

IN SEARCH OF TRANSPARENCY :

ENDING OPACITY IN BRAZIL'S EXTRACTIVE SECTOR

**An action-research
case study of the
Minas-Rio iron
ore mine**



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October 2021¹

The extractive (oil, gas and mining) industries are controversial and problematic for many reasons. To address decades of sector opacity, extractive companies incorporated and/or publicly listed in Canada, the European Union, Norway and the United Kingdom are required by law to disaggregate and publish their payments to governments annually for every country of operation.² In 55 countries, although not currently in Brazil, under the Extractive Industries Transparency Initiative (EITI) extractive companies and governments disclose their respective payments and receipts, alongside a broad range of information about the governance of the sector.³ Publish What You Pay, which campaigned for years to achieve these transparency and accountability measures, recognises that much more still needs to be done to make oil, gas and mineral governance truly open, accountable, sustainable, equitable and responsive to all people.



This case study reports on an action-research collaboration between IBASE (Instituto Brasileiro de Análises Sociais e Econômicas/Brazilian Institute for Social and Economic Analysis, <https://ibase.br>, a member of Publish What You Pay's Latin American affiliate coalition, RLIE)⁴ and Publish What You Pay UK (www.pwyp.org/pwyp_members/united-kingdom).⁵ We report on using mandatory payments-to-governments data as a starting point to investigate Brazil's extractive sector and to promote transparency, public participation and accountability.

1 This case study report is the third in a series of three co-published Publish What You Pay extractive industry country studies. The previous two were on Kazakhstan (Nov. 2020, <https://www.pwyp.org/pwyp-resources/pwyp-report-kazakhstan-extractives/>) and Nigeria (Mar. 2021, <https://www.pwyp.org/pwyp-resources/pwyp-report-nigeria-extractives/>). Please cite this study as IBASE, PWYP UK and PWYP International Secretariat, *In Search of Transparency: Ending Opacity in Brazil's Extractive Sector – An action-research case study of the Minas-Rio iron ore mine*, 2021.

2 A similar United States law dating from 2010 still awaits implementation, as does a Swiss law of 2020.

3 <https://eiti.org/>

4 RLIE (Latin American Network on the Extractive Industries): <http://redextractivas.org/>

5 "Action research ... seeks transformative change through the simultaneous process of taking action and doing research, ... linked together by critical reflection": https://en.wikipedia.org/wiki/Action_research

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Box 1. BRAZIL COUNTRY CONTEXT⁶

Brazil, the largest economy in Latin America, produced more than 1 billion barrels of oil in 2019 and holds the world's 15th largest proven oil reserves.

Brazil also has the world's sixth largest mining industry, with production and export of about 80 mineral commodities and major reserves of bauxite, iron ore, niobium, nickel and gold. It is the world's second largest producer of iron ore, with 17% of global production and five of the world's 11 largest iron ore mines, mainly under the control of the now fully privatised former state-owned company Vale. Mineral resources including oil and gas account for 2% of Brazil's GDP and a significant share of exports. Brazil has at times "reaped windfall gains from high commodity prices and from rising global demand for its natural resources"; but "regulatory challenges and corruption scandals" have "plagued the economy for decades", although these were "masked by the commodity boom". "[E]xternal risk for the economy ... results from low commodity prices, in particular [for] oil and iron ore" – OECD.

Brazilian social movements⁷ organised by mining-affected local populations and civil society organisations have for years criticised the negative impacts of mining and the failure of government promises to allocate receipts from mineral wealth to address such impacts. Despite much discussion about how mining can be profitable for companies, little is done to compensate producer municipalities for mining-related problems or to develop inclusive economic alternatives in anticipation of the exhaustion of finite mineral resources.

Natural resource ownership and use: "Mineral deposits, under exploitation or not, and other mineral resources ... for the purpose of exploitation or use, [are] a property separate from that of the soil and belong to the Union ... [P]rospecting and mining of mineral resources and the utilisation of the potentials mentioned ... may only take place ... in the national interest" – Constitution of Brazil, art. 176.

Extractive Industries Transparency Initiative (EITI) status: Not yet implementing.

NRGI Resource Governance Index: Score (oil and gas) 71/100. Rank 6/89 countries.

NRGI country profile: <http://www.resourceprojects.org/country/BR>

Transparency International Corruption Perceptions Index: Score 35/100. Rank 106/198 countries.

Population:

211.05 million

Real per capita GDP:

US \$8,717.2

UNDP Human Development Index:

Score

0.761/1.000

Rank

79/189 countries



6 Sources: Reuters, <https://www.reuters.com/article/us-brazil-oil-production/in-a-first-brazil-produces-more-than-one-billion-barrels-of-oil-in-2019-idUSKBN1ZL335>, Jan. 2020; Deloitte, <https://www2.deloitte.com/br/en/pages/energy-and-resources/upstream-guide/articles/brazil-oil-exploration-production-overview.html>; OECD, <https://www.oecd.org/trade/topics/trade-in-raw-materials/documents/trade-raw-materials-brazil-country-note.pdf>; MiningTechnology, <https://www.mining-technology.com/features/featurethe-worlds-11-biggest-iron-ore-mines-4180663/>, 2014; Invest in Brazil, <http://investinbrazil.biz/industry/metallurgy/brazil-mining-industry>; <http://www.brazil.gov.br/government/constitution>; C. Trocarte and T. Coelho, "A large portrait of Brazilian mining" (trans.), Mar. 2020, <https://outraspalavras.net/crise-brasileira/um-grande-retrato-das-mineradoras-brasileiras/>, and "Quando vier o silêncio: o problema mineral Brasileiro [When the silence comes: the Brazilian mineral problem]", Expressão Popular and Fundação Rosa Luxemburgo, 2020; Natural Resource Governance Institute (NRGI), <https://resourcegovernanceindex.org/country-profiles/BRA/oil-gas>, 2017; Transparency International, <https://www.transparency.org/en/cpi/2019/results/>; World Bank, <https://data.worldbank.org/country/brazil?view=chart> and <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=BR&view=chart>, 2019; UNDP, <http://hdr.undp.org/en/countries/profiles/BRA>, 2018.

7 Social movements and NGOs collaborate closely in Brazil and are considered two distinct parts of civil society.

EXECUTIVE SUMMARY

In 2019-20 IBASE and PWYP UK undertook joint transparency, public participation and advocacy action research on Brazil's extractive sector. We focused on a single mining project: Anglo American's Minas-Rio open-pit iron ore mine in the municipality of Conceição do Mato Dentro, Minas Gerais State, and its associated tailings facility. Minas-Rio is the world's ninth largest iron ore mine, holding an estimated 1.28 billion tonnes of resources with an expected lifetime of 48 years.

In selecting Minas-Rio for study we applied five criteria: (a) significant subnational payments to government reported by the company; (b) clearly identifiable project(s) and/or subnational government entities associated with reported payments; (c) mine location accessible from IBASE's office in Rio de Janeiro; (d) operating company within PWYP UK's main mandate (UK incorporation and/or London Stock Exchange/LSE listing) and accessible for information requests and dialogue; (e) intrinsic importance of the mine(s) from a civil society perspective.

This case study report combines fiscal analysis with discussion of the quality of federal and

subnational financial management, issues of public accountability, and impacts of the mine on the local environment and on local communities' livelihoods, access to clean water, physical and psycho-social health, and other social consequences including their gender, ethnicity and other human rights dimensions. We include a contribution from the Responsible Mining Foundation, summarising evidence-based desk research on Minas-Rio using the RMF's Mine Site Assessment Tool. The Postscript describes Brazil's easing of environmental licensing rules in May 2021 and reflects on issues of natural capital accounting, ecological debt and communities' right to say no to extraction.

Our findings and recommendations highlight key challenges surrounding the mine's governance and how these can and should be addressed, both for Minas-Rio and more widely across Brazil's extractive sector. The report and recommendations are intended for a wide readership: Brazilian federal and subnational government officials, extractive company officials, international organisations, and Brazilian, regional and international civil society.

Key findings⁸

- ✦ There is very limited transparency in Brazil about extractive industry fiscal flows, although the online publication of mining royalty receipts (CFEM) is helpful and shows that the government can do better.
- ✦ Mining royalties are an important source of municipal income, but government entities ignore the legal requirement to disclose how royalties are allocated.
- ✦ The legally required percentage rate at which the National Mining Agency pays mining royalties to mining producer municipalities is constantly disputed and changing, but there is evidence of Conceição do Mato Dentro municipality receiving a smaller proportion of mining royalties than legally required.
- ✦ Conceição do Mato Dentro experiences economic and social costs from the presence of the Minas-Rio mine that may outweigh the benefits. And the distribution of benefits and harms appears to favour urban over rural communities and to disproportionately affect low-income households and people of colour, with especially negative impacts on local water resources and food growing.
- ✦ Subnational government in Brazil, including in Minas Gerais State and Conceição do Mato Dentro municipality, is poorly equipped to regulate and manage large-scale mining, with state and municipal government officials appearing to disagree on the benefits and costs.
- ✦ Our research indicates that Anglo American's engagement with local civil society and communities needs improvement, although the company has written to us citing in some detail its efforts to engage.
- ✦ Anglo American's environmental impact assessments, economic diversification efforts, community dialogue and

resettlement plans appear inadequate from the perspective of affected communities, who experience water deficiency, airborne pollution, impaired livelihoods, economic loss, and physical and psycho-social ill-health.

- ✦ Tailings dam breach is a major fear among people downstream of Minas-Rio, especially given Brazil's history of tailings disasters and more than ever with the planned ninefold expansion of the mine's tailings capacity from 40 million to 370 million cubic metres of mineral waste.
- ✦ Project critics suspect that the company may be struggling to make the costly Minas-Rio project more financially viable, a view that the company refutes.

Key recommendations

(for the recommendations in full see page 42)

To the Brazilian federal government

- ✦ Join and implement the Extractive Industries Transparency Initiative (EITI), with a multi-stakeholder group of representatives of government, industry and civil society to enhance natural resource governance and accountability to citizens, build trust and reputation, and reduce the scope for corruption and mismanagement.
- ✦ Make extractive industry data accessible to citizens, including disclosure of taxes paid disaggregated to company level, and publish the full text of all extractive contracts, licences, concessions and other legal agreements governing the exploitation of oil, gas and minerals.
- ✦ Reach fair and lasting agreement with municipalities on sustainable rates of mining royalties (CFEM); ensure that Conceição do Mato Dentro and other mining municipalities receive their legally required percentage; publish current percentage rates at which mining royalties are paid to municipalities in real time;

⁸ Supporting evidence for these findings is included with the main text below and its footnotes and references. Comments by Anglo American on several of these findings are referenced.

and compensate municipalities with backdated payments for previously underpaid amounts.

- ✦ Establish and enforce mechanisms at federal, state and municipal levels to fully meet the public transparency requirement of Law No. 13,540 regarding the use of mining royalty receipts.
- ✦ Ensure that mining-affected states and municipalities have sufficient resources to provide adequate public services and for economic diversification with full public accountability; boost states and municipalities' technical capacity to manage financial flows, infrastructure development, and social and environmental impacts and needs, while ensuring that extractive companies bear prime responsibility for managing impacts.
- ✦ Protect the rights of citizens to fundamental freedoms of expression and assembly, including for people opposing mining projects.
- ✦ Require companies proposing new mining projects to undertake human rights impact assessments, including all internationally recognised human rights as a reference point; and require operators of current mining projects to undertake and publish human rights impact reports with new assessment every three years; also ensure that companies publish and implement human rights management plans to address issues identified.
- ✦ Engage constructively in United Nations negotiations for a broad and strong binding international treaty on business and human rights.

To the Minas Gerais State government

- ✦ Establish a mechanism to fully meet the public transparency requirement of Law No. 13,540 regarding the use of CFEM royalty receipts.
- ✦ Build the institutional capacity to regulate and monitor mining operations and support municipalities in managing mining-related impacts.

To Conceição do Mato Dentro municipality

- ✦ Publish at least once a year a report to citizens on the use of CFEM mining royalty receipts to fully meet the public transparency requirement of Law No. 13,540.
- ✦ Pilot a municipal multi-stakeholder group to address mining governance, fiscal management, and environmental, social and human rights issues, drawing on the Philippines, Peru and other subnational EITI models, to include joint decision-making on the allocation of CFEM royalty receipts and monitoring of spending.
- ✦ Demand sufficient resources from the federal government to provide adequate public services, for economic diversification with full public accountability, and for technical capacity to manage financial flows, infrastructure development, and social and environmental impacts and needs, while insisting that extractive companies bear prime responsibility for managing impacts.
- ✦ Implement effective compensatory measures for mining-affected rural, low-income and black communities and for disadvantaged groups within those communities.

To Anglo American

- ✦ Undertake a comprehensive human rights impact assessment, including all internationally recognised human rights as a reference point, of Minas-Rio and its tailings and pipeline; publish (including in Portuguese) and implement a human rights management plan to address issues identified; repeat the exercise every three years.
- ✦ Seek the Free, Prior and Informed Consent (FPIC) of affected communities, whether indigenous or non-indigenous, at every stage of mining operations including prior to the initial decision to extract at any location and before each mine or tailings expansion.
- ✦ Implement comprehensive compensatory measures for mining-affected rural, low-income and black communities.
- ✦ Encourage the Brazilian government to join and implement the Extractive Industries Transparency Initiative (EITI) to broaden dialogue with civil society and improve sector-wide governance.
- ✦ Review the Programa Crescer (Grow Programme) local economic diversification initiative in light of the present report's findings and ensure that its benefits are significantly scaled up.
- ✦ Respond constructively to downstream communities' demands regarding resettlement out of danger from the risk of tailings dam breaches.
- ✦ Review Minas-Rio's tailings management and communications with at-risk communities in light of the present report's findings and ensure that every possible measure is taken to meet, and where feasible exceed, both the 2020 Global Industry Standard on Tailings Management and the higher standards of the 2020 civil society Guidelines for Responsible Mine Tailings Management.

- ✦ Remedy any implementation gaps in company operational-level grievance mechanisms to ensure that provision for affected individuals and communities fully meets in practice the UN Guiding Principles criteria.
- ✦ Publish and consult with the affected municipalities and communities on a plan for closing down Minas-Rio, rehabilitating the damaged environment and fully compensating affected people for harms caused during the project's lifetime.

To civil society in Conceição do Mato Dentro municipality, in Minas Gerais State and across Brazil

- ✦ Advocate and campaign for the recommendations above, including for:
 - Brazil to join and implement the Extractive Industries Transparency Initiative (EITI).
 - Public disclosure of Brazil's extractive taxes, contracts and licences.
 - Transparency in the use of CFEM mining royalty receipts.
 - Sufficient income for mining municipalities to provide adequate public services and for economic diversification.
 - Public human rights impact assessments of current and proposed new mining projects.
 - Anglo American to reach satisfactory agreement on resettlement plans with affected communities, assess Minas-Rio's tailings facilities against the new Global Industry Standard and civil society Guidelines for Responsible Mine Tailings Management, and to remedy areas of risk to affected people.

