on Business and Human Rights, particularly Pillars 1 and 3 concerning Brazil's duty to protect human rights in the context of business activities and to ensure effective remedy for corporate-related human rights abuses.
- Create the Committee to Follow and Monitor the National Guidelines on Business and Human Rights established by Decree No. 9.571/2018.

Environmental Protections

- Safeguard and fully implement existing legal protections of the environment.
- Abandon de-regulatory legislative proposals, including Bills 490/2007, 191/2020, 3.729/2004 and 6.299/2002 and revoke executive decrees, resolutions and ordinances that dismantle or undermine existing environmental protections as well as the rights of indigenous peoples and other traditional communities.
- Approve and sanction bill no. 5.490, of 2020, which creates the National Plan for the Eradication of Contamination by Mercury.
- Adopt regulations that:
 1. ensure the suspension of any unlicensed mining and industrial activity until the relevant regulatory bodies have verified compliance with environmental legislation.
 2. prohibit automatic renewal of mining and industrial activities for which compliance verification has not been conducted.
 3. sanction any entity conducting or allowing unlicensed activities.
 4. prevent recidivist offenders from obtaining new operating licences.
- Increase the resources and technical capacity of IBAMA, ICMBio, CONAMA, state-level SEMAs and other federal and state environmental protection bodies to regulate, monitor and control the activities of mining, manufacturing and all other business activities that carry risks to the environment as well as pesticide use by the agricultural sector and ensure sustained protection for potentially affected individuals and communities.
- Hold competitive examinations for vacancies within environmental agencies, particularly for posts requiring technical expertise.
- Replace any political appointees who lack the technical expertise to occupy their current positions within these agencies with specialized personnel.
- Improve public oversight of the auditing and certification industry and put measures in place to guarantee auditors and certifiers act with integrity, independence and without conflicts of interest.

- Enforce the prohibition on mining in protected indigenous territories, prioritising an immediate halt to all gold prospecting activities and removing all invaders from indigenous land.
- Recreate the working group that monitored the implementation of the Minamata Convention.
- Implement the Minamata Convention on Mercury, prioritising provisions designed to protect populations at risk.
- Phase out the use of mercury in artisanal and small-scale gold mining throughout the country, following recommendations of the Minamata Convention on Mercury.
- Combat mercury smuggling within the country.
- Implement DNPM Ordinance No. 361, of September 10, 2014, to verify the origin of the gold.
- Strengthen the controlling body (the National Mining Agency) for the approval, monitoring and control of the permission to mining activity (called Permissão de Lavra Garimpeira - PLG).
- Foster transition models in small-scale production with the adoption of technological assistance and training by Brazilian research institutions.

Tailings Dams Safety

- Strengthen the dam inspection regime to improve governmental oversight and prevent further collapses.
- Approve and implement Bill 550/2019 and 36 other bills that are pending in the National Congress to strengthen safety of tailings dams.
- Adopt immediate measures to address the imminent risk of collapse of dams as identified by the ANM.
- Subordinate the elaboration of dam projects to river basin management plans, with analysis of prevention and mitigation plans by the respective committees and in accordance with Strategic Environmental Assessments, when available.
- Order the creation of a mandatory compensation fund for high risk and impact projects.

Pesticides

- Conduct a review of the environmental and human health risks and impacts of current pesticide policies.
- Establish an immediate moratorium on aerial spraying with a view to banning the practice and/or significantly restricting it in line with international best practice.
- Establish and enforce nation-wide buffer zone rules for sensitive sites, including human habitation and schools, for all forms of ground spraying.
- Install mandatory monitoring devices around schools and residences and on spraying vehicles.
- Phase out the use of highly hazardous pesticides, including glyphosate and atrazine, prioritizing those already banned or restricted in OECD countries.
- Phase out the import of hazardous substances forbidden from use in OECD countries.
- Abandon de-regulatory legislative proposals including Bill 6.299/2002 and embed a hazard-based approach to pesticides in law.
- Align the regulatory framework on pesticides with OECD standards and best practices, including on maximum acceptable levels of pesticide residue in food and water.²¹⁴
- Expand and strengthen the evaluation, monitoring and inspection of pesticides.
- Ensure sufficient resources and expertise in federal, state and municipal bodies to monitor and control pesticide residue in food and water.
- Improve data and knowledge of the pesticide market and end public support for pesticide production and Consumption.²¹⁵

- ◉ Introduce taxes on polluting activities other than wastewater discharges (air emissions, waste and resource use).²¹⁶