- ✦ Raise public awareness of the EITI and use it as a mechanism to demand greater government and company accountability for mining in Brazil.
- ✦ Investigate the evidence and arguments that Anglo American's January 2021 letter to IBASE and PWYP UK offers about Minas-Rio⁹ and its impacts and report on findings.
- ✦ Document direct and indirect economic, social, environmental and human rights impacts of Minas-Rio and other mining projects, with a focus on differential impacts on women/girls, men/boys, youth and people of colour, and communicate findings to company managers to improve the debate with the company.
- ✦ Support the right of currently and potentially affected communities to say no to mining.

To international financial and multilateral institutions and institutional donors

- ✦ Seek out and fund more civil society transparency, participation and accountability initiatives directed at securing more equitable and sustainable outcomes in producer countries and subnational localities from the extraction of non-renewable natural resources.
- ✦ Encourage the Brazilian federal government to implement the EITI at federal and potentially subnational levels in Minas Gerais.
- ✦ Increase support for capacity building for civil society organisations working on extractive sector accountability.

⁹ Anglo American's written comments on the draft report are available at <http://bit.ly/3jrPUWW>

PROJECT OBJECTIVES AND APPROACH

This project set out to use extractive companies' mandatory payments disclosures as an entry point for civil society analysis, discussion and awareness raising, to promote public participation and to hold government entities and selected companies' representatives to account for their stewardship of non-renewable natural resources, including for the resulting payments and receipts. We focused on Anglo American's Minas-Rio iron ore operations in Minas Gerais State, Brazil, the world's ninth largest iron ore mine.

We also sought to generate a useful example of transparency, participation and accountability work on the resource extraction sector, promoting progress towards more equitable and sustainable natural resource stewardship for citizens and affected communities.

To achieve fair and sustainable outcomes when a country's non-renewable natural resources are extracted involves addressing a range of governance, environmental and human rights challenges.¹⁰ In 2019 IBASE and PWYP UK began to discuss and collaborate on issues relating to Brazil's extractive sector.

- ✦ IBASE's history links closely to the democratisation of Brazil. It works to promote rights, citizenship, democracy, socio-environmental sustainability and an extractive sector that caters better to the needs of all. IBASE aims to stimulate public debate and to inform and engage citizens in demanding greater transparency and accountability on the part of government entities and mining companies.
- ✦ PWYP UK, a coalition of 30 UK civil society organisations, is working to use payments-to-governments reporting by oil, gas and mining companies, and disclosure of receipts by governments, long advocated by civil society, to improve public outcomes in addressing the "resource curse"¹¹ in the global South and transition countries; to demonstrate that transparency can make a difference; and to collaborate effectively with PWYP coalitions and coalition members overseas.

Our aim was to research socioeconomic outcomes from a selected mining project in Brazil, document evidence, raise public awareness and discuss with stakeholders. Depending on the project selected, we would assess fiscal flows and where possible compare publicly reported extractive company payments-

¹⁰ See e.g. UN Environment Programme, <https://www.unenvironment.org/explore-topics/extractives/why-does-extractives-matter>

¹¹ NRG, 2015, <https://resourcegovernance.org/analysis-tools/publications/primer-resource-curse>

to-government data with government receipts; follow the money in terms of subnational government allocations and spending; assess the quality of fiscal governance; document social, economic, environmental and gender impacts of extraction on lives and livelihoods at subnational level; and engage with local government and company officials, civil society and affected communities to understand their perspectives and explore common ground for advocacy and/or reform. IBASE and PWYP UK aimed also to clarify how far, if at all, extractive contracts and fiscal terms are disclosed in Brazil.

Research consultant

IBASE commissioned an independent consultant, Dr Tazio Peters Coelho, to undertake research, analysis, local stakeholder interviews, a field visit to the mine area and, with IBASE team members, consultations with local social movements, a non-governmental organisation (NGO) and residents. Tazio Coelho is Professor at the Department of Social Sciences at the Federal University of Viçosa, Minas Gerais State, and an adviser to Brazil's Movimento pela Soberania Popular na Mineração (Movement for Popular Sovereignty on Mining or MAM).¹² He contributed to a multi-author 2018 civil society report on the Minas-Rio mine, which the present case study report draws on in places.¹³

Inviting comments

To help ensure the accuracy of the case study, and to promote informed dialogue, we sent a draft version of this report for comment to the Minas Gerais State Public Prosecutor's Office, to Conceição do Mato Dentro municipality officials, to industry (Anglo American) and to civil society representatives ahead of publication. We have taken all comments received into consideration in revising the report for publication.¹⁴

Costs, benefits and intergenerational equity

The project partners recognise the complexity of a broad cost-benefit analysis of oil, gas and/or solid minerals extraction. As a UN University study states: "[R]evenue from extractives is not income but an exchange of below-ground resource assets for above-ground cash ... [T]he process of reshuffling has costs – environmental ... and often also social ... For extraction to be worthwhile ... its long-term value must exceed these costs."¹⁵

Oil, gas and solid minerals are inherited wealth; extraction is their sale. Extraction-related taxes, royalties, etc. are public receipts in exchange for selling non-renewable mineral wealth. While the needs and right to development of present generations and extractives-affected communities are important, present generations should also consider future generations' right to benefit from a country's shared inheritance. Conventional use of the term "revenue(s)" tends to disregard intergenerational equity issues, and for this reason the present report generally avoids using the term "revenues."¹⁶

12 "MAM is a popular movement that advocates about the uses and appropriation of the country's natural resources. It works alongside those self-organised as people affected by mining and engages in discussions about mining extraction's growth and pace, where mining can and cannot happen and popular sovereignty in mining" (trans.) – <https://mamnacional.org.br/mam/quem-somos/>

13 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar: transformações socioambientais e violações de direitos humanos no contexto do empreendimento Minas-Rio em Conceição do Mato Dentro, Alvorada de Minas and Dom Joaquim [Preliminary study: socioenvironmental transformations and human rights violations in the context of the Minas Rio project...], co-published by a research consortium and the Minas Gerais State Prosecutor's Office, Oct. 2018, <https://bit.ly/3goIOAH>

14 Anglo American's written comments on the draft are available at <http://bit.ly/3jrPUWW>

15 G. Lahn and P. Stevens, chapter 5 in T. Addison and A. Roe (eds), *Extractive industries*, UNU-WIDER, Oxford University Press, 2018, <https://www.wider.unu.edu/publication/extractive-industries>, p. 108.

16 On shared inheritance, intergenerational equity and the term "revenue(s)", see R. Basu and S. Pegg, "Minerals are a shared inheritance: accounting for the resource curse", *The Extractive Industries and Society*, 7, 4, Nov. 2020, pp. 1369-76, <https://bit.ly/37UTvY8>; also at https://mpra.ub.uni-muenchen.de/102270/1/MPRA_paper_102270.pdf

ACTIVITIES AND OUTPUTS

Scoping and case study selection

Using NRGi's www.resourceprojects.org platform, we found 51 extractive companies reporting under Canadian, European Union (EU), Norwegian and UK law payments made to the Brazilian government from 2015 to 2018. These are large private incorporated companies and/or companies with shares publicly traded on regulated markets in these jurisdictions.¹⁷

To match IBASE's priorities, we narrowed the field to solid minerals extracting companies, excluding oil and gas. To select a mining project for study we applied five criteria: (a) significant subnational payments to government reported by the company; (b) clearly identifiable project(s) and/or subnational government entities associated with reported payments; (c) mine location reasonably accessible from IBASE's office in Rio de Janeiro; (d) operating company within PWYP UK's main mandate (UK incorporation and/or London Stock Exchange/LSE listing) and accessible for information requests and dialogue; (e) intrinsic importance of the mine(s) from an in-country civil society perspective.

To facilitate data comparison, we checked companies listed on Brazil's National Mining Agency (Agência Nacional de Mineração, ANM) public database of mining royalty payments, which is searchable by company, mineral

resource, state and municipality. Royalty payments are known in Brazil as *compensação financeira pela exploração de recursos minerais* ("financial compensation for the exploration [use] of mineral resources" or CFEM).¹⁸ We identified on the ANM database two UK-reporting mining companies that also report under UK law payments made in Brazil: Anglo American and Serabi Gold. (Among other UK-reporting miners disclosing payments made in Brazil, BHP Billiton's Samarco Mineração iron ore joint venture with Vale is identified on the ANM database, although BHP itself is not.)¹⁹

We focused this study on Anglo American's Minas-Rio iron ore project based on the above selection criteria. Minas-Rio is Brazil's fifth largest iron ore mine and of concern to Brazilian civil society because of its large output and physical footprint, including its expanding tailings (mine waste) storage, its 525 km iron ore slurry pipeline to the coast, and its history of associated accidents and related human rights risks (see Box 2).²⁰ At 340 km north of Rio de Janeiro, the mine is within reach of IBASE for field research and local stakeholder consultations. Owner-operator Anglo American is UK incorporated, headquartered and publicly listed (London Stock Exchange) and discloses significant payments relating to Minas-Rio under UK transparency regulations.

¹⁷ Our search can be replicated at <https://www.resourceprojects.org/entities?tab=0&countries=Brazil>

¹⁸ Agência Nacional de Mineração (ANM), Maiores arrecadadores CFEM (Largest payers of CFEM receipts), https://sistemas.anm.gov.br/arrecadacao/extra/relatorios/cfem/maiores_arrecadadores.aspx

¹⁹ On the Samarco tailings dam disaster of 2015 see e.g. Business & Human Rights Resource Centre, <https://www.business-humanrights.org/en/bhp-billiton-vale-lawsuit-re-dam-collapse-in-brazil>

²⁰ C. Grzybowski, O empreendimento extrativista Minas-Rio da Anglo American: impactos ecossociais [Anglo American's Minas-Rio extractive venture: eco-social impacts], IBASE, 2020.

Box 2. MINAS-RIO AND ITS PIPELINE²¹



Location of the Minas-Rio mine and pipeline. Map by Zoludesign / IBASE.

The mine

Anglo American's Minas-Rio mine and associated infrastructure comprise Brazil's fifth largest and the world's ninth largest iron ore operations, holding an estimated 1.28 billion tonnes of resources and with an expected lifetime of 48 years. In 2007/8 when Anglo American acquired the project, Minas-Rio was reported to be the world's most expensive iron ore mine. After numerous delays, production began in 2014, with the first iron ore exports the same year. The mine produced 16.8 million tonnes of ore in 2017 and has a maximum design annual capacity of 26.5 million tonnes, with staged expansion planned to 56 million tonnes per year. In 2019 the company received a licence to expand tailings dam storage of mine waste suspended in water.

The vast majority of Minas-Rio's open pit production is located in Conceição do Mato Dentro municipality (population 120,000) in Minas Gerais State, southeast Brazil.²² The location is approx. 160 km northeast of the state capital, Belo Horizonte. A small section of the mine, as well as the mineral processing plant and part of the tailings are sited in the adjacent Alvorada de Minas municipality. Anglo American owns (100%) of Minas-Rio, which it operates through its subsidiary Anglo American Ore de Ferro Brasil SA.

21 Sources: <https://www.britannica.com/place/Minas-Gerais>; MiningTechnology, <https://www.mining-technology.com/features/featurethe-worlds-11-biggest-iron-ore-mines-4180663/>, 2014; Anglo American, <https://www.angloamerican.com/investors/annual-reporting/> and <https://www.angloamerican.com/~media/Files/A/Anglo-American-Group/PLC/investors/annual-reporting/2019/aa-sustainability-report-2018.pdf>, pp. 62, 65, and other company online publications; Mining.com, Jan. 2013, <https://www.mining.com/report-anglo-american-set-for-5bn-write-off-over-minas-rio-69010/>; NS Energy, <https://www.nsenerybusiness.com/projects/minas-rio-iron-ore-mine/>; PA Automation, <http://www.paautomation.com.br/AngloAmericanMinasRio-project.php>; Hoje em Dia, Jun. 2013, <https://www.hojeemdia.com.br/primeiro-plano/economia/dom-joaquim-em-p%C3%A9-de-guerra-com-a-anglo-american-1.182579> (Dom Joaquim on a war footing with Anglo American); R7.com, Mar. 2018, <https://noticias.r7.com/minas-gerais/mineroduto-da-anglo-american-se-rompe-pela-segunda-vez-em-minas-30032018> (Anglo American ore pipeline breaks for the second time in Minas); Mining.com, Dec. 2018, <https://www.mining.com/eight-months-billions-later-anglo-american-restarts-minas-rio/>; REAJA and GESTA/UFMG, Atingidos pelo projeto Minas-Rio: comunidades da jusante da barragem de rejeitos, boletim informativo 11 [Affected by the Minas Rio project: communities downstream of the tailings dam, informative report 11], Oct. 2018, <https://bit.ly/2R5XyZX>; LMN, Jul. 2017, <http://londonminingnetwork.org/2017/07/briefing-on-anglo-americans-minas-rio-iron-ore-mine-in-brazil>

22 Conceição do Mato Dentro is also the name of micro-region containing the municipalities of Conceição do Mato Dentro, Alvorada de Minas, Dom Joaquim and Serro.

The tailings dam for Minas-Rio “uses a downstream construction design and ... an embankment dam structure, built using compacted imported earth-fill material ... placed in controlled layers ... as a water-retaining type of dam” (Anglo American). The tailings dam extends from Conceição do Mato Dentro into Alvorada de Minas. Rural communities located downstream from the dam in Alvorada de Minas and in another neighbouring municipality, Dom Joaquim, would be directly affected in the event of a tailings breach.

Minas Gerais State (literally “General Mines”) has at times supplied more than half the mineral production of Brazil and is the location of more than 360 tailings dams. The better quality mines are being exhausted, with investment moving to mines in Pará State.

The pipeline²³

The 525 km Minas-Rio pipeline takes iron ore slurry (solids suspended in water) from the mine processing plant to an export facility at the costal port of Açú, from where the ore is shipped to China. The pipeline was part of the original mine project started by the Brazil-based EBX Group, owned by business mogul Eike Batista (currently in prison for his role in Brazil’s “Car Wash” corruption scandal). The world’s longest pipeline of its kind, it crosses 32 municipalities in the states of Minas Gerais and Rio de Janeiro. Construction of the pipeline caused conflict with affected municipalities and smallholders with demarcation of a 20 metre isolation strip around the pipe where no construction or farming was permitted, reportedly imposed without appropriate compensation.

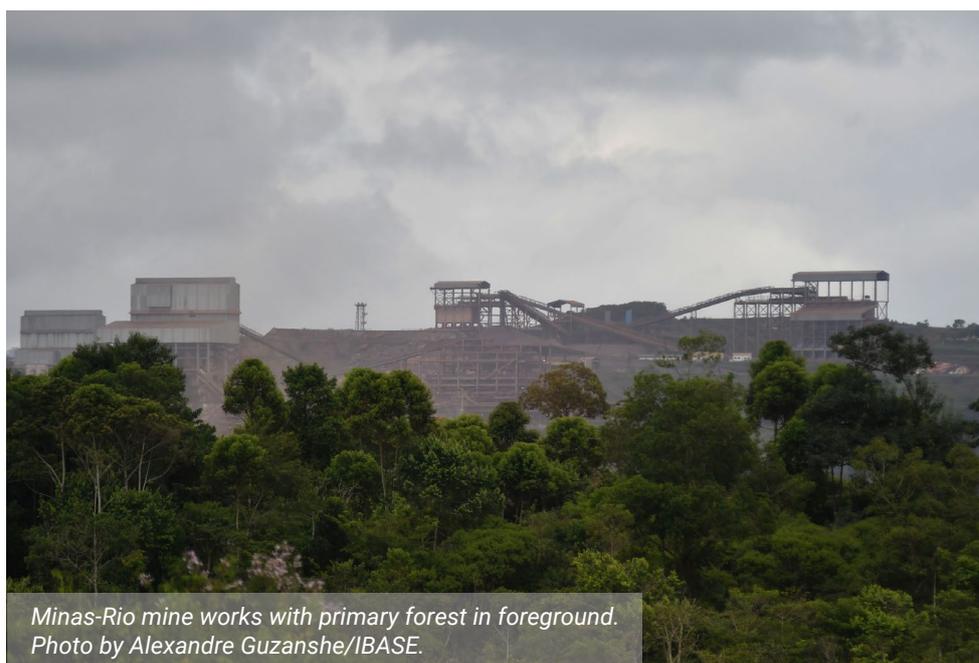
The pipeline uses a system of pumps and valves to speed up or slow down the ore stream, taking four days to reach its destination at 6 km per hour. The water that carries the mineral is collected from a river in nearby Dom Joaquim municipality and has reduced the water supply to local residents. Corrosion of the pipe caused two major spills in March 2018 that discharged nearly 950 tonnes of iron ore pulp in nearby creeks and river basins. The environmental damage was found to be irreparable and resulted in the government fining the company \$50 million, plus loss of 280 days’ production and an 80% fall in annual output at the mine. Production resumed in December 2018 following replacement of 4 km of pipeline.

Anglo American reports that the mine “operates in a challenging socio-political environment and experienced an increase in social-related grievances” following the 2018 pipeline incidents, and that it has been the target of allegations including “hindering the effectiveness of protecting human rights defenders, acts of intimidation by community members, and concerns around environmental impacts”.

23 Sources: A.L.F. Dias and L.F. de Oliveira (eds), *Market and state violence in the context of the Minas-Rio Conceição do Mato Dentro mining enterprise 2015-2017* (trans.), UFMG, 2018; *Grandes Construções*, <https://www.grandesconstrucoes.com.br/Materias/Exibir/grandiosidade-sob-suspeita> (“Grandiosity under suspicion: leakage and shutdown of operations impose new operational challenges for Anglo American mining pipeline, pride of Brazilian engineering”), Jul. 2018.

Fiscal analysis

We used Anglo American's payments-to-governments data published under UK transparency regulations and public domain data in Brazil to analyse fiscal flows between the company and its main host municipality, Conceição do Mato Dentro. Brazil's only current official source of public data on government receipts from mining is the Agência Nacional de Mineração (ANM) database of CFEM royalty payments (see Box 3). As we discuss below, CFEM payments, which the ANM disaggregates by company, mineral resource and municipality, are a significant financial flow but are much smaller than mining company tax payments, which the Brazilian government does not currently disaggregate. Lack of public mining tax disclosure by the government makes it difficult for citizens to know how much money their country receives from extractive activities.



*Minas-Rio mine works with primary forest in foreground.
Photo by Alexandre Guzanshe/IBASE.*

If Brazil were an EITI-implementing country, considerably more public information on government mining and oil receipts and sector governance would be available (Box 4).

The section below on **Project findings and outcomes** reports in detail on our data analysis and other case study results.

Box 3. DATA AND INFORMATION SOURCES

Extractive sector payments-to-governments, government receipts and related data used in this report comes mainly from four sources:

- o NRGi's searchable www.resourceprojects.org online platform collates, visualises in HTML and republishes in open and machine-readable CSV format extractive companies' payments-to-governments data as disclosed under Canadian, European Union, Norwegian and UK law. www.resourceprojects.org directly incorporates companies' payments data where this is available via an application programming interface (API) (e.g. in the UK from <https://extractives.companieshouse.gov.uk>). It scrapes or incorporates other data from company and government PDF, Excel and HTML files. www.resourceprojects.org also provides links to original (and back-up, where applicable) sources of company payments data.
- o Brazil's Agência Nacional de Mineração (National Mining Agency or ANM) publishes a national database of mining royalty payments that are known as CFEM (compensação financeira pela exploração de recursos minerais or financial compensation for the exploration (use) of mineral resources). The database of Maiores arrecadadores CFEM ("Largest CFEM collections") is at https://sistemas.anm.gov.br/arrecadacao/extra/relatorios/cfem/maiores_arrecadadores.asp and searchable by company, mineral resource, state and municipality.

- o Brazil's Sistema de Informações Contábeis e Fiscais do Setor Público (Public Sector Accounting and Tax Information System, known by the acronym Siconfi), <https://siconfi.tesouro.gov.br/siconfi/index.jsf>, provides accounting, financial and tax statistics on Brazil's 5,570 municipalities, 26 states, the Federal District (Brasilia) and the Union (the country as a whole including federal/central government departments).
- o Anglo American, owner and operator of the Minas-Rio mine, publishes its payments-to-governments and other reports at <https://www.angloamerican.com/investors/annual-reporting/reports-library/>

Research sources used also include other Brazilian government, industry and civil society publications and websites and online media reports.

Footnotes in the text provide links to relevant reports and data.

Use of "\$" on its own denotes US dollars throughout this report. "R\$" denotes Brazilian reais (R\$1 = approx. US\$0.2).

Box 4. THE EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE (EITI)²⁴



The EITI is a global standard for the open and accountable management of oil, gas and mineral resources, guided by the belief that a country's natural resources belong to its citizens. The EITI Standard requires participating governments, and extractive companies operating in their territory, to disclose information along the value chain, from the point of extraction, to how company payments reach government budgets and how receipts benefit the public. The EITI seeks to strengthen public and corporate governance, promote understanding of natural resource management, and provide the data to inform reforms for greater transparency, public participation and accountability in the extractives sector. In each of the 55 implementing countries (<https://eiti.org/countries>), the EITI is supported by a coalition of government, companies and civil society.

Countries join the EITI voluntarily to enhance their natural resource governance and accountability to citizens, to build trust and reputation, to reduce the scope for corruption and to mobilise domestic resources for sustainable development. In each implementing country a multi-stakeholder group (MSG) of government, industry and civil society oversees extractive companies' annual public reporting of payments to government entities in the implementing country, such as taxes and royalties, and the corresponding reporting of extractive receipts by the government, including payments and receipts at project and subnational levels. The two data sets usually require reconciliation of differences. Essential to the EITI governance model is the full, independent, active and effective participation of representatives of government, industry and civil society in the MSG.

²⁴ <https://eiti.org/who-we-are>

The EITI Standard also requires annual publication of key information about the country's extractive sector: legal and fiscal regimes; contracts, licences and their award and allocations; beneficial owners of bidding and operating companies; state participation in the sector; exploration, production levels and exports; transportation payments; distribution and allocation of government receipts; employment (with gender disaggregation); companies' social and environmental spending; and environmental impacts of extraction (<https://eiti.org/document/eiti-standard-2019>).

More than US \$2.7 trillion in extractive company payments and government receipts have been disclosed in countries' EITI reports, and 95% of EITI data is publicly available in open data format (<https://eiti.org/explore-data-portal>). Governments, industry and civil society use EITI data and reports to foster public debate, inform legal and fiscal reforms, strengthen tax collection, track financial allocations to communities, create financial models, monitor contracts, clarify the investment environment, inform credit and investor ratings, and identify corruption and mismanagement risks. For civil society the primary objective of the EITI is to make governments and extractive companies more accountable.

Eleven Latin American and Caribbean countries have joined and currently implement the EITI Standard: Argentina, Colombia, Dominican Republic, Ecuador, Guatemala, Guyana, Honduras, Mexico, Peru, Suriname, and Trinidad and Tobago (<https://eiti.org/countries>). Civil society representatives in these countries regularly exchange experiences, discuss ways to make the extractive sector in the region more transparent and work together to bring relevant concerns from the region to the EITI International Board, such as the high levels of government corruption, EITI implementation at the subnational level, and artisanal mining.

Sixty-eight oil and gas companies, mining and metals companies (including Anglo American), commodity traders and financial institutions support the EITI (<https://eiti.org/supporters/companies>).

Research and consultations

Impact research and local meetings

The project consultant, who is familiar with the Minas-Rio mine and surrounding area, drew on existing research to document several key impacts of mining on the local economy and public welfare, including on agricultural livelihoods. He undertook semi-structured interviews with city hall (municipal) officials, representatives of social movements and other civil society, and local residents. With IBASE representatives he held two consultation and information exchange meetings with stakeholder groups in Conceição do Mato Dentro.²⁵

Individual interviews were held between October and December 2019 with senior Conceição do Mato Dentro officials;²⁶ local representatives of the Movimento pela Soberania Popular na Mineração (Movement for Popular Sovereignty on Mining, MAM) and the Rede de Articulação e Justiça dos Atingidos pelo Projeto Minas-Rio (Network of Articulation and Justice for People Affected by the Minas-Rio Project, REAJA);²⁷ and with residents of local communities affected by the mine and tailings dam.

Meetings took place in February 2020 between the project consultant, IBASE and two senior

²⁵ IBASE is also publishing a complementary report by one of the IBASE team members present: C. Grzybowski, O empreendimento extrativista Minas-Rio da Anglo American [Anglo American's Minas-Rio extractive venture], cited above.

²⁶ Interviews held at Conceição do Mato Dentro city hall in Oct. 2019.

²⁷ <https://www.facebook.com/povodonodopoder/>

officials at Conceição do Mato Dentro city hall and another staff member. The consultant and IBASE also met the same month at a community centre with representatives of the MAM, REAJA and the Núcleo de Assessoria às Comunidades Atingidas por Barragens (Assistance Centre for Communities Affected by Dams, NACAB).²⁸

International civil society perspective

PWYP UK requested and received a perspective on the mine from the London Mining Network (LMN), which has published a briefing on Minas-Rio.²⁹

Clarification request to Anglo American

PWYP UK and IBASE wrote to Anglo American in November 2019 with questions arising from the company's UK payments-to-governments reporting relating to Minas-Rio and Minas Gerais State and municipalities.³⁰ We asked:

- ✦ Why the company reports no payments made to Conceição do Mato Dentro or Alvorada de Minas municipalities (the latter location includes a small part of the mine and part of the tailings) in certain years although it reported such payments in other years.
- ✦ Why the company reports payments to other municipalities in Minas Gerais State (Dom Joaquim, Sabinópolis, Serro) and whether these relate to water extraction for mining, pipeline transportation, other activities connected with Minas-Rio or entirely different projects.

- ✦ If the company could disaggregate and name payee governments entities listed as "Other" and "All municipal governments" in its payments data for 2015-16 (consistent with the UK financial regulator's 2019 ruling that "stakeholders should be able to assess to which precise government entity a payment has been made").³¹ We wanted to be sure which, if any, of these payments relate to Minas-Rio.
- ✦ Whether any payments that the company reports as made to Minas Gerais State or any of its municipalities arise from projects other than Minas-Rio.

We hoped that our inquiry might lead to constructive engagement with the company about a range of issues arising from our study.

Human rights commentary

As we jointly drafted our case study report synthesising our findings, IBASE provided a brief additional commentary reflecting on several human rights concerns relating to Minas-Rio.

Responsible Mining Foundation mine-site assessment

During work on this study, we accepted an offer from the independent non-governmental Responsible Mining Foundation (RMF)³² to assist PWYP coalitions and members with research on specific mining projects. At our request the RMF applied its recently revised Mine Site Assessment Tool to Minas-Rio.³³

Findings and outcomes from the various branches of our investigations are described on the following pages.

28 <https://www.nacab.org.br/>

29 LMN, Jul. 2017, <https://londonminingnetwork.org/2017/07/briefing-on-anglo-americans-minas-rio-iron-ore-mine-in-brazil/>

30 Our November letter corrected minor errors in an earlier version of the letter.

31 UK Financial Conduct Authority, Feb. 2019, <https://www.fca.org.uk/publication/newsletters/primary-market-bulletin-20.pdf>, p. 9.

32 <https://www.responsibleminingfoundation.org/>

33 RMF, 2020, <https://www.responsibleminingfoundation.org/msat>

PROJECT FINDINGS AND OUTCOMES

Fiscal flows and financial management

Minas-Rio-related payments to government

Anglo American has reported under the UK's extractives transparency regulations its project-specific payments to government relating directly to Minas-Rio in 2015-18 as totalling

\$79.9 million, and its government-entity-specific payments to Minas Gerais State and its municipalities including Conceição do Mato Dentro in 2015-18 as totalling \$30.1 million³⁴.

Anglo American reported payments arising from Minas-Rio project, 2015-18 (US \$)

Year	Taxes	Royalties	Fees	Payments for infrastructure improvements	Total
2015	\$0	\$0	\$0	\$16,800,000	\$16,800,000
2016	\$5,125,100	\$12,327,500	\$2,247,860	\$5,581,200	\$25,281,660
2017	\$0	\$26,162,000	\$656,000	\$2,107,000	\$28,925,000
2018	\$0	\$7,626,000	\$879,000	\$396,000	\$8,901,000
Total	\$5,125,100	\$46,115,500	\$3,782,860	\$24,884,200	\$79,907,660

Anglo American reported payments to Minas Gerais State and its municipalities, 2015-18 (US \$)

Year	Minas Gerais State government	Conceição do Mato Dentro municipality	Other municipalities in Minas Gerais	Total
2015	\$3,540,000	\$12,400,000	\$4,458,000	\$20,398,000
2016	\$6,894,680	\$0	\$0	\$6,894,680
2017	\$30,000	\$2,342,000	\$0	\$2,372,000
2018	\$0	\$396,000	\$0	\$396,000
Total	\$10,464,680	\$15,138,000	\$4,458,000	\$30,060,680

The above company data provides context for the following discussion.

³⁴ Anglo American Brazil country data at www.resourceprojects.org sorted by project and by government entity. As noted above, we asked the company to clarify aspects of the municipal payments and their variances and have received only limited clarifications to date (discussed below).