Public Health

- ◉ Protect public health from the harmful effects of environmental degradation and pesticide exposure.
- ◉ Conduct a review on the health effects of acute and chronic exposure to pesticides and other toxic chemicals from mining, manufacturing and other business activities among people living in rural areas, including indigenous, *Quilombola*, peasant and other traditional communities (and on vulnerable individuals within these communities, such as pregnant women and children).
- ◉ Develop and implement a protocol to receive complaints about environmental pollution and pesticide spraying around sensitive sites, conduct follow-up environmental and health monitoring, take action to eliminate or reduce exposure and refer alleged regulatory breaches to the relevant law enforcement authorities.
- ◉ Increase training of healthcare workers in pollution and pesticide-related health conditions, including training in clinical diagnoses, notification requirements and adequate treatment.
- ◉ Increase technical support to state health authorities and surveillance programs on populations exposed to environmental pollution and pesticides.
- ◉ Increase the health budget to a level sufficient to ensure the human right to health, in line with international human rights instruments and standards.
- ◉ Promote impact mitigation plans in areas affected by the contamination, promoting food security and sovereignty guarantee to the affected peoples.

Access to information and Public Participation

- ◉ Ratify the Escazú Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean and give full effect to the rights enshrined in it.
- ◉ Ensure meaningful, inclusive and equitable public participation in environmental policy and decision-making, including in relation to any proposed new laws and regulations or changes to existing laws and regulations relating to the environment.
- ◉ Ensure all environmental agencies facilitate access to information relating to environmental licencing processes and guarantee active transparency by proactively disclosing key information such as licence and licence renewal requests, government responses to these requests, conditions placed on environmental licences granted and the results of environmental monitoring and inspection reports.
- ◉ Make health and safety information concerning hazardous activities and products publicly available and accessible and share it proactively with those at greater risk of harm.
- ◉ Reinstate social participation mechanisms, councils and committees that were eliminated or severely affected by Decree 9.759/2019 and others.
- ◉ Incorporate the perspectives of civil society in the deliberations carried out by the Working Group on mining, which excludes civil society participation, and which has the potential to promote consistent changes in the value chain.

Access to Remedy

- ◉ Provide effective mechanisms to remedy human rights abuses resulting from corporate infringements of environmental law and regulations.
- ◉ Ensure the courts act diligently and expeditiously in the conduction and conclusion of legal proceedings for environmental damage, damage to health and other harms derived from environmental degradation and exposure to pesticides.

- ◉ Strengthen the capacity and resources allocated to environmental bodies responsible for environmental licencing, such as IBAMA and the SEMAs, to enable them to pursue administrative procedures, within reasonable timeframes, to investigate, sanction and correct environmental breaches.
- ◉ Ensure that, where disasters like the two dam collapses referred to in this submission occur, adequate reparation measures are provided to all those affected, based on consultation and following an inclusive and participatory process, and that adequate environmental rehabilitation is carried out.
- ◉ Ensure prompt investigations, prosecutions and punishment of environmental crimes, including those related to illegal spraying of pesticides, and of criminal acts perpetrated against residents or community leaders who denounce or raise concerns about the environmental or health effects of mining, manufacturing and other business activities and of pesticide use (see separate paper on “Threats to Environmental and Human Rights Defenders (EHRD) and the increasing erosion of Brazil’s civic space”).
- ◉ Identify and implement necessary reforms to ensure corporate executives are held accountable for environmental crimes and other serious human rights abuses.

Recommendations for the OECD accession process

Taken together, the gaps and failures referenced in this submission demonstrate that Brazil is far from being in alignment with OECD practices, policies and standards and that at this moment in time, it is unfit for accession. The accession process provides a unique opportunity to achieve alignment, provided accession is unreservedly conditioned on Brazil addressing the legal and policy failures identified in this paper.

The authors of this paper Conectas, OECD Watch, and FIDH and make the following asks:

Of the OECD and each of the relevant technical committees:

- ◉ To carefully consider the research and reform recommendations presented in this paper during Brazil’s technical review;
- ◉ To ensure the technical review process is transparent and participatory, actively seeking engagement of civil society, particularly in Brazil, to ensure its views are heard and reflected in the ultimate terms for Brazil’s potential accession; and
- ◉ To require Brazil to adopt the reforms recommended in this paper as a condition of accession.

Of current OECD member states:

- ◉ To ensure the OECD upholds its values on rule of law, human rights, and the environment by:
 - Ensuring the technical reviews of the relevant OECD committees are transparent and participatory;
 - Ensuring the relevant OECD committees require Brazil to adopt the reforms this paper recommends during its accession process; and
 - Granting Brazil membership only if it has implemented the domestic reforms necessary to meeting the OECD’s values and standards.

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