CFEM mining royalties and taxes

As noted above, Brazil does not publish sector-disaggregated corporate income tax receipts. But under the federal government's open data policy,³⁵ the ANM publishes disaggregated annual mining royalty data (CFEM). The relatively small size of CFEM mining royalties compared with mining tax receipts is evident

from data published under European and Canadian extractive industry transparency laws. All types of payments disclosed by mining companies to Brazilian government entities total more than \$1.3 billion for the years 2015-18, with taxes of \$1.14 billion almost ten times larger than royalties.

Mining companies' total payments to Brazilian government entities, 2015-18, reported under European and Canadian transparency laws (US \$)³⁶

Bonus payments	\$408,872
Fees	\$29,239,064
Payments for infrastructure improvements	\$35,852,283
Royalties	\$142,455,645
Taxes	\$1,136,546,189
Total	\$1,344,502,053

While taxes are by far the largest payment type, there is one proviso. Differences in interpreting the terms "royalty" and "tax" are common between extractive companies, and between companies and governments. For some company payments reported as made in Brazil, www.resourceprojects.org notes that it has included under "taxes" certain "CFEM-royalty" payments.³⁷ Some payments included as taxes in the table above are therefore almost certainly CFEM royalty payments. This makes cross-checking company-reported royalty payments with Brazilian government CFEM receipts data problematic. Taking a sample year, for example, Anglo American reports total royalties paid to

Brazil's ANM in 2018 as \$11.17 million, while the ANM reports total CFEM royalties received from Anglo American as R\$32,431,333, which is equivalent to about US \$6 million at mid-2018 exchange rates.³⁸ We did not attempt to investigate this variance or to make a more systematic comparison between Anglo American's royalty payment disclosures and the government's CFEM data.

Although significantly less than corporate income tax, CFEM is still an important source of government mining receipts in Brazil. Anglo American reports the following totals per type of payment made in Brazil in 2015-18.

35 Created by Decree 8,777 of 2016, https://www.lexml.gov.br/urn/urn:lex:br:rede_virtual_bibliotecas:artigo_revista:2016:1001086701

36 Data for Canadian, EU, Norwegian and UK reporting mining companies from www.resourceprojects.org sorted by payment type.

37 www.resourceprojects.org/entities?tab=0&countries=Brazil, entity and project payments made by Itafos, Jaguar Mining and Yamana Gold.

38 https://sistemas.anm.gov.br/arrecadacao/extra/Relatorios/arrecadacao_cfem_muni.aspx?ano=2018&uf=MG

Anglo American's reported total payments to Brazilian governments entities, 2015-18 (US \$)³⁹

Fees	\$6,424,841	Paid at federal, state and municipality levels
Payments for infrastructure improvements	\$29,142,200	Paid at municipality level
Royalties	\$43,908,200	Paid mainly at federal but also at state level ⁴⁰
Taxes	\$164,314,300	Paid at federal and state levels
Total	\$243,789,541	

CFEM royalties, which represent ≈18% (≈ US \$43.9 million vs \$243.8 million) of Anglo American's total disclosed payments to Brazil over four years, are of particular interest at the subnational level. 90% of CFEM, after payment at federal level, is reallocated to states and municipalities. Under Brazil's regulatory framework, CFEM payments made to the federal ANM are currently apportioned 60% to the mineral-producing municipality/ies where each mine is located, 15% to states and 15% to mining-affected but non-producing municipalities, with the remaining 10% retained at federal level.⁴¹

In December 2017 Brazil's main mining regulation, Decree Law 227 of 1967, was modified by Law No. 13,540, which changed the basis for calculating and allocating CFEM.⁴² CFEM was previously based on a percentage of net company receipts after discounting taxes on marketing, transport and insurance costs. Since 2018 CFEM – currently believed to be 3% for iron ore and up to 3.5% for other minerals – has been calculated as a percentage of gross production sales receipts minus sales taxes. Also under the new legislation, the mineral-producing municipality/ies' share of locally generated CFEM was reduced from 65% to 60%. In the case of Minas-Rio, the two producing municipalities, Conceição do Mato Dentro (most of the mine) and Alvorada de Minas (a small part of the mine), each receive 60% of the CFEM from production generated in their respective territories. We understand that a third municipality, Dom Joaquim, which is downhill from and threatened by the tailings dam

(discussed below), does not receive a share of CFEM because, despite its vulnerability to a tailings dam breach, the federal ANM does not recognise it as a mine-affected municipality.

There is little transparency around the precise percentage of gross production sales receipts minus sales taxes that constitutes the CFEM royalty rate, which as stated above we believe to be currently up to 3.5% depending on the mineral involved. The CFEM rate is frequently disputed between the federal government, states and municipalities and is not currently published anywhere that we could locate or confirm.

Mining taxes in Brazil are considered by critics to be "much lower than they should be".⁴³ The value of CFEM is also low compared with mining royalties in many countries and up to 2017 was distributed very unequally between government entities that bear the impacts of mining, processing and transportation. Brazilian civil society has demanded that iron ore royalties should be doubled to 6%. Experts in mining law also point out the lack of a cohesive federation-wide approach to minerals extraction in Brazil where responsibility would be shared between federal, state and municipal government, as in other policy areas such as health and environment. CFEM, intended to pay municipalities for the exploitation of their minerals, does not in fact even compensate for all the infrastructure and environmental problems caused, especially in smaller municipalities.⁴⁴

39 Anglo American Brazil country data at www.resourceprojects.org sorted by payee entity country (Brazil) and payment type. Anglo American does not, unlike some other mining companies, report bonus payments in Brazil during the period.

40 The company's reporting of a particular royalty payment as made at state level may, in view of the regulatory framework, be a recording or reporting error.

41 Federal Senate, Law No. 13,540, <https://legis.senado.leg.br/norma/26324818>

42 Federal Senate, Law No. 13,540.

43 N. Fowler and Tax Justice Network, 2019, <https://taxjustice.net/2019/07/22/terrible-transactions-how-much-does-mining-benefit-the-brazilian-state/>.

44 A. Cardoso and J. Vieira, "Seven points to understand the provisional measure of mining royalties and what's at stake" (trans.), Inesc, 2017, <https://www.inesc.org.br/en/sete-pontos-para-entender-a-mp-dos-royalties-da-mineracao-e-o-que-esta-em-jogo/>



Evidence of government under-allocation of CFEM

The Minas-Rio mine was planned during the commodity “super-cycle” boom years of the 2000s, when the international market price of iron ore exceeded US \$188 per metric tonne. Average prices had fallen to \$57/tonne by 2014 when the mine began production and to US \$41/tonne by 2015. Prices then recovered, reaching \$70/tonne in 2018 and \$169/tonne in March 2021. Production costs at Minas-Rio were initially \$60/tonne but stabilised at \$30/tonne in 2017 as the company recovered its start-up costs and increased production.⁴⁵

We used Anglo American production data for Minas-Rio, and average market prices, to calculate annual company gross sales receipts from the mine. Figure 1 compares these gross company receipts with total CFEM reported by the government on the ANM database as received for mining activities in the municipality of Conceição do Mato Dentro. Because Minas-Rio is the only mine located in or affecting

Conceição do Mato Dentro, and the company's only project in Minas Gerais (as confirmed to us by Anglo American), we know that all Conceição do Mato Dentro-related CFEM receipts originate in payments by Anglo American for this one mine.

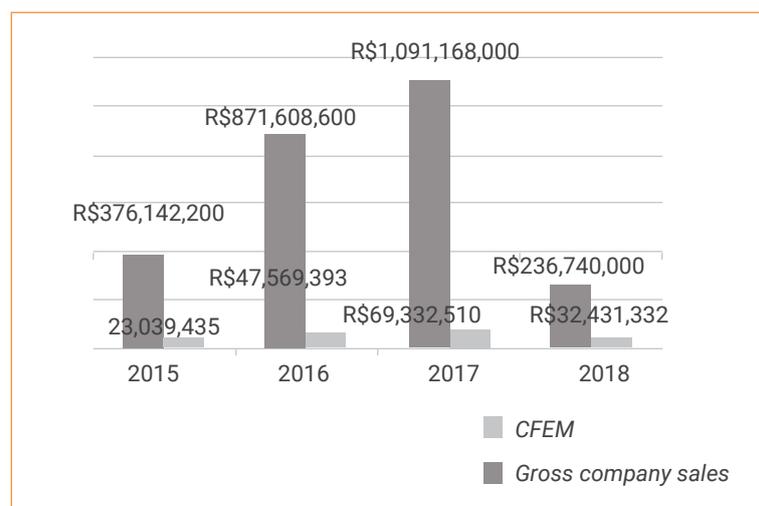


Fig. 1. Minas-Rio mine gross company sales and related CFEM royalties received by Conceição do Mato Dentro municipality, 2015-18 (R\$ = Brazilian reais).

45 Anglo American, annual reports, 2015-19, <https://www.angloamerican.com/investors/annual-reporting/reports-library/>

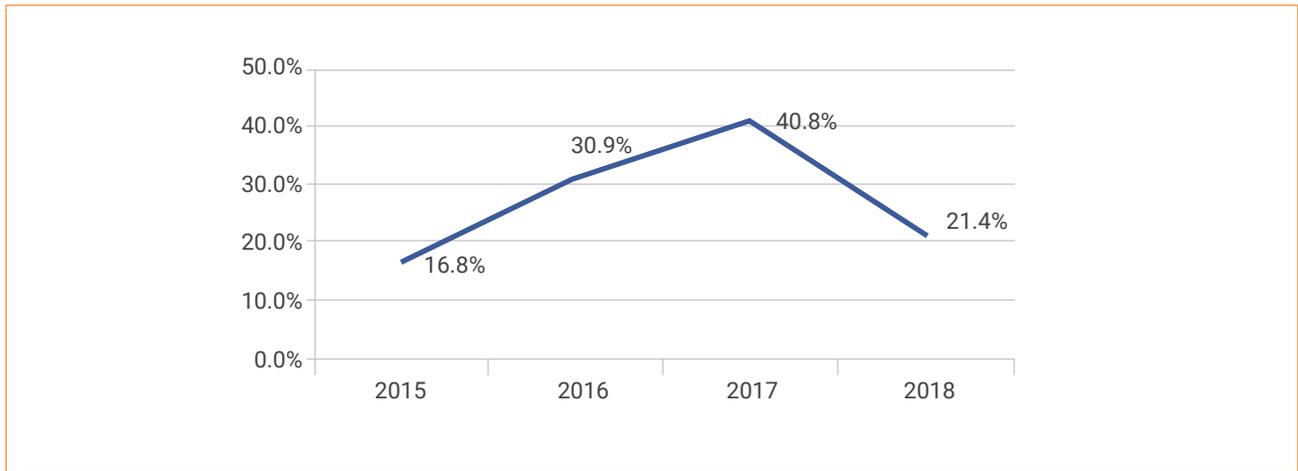


Fig. 2. Conceição do Mato Dentro's CFEM royalty receipts as a percentage of municipal income, 2015-18.

The reduction in Conceição do Mato Dentro's CFEM receipts in 2018 was softened by the fact that, while Minas-Rio production reduced by 80%, the changes at end-2017 in the way CFEM was calculated, noted above,⁴⁷ resulted in an increase in the final value of CFEM.

Transparency and accountability requirements unmet

With CFEM contributing an average of 27.5% of Conceição do Mato Dentro's municipal income over the years 2015-18, as shown above, transparency, accountability and public trust regarding how these funds are allocated and spent locally are important for citizens and communities. Brazil's Law No. 13,540 of 2017 explicitly requires transparency regarding the use of CFEM receipts: "Each year, the Union, the States, the Federal District and the Municipalities shall make public information relating to the application of the segments of CFEM intended for them, as laid down in Law No. 12,527 [of 2011] ... in order to have absolute transparency in the management of the resources of CFEM."⁴⁸

However, it is not currently possible to verify how Conceição do Mato Dentro allocates or spends its CFEM receipts. There is no separate

item in the published municipal budget; no such information is available to the general public online; and, as discussed below, city hall officials themselves appear not to know the facts. Brazilian civil society and social movements working with mining-affected communities argue for strict public oversight of CFEM and measures to ensure municipalities are fully accountable in budgeting and spending, including for social programmes, strategic investment and disaster risk reduction and accident emergency management plans. Civil society should be able to monitor CFEM receipts and to raise concerns when the ANM fails to pay.

Is CFEM a net benefit to the producer municipality?

Despite the relative size and importance of CFEM as a proportion of Conceição do Mato Dentro's regular municipal income, recent research by IBASE complementary to this case study indicates that as an income source it is outweighed by mine-related costs.⁴⁹ IBASE's assessment is that CFEM receipts fail to compensate adequately for expenses resulting from the impacts of mineral extraction on municipal services such as public health, education, garbage collection, street lighting,

47 The change was to move from basing CFEM on net company receipts after discounting taxes on marketing, transport and insurance costs, to calculating CFEM as a percentage of gross production sales receipts minus sales taxes; see p. 21 above.

48 Federal Senate, Law No. 13,540, section 21.

49 C. Grzybowski, O empreendimento extrativista Minas-Rio da Anglo American [Anglo American's Minas-Rio extractive venture].

water, sewage and environmental protection. Population growth associated with Minas-Rio has led to the city's expansion, squatting and increasing violence. Despite gains, such as growth in commerce, potentially resulting in a larger tax base, other mine-related costs have included the loss of a promising ecotourism sector. IBASE's research concludes that CFEM receipts are too small to help establish good economic conditions for the inevitable post-extraction phase. These points are further discussed below.

On Minas-Rio-related payments to the Brazilian government generally, Anglo American states: "An additional \$3,319,776 of tax, \$6,906,305 royalties and \$918,545 fees were paid in relation to Minas-Rio in 2015 ... allocated as a central Brazilian cost in our public reports rather than allocated to Minas-Rio"; and that latest company published data shows "a more complete picture of the fiscal contribution to date (as an additional \$60,701,000 royalties and \$737,000 fees were paid in 2019)".⁵⁰

Reduced subnational share of mining proceeds due to 1996 law

In addition to issues relating to CFEM royalties, a 1996 federal law still currently in force has reduced states' and municipalities' share of mining proceeds in favour of the mining companies. This is the Kandir Act (Lei Kandir), introduced by President Cardoso's right-of-centre government and named after then Planning Minister Antônio Kandir.⁵¹ This law exempts private companies in all sectors from paying the ICMS (Imposto sobre Circulação de Mercadorias e Serviços) tax on the inter-state and inter-municipal movement of goods and services. Passing of the Act ignited a tax conflict between states and municipalities, on the one hand, and the federal government, on the other, with the former demanding compensation for

the financial resources lost and forfeited for the benefit of companies. Losses for mining municipalities and states were expected to be in the billions of reais. In December 2020 the Brazilian Chamber of Representatives (Lower House) approved legislation first proposed in the Senate (Upper House) to ensure the payment of compensation by the federal government to states and municipalities on losses resulting from the Kandir Act, with total compensation estimated at R\$ 65.6 billion to be disbursed until 2037. But currently there is no provision for compensation to redress impacts of mining on affected communities and the natural environment.⁵²

Use of tax havens by mining companies

Other studies point out a tendency of mining companies' subsidiaries in Brazil to transfer ownership of raw materials to subsidiaries located in tax havens (low tax and secrecy jurisdictions). Sales are then made by the tax haven subsidiary to the buyer. Because no sales are made by the Brazilian subsidiary, Brazilian sales taxes do not apply. Any charges applied for transferring minerals are considerably less than taxes would be. One source estimates such losses from under-invoiced Brazilian iron ore exports to be in the billions of dollars annually.⁵³

Socioeconomic, environmental, health and cultural impacts

Who is affected?

According to civil society sources, the 2011 environmental impact assessment (EIA) undertaken by the consulting firm Diversus on behalf of Anglo American found that 22 communities would be affected by Anglo American's development and operation of Minas-Rio and its associated tailings dam,

50 Anglo American, comments on draft report, Jan. 2021, <http://bit.ly/3jrPUWW>

51 Lei Complementar no. 87, 1996, http://www.planalto.gov.br/ccivil_03/leis/lcp/lcp87.htm

52 Poder360, "Compensation of the Kandir Law will give more than R \$ 1 billion to 13 States by 2037" (trans.), Nov. 2020, <https://www.poder360.com.br/economia/compensacao-da-lei-kandir-dara-mais-de-r-1-bilhao-para-13-estados-ate-2037/>

53 Instituto Justiça Fiscal, "Study reveals how mining companies take billions from Brazil without paying due taxes" (trans.), Aug. 2017, <https://ijf.org.br/estudo-revela-como-empresas-de-mineracao-retiram-bilhoes-do-brasil-sem-pagar-devida-tributacao>

processing plant and pipeline.⁵⁴ Many of these communities comprise scattered small family farms often linked by kinship ties and Afro-descendant ethnicity, including three communities located within 10 km downstream of the Minas-Rio tailings dam: Passa Sete, Água Quente and São José do Jassém, the latter including smaller communities such as Teodoro and Saraiva.

There have been various licensing stages and public hearings as the mine has developed. Civil society researchers and social movement leaders have criticised the way the licensing authorities and Anglo American have managed the process. In particular, the rural communities' anxieties about the loss of long-standing local economic self-managing practices and livelihoods, and about mine-related noise, dust, roadbuilding, heavy traffic, silting and pollution of rivers and streams, and loss of natural spring waters were discounted during the licensing stages as expressions only of "perception" and "alleged" or "supposed" impacts" rather than as objectively real consequences of the mine and its infrastructure.⁵⁵ This led, say civil society

critics, to a restrictive and arbitrary limiting of company and government recognition of who would be affected by the mine and the scope and severity of the impacts, a failure to address problems, and considerable resentment among community members.⁵⁶

Declining agricultural production and little economic diversification

A major concern in mining municipalities in Brazil is its growing local economic dominance.⁵⁷ Local economies in mining areas increasingly depend on exporting primary minerals and show little evidence of economic diversification. For Conceição do Mato Dentro, agriculture is an important but diminishing economic sector. The land area used to cultivate crops for local consumption such as bananas, coffee, pineapples, peanuts, rice, sugarcane, beans, cassava and maize was already decreasing in 2012 when mine construction began at Minas-Rio and has since reduced by about 70% (see Fig. 3). With the mine's third expansion stage, 2016-17, land under cultivation suffered a particularly rapid decline.

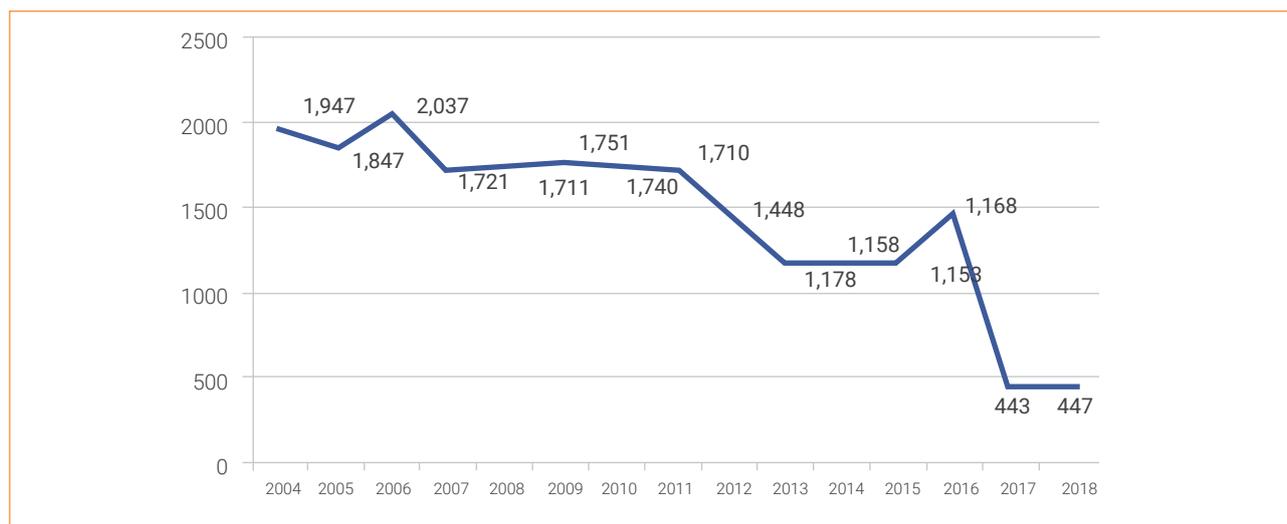


Fig. 3. Total are planted with key local food crops. Conceição do Mato Dentro, 2004-18 (hectares).

54 A.F. Moreira Santos, L. da Silva Sales Ferreira and V. Villela Penna, "Supposed impacts, real violence: the construction of reality in the implementation of the Minas-Rio project", *Vibrant – Virtual Brazilian Anthropology*, 14, 2. 2017, <https://bit.ly/344ey9f>
 55 Moreira Santos, da Silva Sales Ferreira and Villela Penna, "Supposed impacts..."

56 The above two paragraphs were added to the report towards the end of our research and writing process, in May 2021, and Anglo American were given an additional opportunity to comment.
 57 O Tempo, "In Minas Gerais 480 cities depend on mining royalties" (trans.), Feb. 2019, <https://www.otempo.com.br/cidades/em-minas-gerais-480-cidades-dependem-dos-royalties-da-mineracao-1.2131108>

Production of food crops for local consumption generally takes place on smaller-scale family farms and supports lower-income households (see Fig. 4).

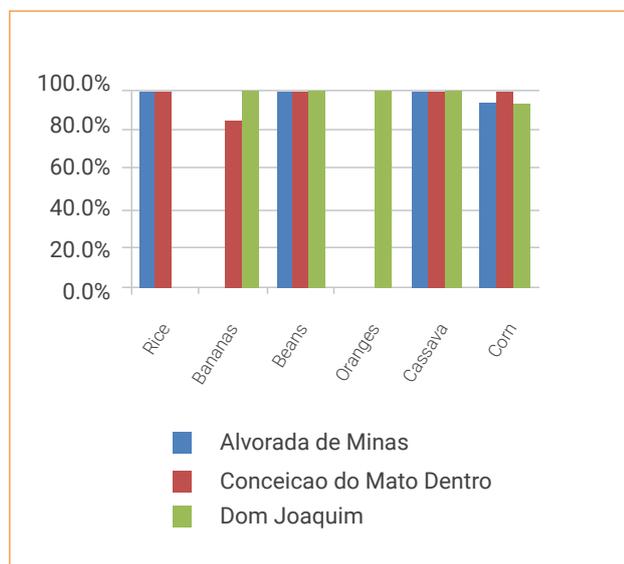


Fig. 4. Percentage of key food crops grown on family farms in Conceição do Mato Dentro and neighbouring municipalities, 2016.

Brazil's Law No. 13,540 of 2017 recommends that 20% of the CFEM mining royalty intended for producing states and municipalities be used for local economic diversification.⁵⁸ Lack of fiscal transparency at the municipal level makes

this currently virtually impossible to track. Anglo American's publications and website mention the company's Programa Crescer (Grow Programme): "250 rural and urban entrepreneurs" in Minas Gerais State (in Alvorada de Minas, Conceição do Mato Dentro, Dom Joaquim and Serro municipalities) are said to have benefited from company and Inter-American Development Bank support for local socioeconomic development since 2013.⁵⁹ The company informed us in 2021 that the programme has now benefited "more than 550 people – including rural producers, entrepreneurs, rural youth workforce and civil servants" in sectors such as dairy, horticulture, apiculture and tourism, and that a new Covid-19 crisis fund will support 50 artisanal cheese producers in five Minas Gerais municipalities.⁶⁰ However, for agriculture at least our data on land under local food cultivation indicates local economic decline associated with decreasing water availability and water quality as described below. Although a dedicated economic diversification fund for Conceição do Mato Dentro was legislated for in 2017, this has not yet been implemented.



Local producers' food fair, Conceição do Mato Dentro municipal market. Photo by Alexandre Guzanshe/IBASE.

⁵⁸ Federal Senate, Law No. 13,540, article II.

⁵⁹ Anglo American, "Rural producers will be able to improve their business in a new phase of the Crescer programme" (trans.), Sep. 2016, <https://brasil.angloamerican.com/pt-PT/imprensa/noticias/2016/29-09-2016>

⁶⁰ Comments on draft report, <http://bit.ly/3jrPUWW>

Tailings dam safety risks and community concerns⁶¹

Mine tailings safety is a major issue in Brazil and in Minas Gerais State.⁶² According to a 2020 Reuters report, Brazil comes third out of the world's countries with most tailings dams, with 270 out of more than 1,700 such dams worldwide. Another study states that 662 tailing dams are registered in the Brazilian government's national mining dam database currently maintained by the ANM.⁶³

In December 2019, Anglo American secured a licence to increase the storage capacity of the Minas-Rio tailings dam from 40 million to 370 million cubic metres of mineral waste.⁶⁴ Engaged academics and others who have raised concerns about this massive nine-times planned increase in tailings capacity have been criticised as being "enemies of development". Initial approval had come two months before publication of State Law No. 23,291 of February 2019, known as the Mar de lama nunca mais ("Sea of mud never again") law.⁶⁵ This law, passed following tailings dam disasters in Minas Gerais at Samarco mine in Mariana municipality (November 2015, 19 people killed)⁶⁶ and at Brumadinho (January 2019, about 260 people killed)⁶⁷ iron ore mines, prohibits raising

the height of existing dams where communities live in the so-called "self-rescue zone" (zona de autossalvamento or ZAS). The ZAS is the area within 10 km downstream of a tailings dam where Brazil's public rescue services are considered unable to save people from a dam breach due to lack of time, so people have to save themselves. Three communities are located within the ZAS of the Minas-Rio dam: Passa Sete (1.5 km downstream), Água Quente (3 km) and São José do Jassém (8.5 km). These communities want resettlement.

ANM resolutions of February 2019 and August 2019 prohibited the construction or elevation of "upstream" tailings dams.⁶⁸ Citing State Law 23,291, in March 2020 Minas Gerais State prosecutors filed a lawsuit for suspension of Anglo American's licence to expand the tailings dam "until those living in three communities downstream from the dam secure the right to be relocated". Anglo American issued a counter-statement that "part of the new law in question does not apply in this case", that "it [had] already established a voluntary relocation programme for families near the dam" and that its dam "is constructed in 'downstream' technique ... safer than Vale's 'upstream' style dam that collapsed".⁶⁹

61 For Anglo American's response on several points made here, see comments on draft report, <http://bit.ly/3jrPUWW>

62 Globo, "Since Brumadinho tragedy, more than 20 dams are on alert in Minas Gerais, says Civil Defence" (trans.), Nov. 2019, <https://g1.globo.com/mg/minas-gerais/noticia/2019/11/19/desde-tragedia-de-brumadinho-mais-de-20-barragens-estao-em-estado-de-alerta-em-minas-gerais-diz-defesa-civil.ghtml>

63 Reuters, "The looming risk of tailings dams", Jan. 2020, <https://graphics.reuters.com/MINING-TAILINGS/0100B4S72KI/index.html>; L.C. Garcia and others, "Brazil's worst mining disaster: corporations must be compelled to pay the actual environmental costs", Ecological Applications, 2017, <https://bit.ly/3cftjtq>

64 The Times, Dec. 2019, <https://www.thetimes.co.uk/article/anglo-american-granted-licence-for-mining-waste-dam-in-brazil-xxsq6thrm> (paywall).

65 LEIA, "Find out who voted for a new licence for the largest expanding mining project in MG" (trans.), Dec. 2018, <https://leia.org.br/saiba-quem-votou-a-favor-de-nova-licenca-para-o-maior-projeto-de-mineracao-em-expansao-em-mg/>. State Law No. 23,291, <https://www.almg.gov.br/consulte/legislacao/completa/completa.html?ano=2019&num=23291&tipo=LEI>

66 Samarco is a joint venture co-owned by Vale and BHP Billiton. Guardian, Mar. 2018, <https://www.theguardian.com/world/2018/feb/28/brazil-dam-collapse-samarco-fundao-mining>

67 Brumadinho is owned by Vale: Mining Magazine, Dec. 2019, <https://www.miningmagazine.com/geomechanics-ground-control/news/1377859/brumadinho-dam-failure-due-to-poor-drainage-according-to-vale-report>; Guardian, Feb. 2021, <https://www.theguardian.com/world/2021/feb/04/brazil-mining-collapse-vale-agrees-compensation>

68 Ministry of Mines and Energy National Mining Agency, Feb. 2019, <https://bit.ly/3lugCGZ> and Aug. 2019, <https://bit.ly/3eTby4w>

69 Mining Weekly, Mar. 2020, <https://www.miningweekly.com/article/brazil-state-prosecutors-seek-to-block-expansion-of-anglo-american-mining-dam-2020-03-04>



Current work on the Minas-Rio tailings dam.
Photo by Alexandre Guzanshe/IBASE.

Residents of Passa Sete, Água Quente and São José do Jassém have demanded relocation due to the proximity of the tailings dam and the risk of breaches.⁷⁰ In response Anglo American has proposed the Plano de Negociação Opcional (Option Negotiation Plan).⁷¹ According to representatives of local social movements, the company's proposals would be inadequate to compensate for harms resulting from relocation. The social movements say that the plans lack consideration of households' farm animals and food crops and disregard family size (number of children). Some residents therefore seek different resettlement terms. How much money the company intends to spend per household versus implementation costs under alternative community proposals is a matter of public concern.

The MAM representatives we spoke with (see below) highlighted the psychological problems in downstream communities caused by the risk of dam breaches. They said that residents find it difficult to sleep at night, and during heavy rain some move temporarily to relatives' homes higher up the hillsides to escape from the potentially deadly avalanche of mine waste if the dam breaks.

On 3 January 2020 emergency alarms installed in Água Quente and São José do Jassém sounded by mistake, and people hurried from their homes in fear of a breach.⁷² A woman resident of Água Quente had an asthma attack and was rushed to a clinic in an ambulance supplied by Anglo American.⁷³ The company stated that it did not know why the sirens had

70 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study].

71 Encontro, "Anglo American mining company criticised for expansion project" (trans.), Apr. 2019, <https://www.revistaencontro.com.br/canal/cidade/2019/04/mineradora-anglo-american-e-criticada-por-projeto-de-expansao.html>

72 DeFato Online, "Siren goes off near Anglo American dam in Conceição do Mato Dentro" (trans.), Jan. 2020, <https://defatoonline.com.br/sirene-dispara-proximo-a-barragem-da-anglo-american-em-conceicao-do-mato-dentro/>

73 DeFato Online, "Woman feels sick after siren erroneously sounds in Conceição do Mato Dentro district" (trans.), Jan. 2020, <https://defatoonline.com.br/mulher-passa-mal-apos-sirene-tocar-erroneamente-em-distrito-de-conceicao-do-mato-dentro/>

sounded and believed that lightning may have been the accidental cause.⁷⁴ Reports indicate that, following the disastrous failure of Vale's Brumadinho tailings dam,⁷⁵ alarms in other locations in Minas Gerais State have sounded more frequently than before.⁷⁶

In October 2020, the Brazilian government passed a law establishing a new national policy on tailings dam safety and a new national tailings dam information system, updating the earlier policy.⁷⁷ The new policy sets rules for the accumulation of water and industrial residues in dams, as well as for their final disposal. The new law resulted from the severely negative repercussions of previous tailings dam disasters in Minas Gerais (Mariana/Samarco and Brumadinho, referred to above). The policy now confirms that it is forbidden to build upstream dams, such as those that collapsed at Mariana/Samarco and Brumadinho, and that all existing upstream dams must be deactivated by February 2022. A recent report analysing the new policy notes that the overall situation of tailings dams in Brazil is one of pervasive insecurity, that the new law does little to address this, that improvements are inadequate, that the new law has loopholes that will allow mining companies to maintain their dangerous model of managing mineral waste, that the majority of residents near dams subject to risk are black Afro-descendants (68.7%) and that the number of unstable dams has doubled in the past year.⁷⁸

At the global level, in 2020 the International Council on Mining and Metals (ICMM), United Nations Environment Programme (UNEP) and Principles for Responsible Investment (PRI) published a new Global Industry Standard on Tailings Management.⁷⁹ The new standard aims to meet the goal of “zero harm” with respect to affected people, social/ environmental and local economic context, tailings facilities, management, governance, emergency preparedness/response, disclosure of information and accountability. Civil society groups criticised the draft new standard for “not go[ing] far enough to adequately protect communities and ecosystems from failures” and have offered in its place Safety First: Guidelines for Responsible Mine Tailings Management.⁸⁰ While analysis of the differences between the two norms is beyond the scope of this report, Anglo American has informed us that it engaged in the development of the new ICMM/UNEP/PRI standard and that its own standard “exceeds the technical requirements of the new Global Standard and ... of the regulatory requirements in all jurisdictions in which we operate” and is “more comprehensive”.⁸¹

Water shortages

The water question is also central to understanding harms affecting communities adjacent to Minas-Rio. Rivers and streams are an essential component of the local landscape and have for generations provided households with water for drinking and cooking, personal

74 Conceição Mato Dentro, “Clarification note on the emergency siren in the Cachoeira de Baixo community” (trans.), Jan. 2020, <https://cmd.mg.gov.br/noticias/nota-de-esclarecimento-sobre-a-sirene-de-emergencia-na-comunidade-de-cachoeira-de-baixo>

75 Mining Magazine, Dec. 2019.

76 O Tempo, “Video shows residents fleeing after Brucutu’s siren sounded accidentally” (trans.), Mar. 2019, <https://www.otempo.com.br/o-tempo-contagem/video-mostra-moradores-fugindo-apos-sirene-de-brucutu-soar-acidentalmente-1.2153716>

77 Federal Senate, “Brazil has new dam safety law” (trans.), Oct. 2020, <https://www12.senado.leg.br/noticias/materias/2020/10/01/brasil-tem-nova-lei-de-seguranca-de-barragens>; Presidency of the Republic, “President institutes new national dam safety policy” (trans.), Oct. 2020, <https://bit.ly/2Hcr8Li>

78 B. Milanez and L.J. Wanderley, “O número de barragens sem estabilidade dobrou, ‘e daí?’: uma avaliação da (não-)fiscalização e da nova Lei de (in)Segurança de Barragens [The number of dams without stability has doubled, ‘so what?’: an assessment of (non-) inspection and the new dam (in-)security law]”, Versos – Textos para Discussão PoEMAS, Oct. 2020, <https://bit.ly/2H4VfEA>

79 ICMM, UNEP and PRI, 2020, <https://globaltailingsreview.org/global-industry-standard/>

80 Earthworks, Jun. 2020, <https://www.earthworks.org/publications/safety-first-guidelines-for-responsible-mine-tailings-management/>; J. Morrill and others, Safety First: Guidelines for Responsible Mine Tailings Management, Earthworks and MiningWatch Canada, 2020, <https://www.earthworks.org/cms/assets/uploads/2020/06/REPORT-Safety-First-Requirements-for-Safe-Tailings-Management-FINAL.pdf>

81 Comments on draft report, <http://bit.ly/3jrPUWW>

and clothes washing, livestock watering, crop irrigation, local cheese and cachaça (sugarcane liquor) manufacturing, leisure and recreation. After construction of the tailings dam, fish deaths occurred on the River Passa Sete, and local people began to see pollution, reduced river flow, the drying up of springs, and occasional floods.⁸² Local cream-cheese producers reported problems caused by water scarcity and contamination affecting milk production.⁸³

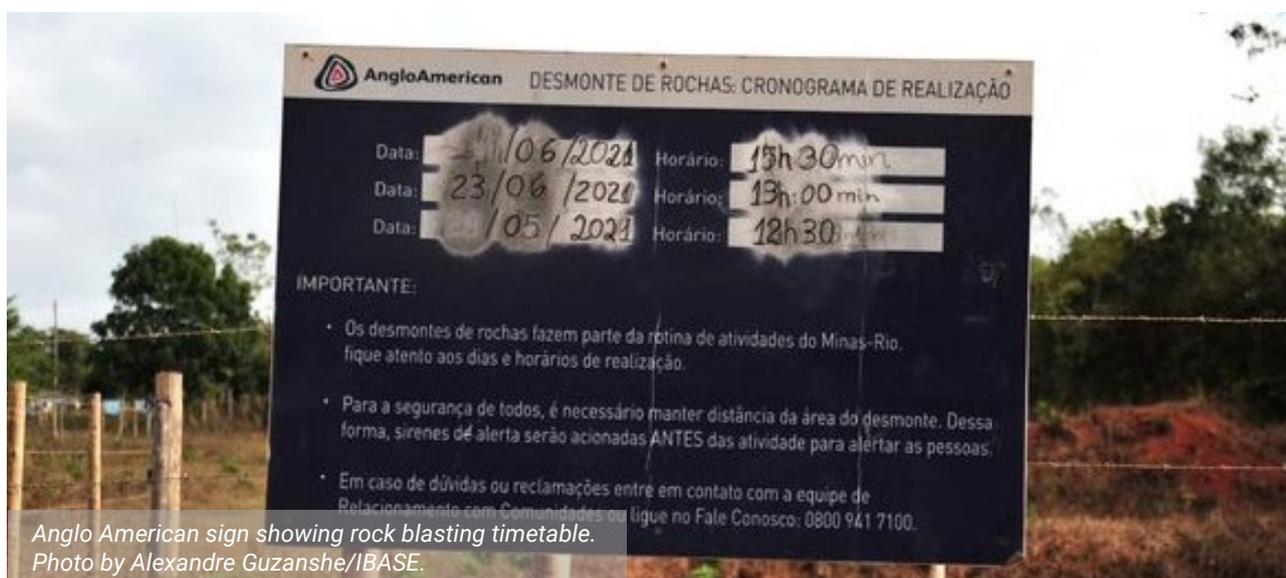
Residents of Passa Sete and Água Quente now need water deliveries by truck. However, the trucks cannot reach the communities in heavy rain, because of the dirt road. Resulting water shortages may last for days. As areas under crop cultivation have decreased with the reduced availability of freshwater, households spend more money to buy food that previously they or their neighbours grew locally. As part of the field research in 2019, the project consultant visited the home of a family in Passa Sete. The household has a small market garden producing vegetables for home consumption and occasionally to sell locally. The consultant heard that the stream passing through the property and supplying water for the vegetable garden has a reduced flow since the tailings dam was

constructed. So the garden produces less, with consequences for family diet and income.

Anglo American states that “water abstraction in the municipality of Dom Joaquim is duly permitted by the competent environmental agencies and ... does not reduce water availability for other users”.⁸⁴

Airborne pollution

A representative of the social movement REAJA who lives in Conceição do Mato Dentro has monitored the licensing and development of Minas-Rio from the beginning. He told us that the community of Sapo, which is downstream of the tailings dam and less than 1 km from the expected expanded mine area, used to have a small milling industry producing a traditional local staple, cassava flour, and animal feed. However, due to dust emissions from mine explosions, it has become impossible to dry the produce in the open air, and this form of local economic activity has been lost. One of the MAM representatives reported that people living near the mine (in Sapo, Passa-Sete, Turco and Jassém) experience respiratory illnesses as a result of the dust, with the worst effects on children and older people. Caring for the sick has increased women’s daily burdens.⁸⁵



Anglo American sign showing rock blasting timetable.
Photo by Alexandre Guzanshe/IBASE.

82 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study].

83 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study].

84 Comments on draft report, <http://bit.ly/3jrPUWW>

85 Anglo American disagrees with these findings: comments on draft report, <http://bit.ly/3jrPUWW>

The pipeline

As noted in Box 2, in 2018 two major leaks occurred in the 0.66 metre diameter iron ore slurry pipeline that runs to the coast.⁸⁶ These incidents discharged pollutants into local streams and rivers and on to land.⁸⁷ Our MAM contacts also mentioned problems in homes located near the pipeline caused by constant vibration generated by the slurry in motion. A number of houses are cracked and in danger of collapsing.⁸⁸

Long before the leaks in 2018, the pipeline stirred public reactions because of its length and the amount of engineering required. A portion of it is buried no deeper than 3 metres underground, and it intersects some 1,500 buildings. In 17 places the pipeline is suspended above ground. To build it, it was necessary to displace rivers in five places and to excavate three mountain sites, and highways in three places. According to studies, building and testing the pipeline led to land loss and family breakups that were insufficiently compensated by the company. To date there has been no overall assessment of its environmental and human impacts.⁸⁹

Water abstraction for the pipeline is a major issue for people in the Dom Joaquim municipality, although not in Conceição do Mato Dentro. The local effects in Dom Joaquim, and localised impacts of the pipeline as it makes its way to the coast, should be taken into account to reach a more complete assessment of the socioeconomic costs of the mine.

Violence and homicides

During interviews reported below, Conceição do Mato Dentro officials referred to the in-migration of men seeking casual work due to mining in the locality. Mining is well known to attract migrant men (and women) and to result in the growth of informal settlements, local unemployment and related social problems including violence.⁹⁰ While the evidence is mixed, and causality is unproven, there are indications from municipal data and other sources that the incidence of crimes of violence, including against women, robberies and homicides has been high in Conceição do Mato Dentro, Alvorada de Minas and Dom Joaquim in recent years, with notable increases in Conceição do Mato Dentro after 2012.⁹¹

On ethnicity and culture – black (Afro-descendant) communities

One important issue that emerged during the licensing process for Minas-Rio was whether the region had residents and localities that could be legally acknowledged as traditional communities (comunidades tradicionais), an umbrella designation in Brazil that includes a variety of indigenous and other ethnic groups organised around land usage and occupation. A 2015 environmental impact study that Anglo American commissioned is said to have concluded that there were no legally certified traditional communities in Conceição do Mato Dentro and surrounding areas, and that quilombo (former escaped slave) communities with an official status were too far from the mine site to bear any significant impact.⁹² This environmental study appears not to have

86 For technical specifications regarding the pipeline, see Brazilian Petroleum, Gas & Biofuels Institute (IBP), 2009, <https://www.osti.gov/etdweb/servlets/purl/21329820#~:text=Pipeline%20Overview5L%20X70%20unlined%20steel%20pipe>

87 MAM, Mar. 2018, <https://mamnacional.org.br/2018/03/14/worlds-largest-slurry-pipeline-breaks-and-causes-havoc-in-minas-gerais-brazil/>

88 Anglo American disagrees about the alleged cause but states that in all such situations it has "appropriately compensated and supported" households "in a constructive manner" and is "willing to discuss any remaining cases of damaged properties": comments on draft report, <http://bit.ly/3jrPUWW>

89 M. A. Tôres. História de água e minério: os efeitos do Projeto Minas-Rio em Água Quente, Conceição do Mato Dentro [History of water and ore: the effects of the Minas-Rio Project on Água Quente, Conceição do Mato Dentro], Universidade Federal de Minas Gerais, Faculdade de Filosofia e Ciências Humanas, Nov. 2014, <https://bit.ly/39gnwUU>

90 Bloomberg, Feb. 2019, <https://www.bloomberg.com/news/articles/2019-02-05/what-mines-mean-for-south-africa-communities-violence-sickness> (paywall).

91 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study], p. 288.

92 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study].

taken into consideration several other reports that attest to the traditional status of most communities in the Conceição do Mato Dentro area. Eight nearby settlements have been classified by one such report as “black rural communities”, and two of them came to be certified by the federal government as quilombo communities. The 2015 environmental impact study in effect caused difficulty by erasing from public recognition the presence of traditional communities and a majority of black (Afro-descendant) residents who have been disproportionately affected by Minas-Rio.⁹³ We discuss this point further below.

Impacts of COVID-19

Press reports have consistently noted that mining has been a driver of COVID-19 infection in Conceição do Mato Dentro and surrounding areas. From the early stages of the pandemic, the Brazilian government ruled that mining was an essential activity, and this appears likely to be the main reason for the high local contamination rates recorded subsequently. In September 2020, Minas Gerais State prosecutors filed an injunction calling for Anglo American to cease operating its iron ore pipeline until it could prove it had effective sanitary measures in place, and the judicial authorities asked the company to conduct periodic testing among its pipeline workers.⁹⁴ Anglo American stated that it had implemented preventive measures and was supporting efforts of the health authorities

to tackle the pandemic, but it never publicly acknowledged the allegations made by the prosecutors. The company states that it has set up a community response action plan for every business unit, including Minas-Rio, and among other measures has donated medical equipment costing more than \$1 million to the healthcare systems in the states and municipalities where it operates.⁹⁵

Stakeholder perspectives

Municipal officials

Interviews and the meeting with Conceição do Mato Dentro officials⁹⁶ included discussion of city improvements financed by Anglo American’s CFEM royalty payments. Officials mentioned the construction of a hospital and a nursery and paving the main city avenue. However, we were told that 80% of the municipal budget was spent dealing with local impacts of Minas-Rio including road building to accommodate mining trucks and increased demand on the public finances resulting from the population influx, such as additional street cleaning, sanitation and health services. The arrival of hundreds of job seekers had caused new neighbourhoods to appear through unplanned land occupation, and housing costs had risen.

Regarding CFEM royalty receipts, city hall officials said that the ANM usually transfers CFEM to Conceição do Mato Dentro in the month following the month it is paid by the company, with December payments officially accounted for the next year. CFEM receipts are difficult for officials to monitor. The company calculates the CFEM payable, then transfers this to the ANM, which then allocates the money to the municipality. Conceição do Mato Dentro has only two inspectors to monitor CFEM receipts, and they lack full technical training. There are plans to train these inspectors in mining tax law, and the city has hired a tax consultancy

93 Anglo American states that, since in Brazil “communities are able to self-recognise as ‘comunidades tradicionais’, the company “carried out a detailed and independent study of traditional characteristics in the surrounding communities. This study did not identify traditional groups, as defined in national legislation, around the mine area. There are some recognised traditional communities in regions some distance from the mine and not impacted by Minas-Rio ... [T]he absence of geographic and cultural relations between the areas of influence of the company and the communities effectively recognized” is detailed in its 2015 environmental impact report: see comments on draft report, <http://bit.ly/3jrPUWW>

94 Brasil de Fato, “For promoting agglomeration, mining is responsible for the increase of Covid-19 in Minas Gerais” (trans.), Jun. 2020, <https://bit.ly/3dxU8JU>; Hoje em Dia, “MP asks for suspension of Anglo American pipeline activities in Conceição do Mato Dentro” (trans.), Sep. 2020, <https://bit.ly/3dxUFLU>; Globo, Public prosecutor requests suspension of activities of Anglo American’s Minas-Rio pipeline (trans.), Sep. 2020, <https://glo.bo/3j9S3VL>; Globo, “MG court orders mining company Anglo American, in Conceição do Mato Dentro, to test employees for Covid-19” (trans.), Sep. 2020, <https://glo.bo/34WbY5g>

95 Comments on draft report, <http://bit.ly/3jrPUWW>

96 Interviews and the meeting took place at Conceição do Mato Dentro city hall in Oct. 2019 and Feb. 2020 respectively.

firm. Under an agreement between Conceição do Mato Dentro, the ANM and the Association of the Mining Municipalities of Minas Gerais, officials have access to certain company payment-to-government information, unlike in some other municipalities. The officials indicated that city hall is becoming better equipped to manage mining receipts.

Officials asked if we could help them calculate the total contribution of mining to Conceição do Mato Dentro's economy by combining workers' salaries with taxes and other payments such as CFEM. This would provide useful data to discuss at municipal committee meetings and at meetings with residents. Overall, their view was that 90% of Conceição do Mato Dentro's population support Anglo American's presence, which makes it difficult for officials to publicly discuss problems caused by the mine (we note civil society's very different perspective below). They acknowledged that REAJA as a local movement is effective in raising questions about mining impacts with residents. In their view the Conselho Municipal de Defesa e Proteção do Meio Ambiente (Municipal Environmental Defence and Conservation Council, CODEMA) – a multi-stakeholder body established by law with business, civil society and government representation⁹⁷ – is an obstacle to local economic development. CODEMA has questioned and sometimes opposed developments linked to the mine.

Municipal staff also told us about Vale's mining interests in Serra da Serpentina, a nearby mountain chain. Vale's planned new mine there would have a much larger capacity than Minas-Rio and is projected to go into production in 2028.⁹⁸ Vale representatives reportedly visit Conceição do Mato Dentro city hall three times a year.

Civil society representatives

We met to discuss Minas-Rio with representatives of two social movements, MAM and REAJA, and the civil society organisation NACAB.⁹⁹ In the opinion of the MAM representative, mine-affected communities receive no benefits from Anglo American's tax and CFEM royalty payments. Their view was that problems caused by the mine, tailings dam and pipeline have not been compensated and continue to harm lives in nearby communities. All considered that Conceição do Mato Dentro allocates its CFEM receipts in ways that do not benefit communities negatively affected by the mine or offset damage. Harms are concentrated in the outlying rural areas, whereas the money is mainly spent in the urban centre.

These civil society representatives believe that the municipality is too closely aligned with Anglo American's business interests rather than with the needs of local people, which gives rise to tensions. In their view, city hall behaves "like an extension of the company". They also consider that most of the conditions of previous licensing rounds have not yet been carried out and that Minas-Rio has a history of association with violations of local community rights (further discussed below). They mentioned that there was a new threat to communities from large-scale mining in the neighbouring municipality of Serro by the Herculano mining company.

Our civil society contacts agreed on the need for officials to report on how the municipality has used CFEM royalty receipts to benefit affected communities and that elected city council members can be an important channel of public communication and dialogue.

Perspective from London Mining Network

The London Mining Network (LMN) is a civil society alliance that monitors and researches

97 Conceição Mato Dentro, "Clarification note on the emergency siren in the Cachoeira de Baixo community" (trans.), Jan. 2020, <https://cmd.mg.gov.br/noticias/nota-de-esclarecimento-sobre-a-sirene-de-emergencia-na-comunidade-de-cachoeira-de-baixo>

98 DeFato, "Vale invests in project to mine Serra da Serpentina" (trans.), Jul. 2019, <https://defatoonline.com.br/vale-investe-em-projeto-para-minerar-serra-da-serpentina-cartao-postal-de-conceicao-do-mato-dentro/>

99 Meeting held at a local community centre in Feb. 2020.

impacts of UK-based mining companies on human rights and the environment in producer countries. In late 2019 LMN informed us that “LMN visited the site of Minas-Rio a few months ago and was impressed (shocked) by the way the project has taken over the area and pressurised people who were opposed ... This is a mining project in a new area, which appears to have a major impact on natural forests and water resources, which is supposed to be mitigated by some weak environmental monitoring and offsetting arrangements ... [Our] impression of Minas-Rio is that it will have difficulty in earning enough to cover the investment, and was only started because of the very high world iron ore prices 10-15 years ago. The investment is now a sunk cost, so somehow Anglo American has to get a return, and there is therefore cost-cutting and corner-cutting to keep costs down.”¹⁰⁰

In 2020 LMN reported that members of communities affected by Minas-Rio had blocked roads in protest against Anglo American’s withdrawal of funding for independent technical advice for them.¹⁰¹ The communities’ statement criticises the company and Minas Gerais State for being unwilling to hire technical assistance for several communities including Água Quente, Passa Sete and São José do Jassém and demands the company commit to implement basic principles and guidelines on “expropriations, evictions, removals and displacements” resulting from the mine project. The company was required as a condition of the environmental licensing process to establish an independent technical advisory team, chosen by the communities. Anglo American has reportedly filed lawsuits against the Minas Gerais Ministry of Mines, the civil society

organisation NACAB and others. The advisory team’s coordinator is quoted as saying that Anglo American is attempting “to intimidate and prevent” impacted communities from having access to the advisory team’s services.

Response from Anglo American

PWYP UK and IBASE’s letter to Anglo American of November 2019 received, after a while, a response stating that Minas-Rio is the company’s only mining project in Minas Gerais State.¹⁰² This confirms that all the company’s payments in Minas Gerais, and all corresponding government receipts, arise from Minas-Rio. We look forward to hearing from the company’s Brazil-based staff, who we were informed should be able to clarify some of the other points in our inquiry letter.

Human rights commentary

Concern about the impacts of mining in Conceição do Mato Dentro pre-dates iron ore production, which began in 2014. In May 2013 dozens of city hall representatives and residents participated at a public hearing on the Minas-Rio licensing process, instigated by the Human Rights Commission of the Legislative Assembly of Minas Gerais State. Participants called for suspension of the project and presented a 3,000-signature petition to the authorities. The municipality’s Secretary for the Environment was quoted as referring to “six years of complaints related to human and environmental rights” and saying that the Minas Gerais State government “recognises that it has no structure to inspect or carry out this type of mining project of this size”.¹⁰³ The meeting discussed impacts of the project on water resources, the resettlement of families, irregularities in the

100 LMN email to PWYP UK and IBASE, Nov. 2019. Anglo American states that there is no evidence of “corner cutting” and that “we would refute any such allegation strongly, given the implication it could have with regards, for example, to safety, which is our number one priority”: comments on draft report, <http://bit.ly/3jrPUWW>

101 LMN, “Protests against Anglo American in Brazil”, Aug. 2020, <https://bit.ly/3bXgzxd>, and “Legal struggle with Anglo American hot up in Brazil”, Sep. 2020, <https://bit.ly/3hwFy5D>

102 Anglo American email to PWYP UK and IBASE, Mar. 2020.

103 Conceição do Mato Dentro, “Residents claim end of Minas-Rio project” (trans.), May 2013, <http://cmd.mg.gov.br/novo/noticias/moradores-reivindicam-fim-de-projeto-minas-rio/>

construction of housing for mine workers, and the social consequences of 8,000 additional workers on the local jobs market.

The degree of local opposition to the Minas-Rio project, including from municipal officials and representatives, calls into question the current effectiveness of channels in Brazil for the public to exercise their right to participate in decision-making affecting economic development, livelihoods, the environment and such rights as the right to water.¹⁰⁴ The principle of Free, Prior and Informed Consent (FPIC) features in international agreements and safeguards to improve social equity in resource management by requiring consent from indigenous peoples and/or local communities prior to actions that affect them, including mineral extraction. Although international law currently commits states to ensure FPIC in the strictest sense only where indigenous peoples are affected,¹⁰⁵ development actors increasingly recognise FPIC as good general practice to undertake with local communities. Involvement of local communities in development decision-making "increases their sense of ownership and engagement and ... helps guarantee their right to development as a basic human rights principle."¹⁰⁶ The International Council on Mining & Metals (ICMM), of which Anglo American is a member, states: "[W]hat constitutes good practice in relation to Indigenous Peoples is the same as for non-Indigenous Peoples. Regardless of

where they operate, responsible companies aim to avoid impacting negatively on communities and seek to leave a positive legacy, particularly in relation to local social and economic development."¹⁰⁷

After production operations at Minas-Rio had begun, a resident of Água Quente community commented publicly at another local meeting in 2016: "There will never be water for regular use. We don't want the river water [any more] because it is tainted with the minerals from up above. The water stinks, it has a bad odour. How can we use this water? We no longer have a water spring in our community, [whereas] before the company, we had water springs. Our spring has dried up".¹⁰⁸

104 Universal Declaration of Human Rights 1948, art. 21(1): "Everyone has the right to take part in the government of his country, directly or through freely chosen representatives." Rio Declaration 1992, principle 10: "Environmental issues are best handled with participation of all concerned citizens, at the relevant level ... Each individual shall have ... the opportunity to participate in decision-making processes." UN Committee on Economic, Social and Cultural Rights 2003, General Comment No. 15 on the Right to Water, para 56: "Before any action that interferes with an individual's right to water is carried out by the State party, or by any other third party, the relevant authorities must ensure ... opportunity for genuine consultation with those affected."

105 UN Declaration on the Rights of Indigenous Peoples 2007, articles 10, 11, 19, 28, 29, 32(2) ("particularly in connection with the development, utilization or exploitation of mineral, water or other resources").

106 UN Food and Agriculture Organisation, Free Prior and Informed Consent: An indigenous peoples' right and a good practice for local communities, <http://www.fao.org/family-farming/detail/en/c/899936/>, p. 5.

107 ICMM, 2015, <https://www.icmm.com/en-gb/publications/mining-and-communities/indigenous-peoples-and-mining-good-practice-guide>

108 Quoted in A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study], p. 245.



*The Água Quente river bed is now virtually dry in places.
Photo by Alexandre Guzanshe/IBASE.*

As we note above, water shortages have implications for food production, livelihoods and community life. A research consortium study coordinated by the State of Minas Gerais Public Prosecutor's Office analysed impacts of mining in this regard on communities in Conceição do Mato Dentro and Alvorada de Minas after production began. Despite much discussion of mitigating measures during the licensing period, the Study Group found that the affected population's access to clean water has worsened significantly. Local people were unable to maintain their traditional vegetable gardens and found it harder to raise domestic livestock, experienced problems in obtaining

cattle feed (especially in the dry season), lacked access to water for drinking, cooking and domestic activities, could not fish, had lost important leisure and social activities, and had to pay higher electricity bills because of the need to pump water.¹⁰⁹

The issue of "rights reparation" has been raised in the context of mining in Brazil – for example, by Professor Tatiana Ribeiro de Souza of the Federal University of Ouro Preto, Minas Gerais State, speaking about the burden of mineral extraction on low-income people who depend on fishing and agriculture and may as a result of mining lose their livelihoods, their lands and

109 A.F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study].

even their lives.¹¹⁰ Ribeiro de Souza has called for material and symbolic reparation for such harms at a scale that satisfies claimants' sense of justice.

According to media and NGO reports,¹¹¹ in 2018 several community residents from small localities in Conceição do Mato Dentro were threatened in letters and phone messages that were allegedly initiated by people acting on behalf of Anglo American. Six people were brought into a human rights defenders' protection programme run by state and federal agencies. All these people had been part of social movements that opposed the Minas-Rio mine and denounced its negative impacts. Anglo American has consistently denied any wrongdoing and in August 2018 brought a legal case against these residents for slander, whose outcome we have been unable to discover.

Critics have argued that Anglo American's 2015 environmental impact study considers impacts on water resources as of only medium magnitude and medium relevance, which disregards the lived experience of local people and evidence from studies and reports by academia, social movements and the Minas Gerais State Prosecutor's Office.¹¹² Besides, human rights harms and threats are often interconnected. While we have focused in this report mainly on rights to water, food, health and livelihoods, associated concerns about Minas-Rio relate to the right to fair negotiations, to freedom of movement, to preserve cultural and community life, to access to justice and remedy, and rights of vulnerable groups (older people, women, youth and people with disabilities) to

special protection. As already pointed out, in the context of Minas-Rio, rural communities are disproportionately affected, and many such communities have a significant presence of African descendants, with their ancestral histories of resistance to slavery. Rights violations affecting them might therefore be characterised as a form of institutional racism.

Responsible Mining Foundation (RMF) Mine Site Assessment

The RMF's assessment of Minas-Rio took place in July 2020, using the new version of its Mine Site Assessment Tool.¹¹³ The assessment comprises evidence-based desk research on environmental, social and governance issues using publicly accessible online company documentation.

Applying a standard set of 60 site-specific questions, RMF assessed Minas-Rio qualitatively and quantitatively against 15 environmental, social and governance indicators using data disclosed by Anglo American and its Brazilian subsidiary relating to Minas-Rio. This produced the following scored overview based on the scoring system of "No" (no evidence) = 0 points, "In progress" = 0.5 points and "Yes" (accomplished) = 1 point. RMF's scores are "for informative purposes only, since scoring is not the essence" of the tool; "a 'no' answer does not necessarily imply a lack of action" on the part of the company "but shows the lack of publicly available supporting evidence".¹¹⁴

110 Prof. Tatiana Ribeiro de Souza, speaking on The Mining We Want: Regional Meeting for a New Mining Model – University Day of Debates on Mining (trans.), Minas Gerais Frente Mineira de Luta das Atingidas e dos Atingidos pela Mineração (Front for the Struggle of those Affected by Mining), Facebook broadcast, Nov. 2020, <https://www.youtube.com/watch?v=RdGG2u6YEZQ>

111 The Intercept, "Aggressions, surveillance, unemployment, persecution and isolation: how the residents who face the mining giant live" (trans.), Mar. 2018, <https://theintercept.com/2018/03/27/ameacas-moradores-mineracao-anglo-americana/>; Mongabay, Mar. 2018, <https://news.mongabay.com/2018/03/brazil-ignored-u-n-letters-warning-of-land-defender-threats-record-killings/>; LMN, May 2018, <https://londonminingnetwork.org/2018/05/death-threats-against-critics-of-anglo-americans-minas-rio-project-in-brazil/>

112 A. F. Moreira Santos, B. Milanez and others, Estudo preliminar [Preliminary study].

113 RMF, <https://www.responsibleminingfoundation.org/msat/>

114 RMF email to PWYP UK and IBASE, Jul. 2020.

TOTAL ACHIEVABLE SCORE = 60 POINTS OR 100%:

Indicator	Score
01 Local employment	13%
02 Local procurement	38%
03 Air quality	25%
04 Water quality	38%
05 Water quantity	38%
06 Rehabilitation and post-closure	13%
07 Tailings	25%
08 Safety of communities	13%
09 Community complaints and grievances	38%
10 Safety and health of workers	0%
11 Women workers	13%
12 Workplace deaths and injuries	13%
13 Training of workers	13%
14 Decent living wage	0%
15 Worker complaints and grievances	13%

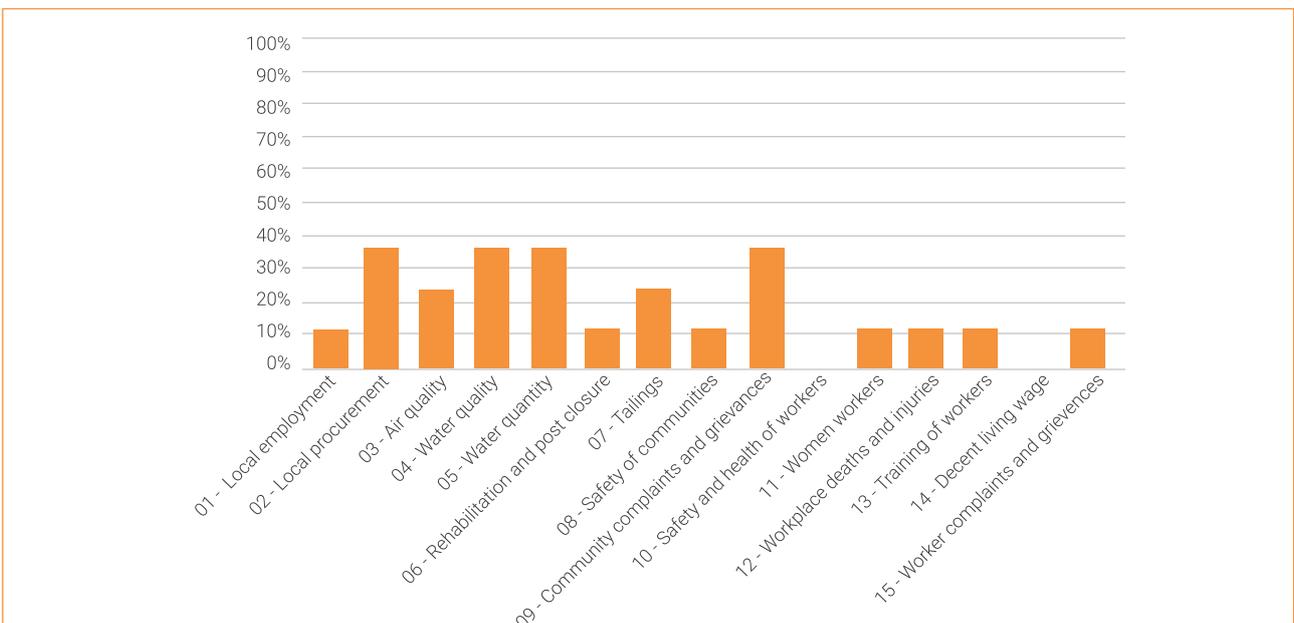
Mine-site score (average over all 60 questions) 19%

RMF’s detailed assessment and scoring of Minas-Rio, including documentation of evidence and sources, is available at <https://bit.ly/30bfU0H>.

In addition to its assessment, RMF comments:¹¹⁵

- 📌 “The subsidiary [Anglo American Ore de Ferro Brasil] stopped publishing its own Sustainability Report after the 2017 Relatório à Sociedade [Report to Society]. Most sustainability data and information are now only available in the global-level (English only) annual Sustainability Report, which means less disaggregated or locally relevant information. Most of the disaggregated evidence found in the public domain is therefore outdated.”
- 📌 “Community relations seem to include discussion and collaborative reflection on issues that matter to affected communities. But no evidence was found on the kind of issues addressed and on the real inclusion and collaboration between the company and the communities.”

Minas- Rio (July 2020)



115 RMF email to PWYP UK and IBASE, Jul. 2020.

- ✦ “The subsidiary used to publish quarterly Community Brochures called Diálogo but the latest publication available on the website dates back to June 2016.”
- ✦ “In Volume IV/V of the 2015 Environmental Impact Assessment for the Etapa 3 extension project, a full map of the area with the communities considered ‘focal’ (potentially affected) is available ... It would be interesting to see ... if ... engagement with the company could lead to both better actions and better transparency on these topics, that cover some of the fundamental basics of responsible mining.”

Commenting on the above assessment, Anglo American writes:

“[W]e currently do not publish data at a mine site level against many of the indicators the RMF uses. This absence of data has led to low level ratings within the RMF assessment for mine sites, but a higher level assessment for the company as a whole, where the data is available. We are considering how to make more granular data available to facilitate future assessments.”¹¹⁶

It is correct that RMF’s 2020 annual evidence-based assessment of large mining companies’ policies and practices against 59 human-rights-related metrics finds that Anglo American “shows the strongest results in all six thematic areas” of the 38 companies surveyed.¹¹⁷ However, RMF qualifies this finding: for the mining sector overall, “absolute results” – i.e. scores against the survey indicators – “remain low”, with Anglo American achieving an overall score of only 55% as one of only two companies reaching 50%. According to RMF: “Anglo American’s results continue to be held back by lack of evidence on a number of issues, particularly on other public disclosure matters (such as legal titles or water quality data), and on reviewing and tracking its performance, for example on how it manages human rights issues ... [and] how its corporate guidelines on issues such as ... human rights due diligence are being implemented in practice.”¹¹⁸

116 Comments on draft report, <http://bit.ly/3jrPUWW>

117 RMF, <https://2020.responsibleminingindex.org/en/companies/48>

118 RMF, <https://2020.responsibleminingindex.org/en/companies/48>

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This action-research collaboration set out to explore, and where possible to achieve greater government and company accountability for, impacts of Anglo American's Minas-Rio iron ore mining project on citizens and communities in the Conceição do Mato Dentro municipality, Minas Gerais State. We selected Minas-Rio because of the availability of useful subnational payments-to-government data disclosed under UK transparency laws by Anglo American, and broadly corresponding Brazilian government data on CFEM mining royalty receipts; also because the mine's location was accessible to IBASE for field inquiries; because Anglo American's UK headquarters and London listing facilitate dialogue; and because of Brazilian civil society's concerns about the mine.

Over a period of months we sought to "follow the money" in Conceição do Mato Dentro by assessing the value and allocation of the company's royalty payments and to investigate other public outcomes of extraction. We undertook desk and field research, data and issue analysis, and consultations and dialogue with municipal officials, Anglo American, local civil society and affected residents. And we received views on the mine from the London Mining Network and the Responsible Mining Foundation.

Our study catalysed dialogue and achieved insights into issues around fiscal transparency,

economic benefits, social and human rights impacts, environmental effects, community experiences, accountability and governance in connection with Minas-Rio, its tailings dam and (to a more limited extent) its pipeline. Although large and locally significant, Minas-Rio is just one of many extractive projects in Brazil. We believe that our report helps shine further light on important concerns relating to the country's extractive sector, especially mining. We hope it will assist Brazilian civil society and other actors in setting priorities for future advocacy and in achieving needed reforms.

Key findings

- ✦ There is very limited transparency in Brazil about extractive industry fiscal flows, although the online publication of mining royalty receipts (CFEM) is helpful and shows that the government could do better.
- ✦ Mining royalties are an important source of municipal income, but government entities ignore the legal requirement to disclose how royalties are allocated.
- ✦ The legally required percentage rate at which the National Mining Agency pays mining royalties to mining producer municipalities is constantly disputed and changing, but there is evidence of Conceição do Mato Dentro municipality receiving a smaller proportion of mining

royalties than legally required.

- ✦ Conceição do Mato Dentro experiences economic and social costs from the presence of the Minas-Rio mine that may outweigh the benefits. And the distribution of benefits and harms appears to favour urban over rural communities and to disproportionately affect low-income households and people of colour, with especially negative impacts on local water resources and food growing.
- ✦ Subnational government in Brazil, including in Minas Gerais State and Conceição do Mato Dentro municipality, is poorly equipped to regulate and manage large-scale mining, with state and municipal government officials appearing to disagree on the benefits and costs.
- ✦ Our research indicates that Anglo American's engagement with local civil society and communities needs improvement, although the company has written to us citing in some detail its efforts to engage.
- ✦ Anglo American's environmental impact assessments, economic diversification efforts, community dialogue and resettlement plans appear inadequate from the perspective of affected communities, who experience water deficiency, airborne pollution, impaired livelihoods, economic loss and physical and psycho-social ill-health.
- ✦ Tailings dam breach is a major fear among people downstream of Minas-Rio, especially given Brazil's history of tailings disasters, and more than ever with the planned ninefold expansion of the mine's tailings capacity from 40 million to 370 million cubic metres of mineral waste.
- ✦ Project critics suspect that the company may be struggling to make the costly Minas-Rio project more financially viable, a view that the company refutes.¹¹⁹

Recommendations

To the Brazilian federal government

1. Join and implement the Extractive Industries Transparency Initiative (EITI), with a multi-stakeholder group of representatives of government, industry and civil society, to enhance natural resource governance and accountability to citizens, build trust and reputation, and reduce the scope for corruption and mismanagement.
2. Make extractive industry data accessible to citizens, including disclosure of taxes paid disaggregated to company level.
3. Reach fair and lasting agreement with municipalities on sustainable rates of mining royalties (CFEM); ensure that Conceição do Mato Dentro and other mining municipalities receive their legally required percentage; publish current percentage rates at which mining royalties are paid to municipalities in real time; and compensate municipalities with backdated payments for previously underpaid amounts.
4. Establish and enforce mechanisms at federal, state and municipal levels to fully meet the public transparency requirement of Law No. 13,540 regarding the use of CFEM receipts.
5. Publicly disclose the full text of all extractive contracts, licences, concessions and other legal agreements governing the exploitation of oil, gas and minerals.
6. Ensure that mining-affected states and municipalities have sufficient resources to provide adequate public services and for economic diversification with full public accountability; boost states and municipalities' technical capacity to manage financial flows, infrastructure development, and social and environmental impacts and needs, while ensuring that extractive companies

119 Comments on draft report, <http://bit.ly/3jrPUWW>

bear prime responsibility for managing impacts.

7. Implement regulations as soon as possible to reimburse states and municipalities for tax proceeds forfeited under the Kandir Act, with explicit provisions to use a share of compensation payments to redress impacts of mining on affected communities and the natural environment.
8. Protect the rights of citizens to fundamental freedoms of expression and assembly, including for people opposing mining projects.
9. Require companies proposing new mining projects to undertake human rights impact assessments, including all internationally recognised human rights as a reference point;¹²⁰ and require operators of current mining projects to undertake and publish human rights impact reports with new assessment every three years; also ensure that companies publish and implement human rights management plans to address issues identified.
10. Commission and publish independent analysis and financial modelling to clarify the costs (including loss of livelihoods and harms to the environment and human well-being) and benefits to Conceição do Mato Dentro and to other selected municipalities of mining operations.
11. Review existing mining-related state-based grievance mechanisms at federal and subnational levels, benchmark them against UN Guiding Principles¹²¹ criteria, and ensure their adequacy and availability for affected individuals and communities.
12. Engage constructively in United Nations negotiations for a broad and strong binding international treaty on business and human rights.

To the Minas Gerais State government

1. Establish a mechanism to fully meet the public transparency requirement of Law No. 13,540 regarding the use of CFEM royalty receipts.
2. Build the institutional capacity to regulate and monitor mining operations and support municipalities in managing mining-related impacts.
3. Ensure that at least 20% of CFEM mining royalties received at state level is used for local economic diversification as recommended by Law No. 13,540 of 2017, such as to support family farming, agroecology, ecotourism, small businesses and the solidarity economy.
4. Ensure that mining-affected municipalities have sufficient resources to provide adequate public services.

To Conceição do Mato Dentro municipality

1. Publish at least once a year a report to citizens on the use of mining royalty receipts to fully meet the public transparency requirement of Law No. 13,540.
2. Pilot a municipal multi-stakeholder group to address mining governance, fiscal management, and environmental, social and human rights issues, drawing on the Philippines, Peru and other subnational EITI models,¹²² to include joint decision-making on the allocation of CFEM royalty receipts and monitoring of spending.
3. Demand sufficient resources from the federal government to provide adequate public services, for economic diversification with full public accountability, and for technical capacity to manage financial flows, infrastructure development, and social and environmental impacts and needs, while insisting that extractive companies bear prime responsibility for managing impacts.

¹²⁰ Office of the United Nations High Commissioner for Human Rights (OHCHR), 2011, https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf

¹²¹ OHCHR, 2011.

¹²² NRGi, Feb. 2016, https://resourcegovernance.org/sites/default/files/documents/subnational-msgs-philippines_0.pdf; World Bank, "Peru Subnational Implementation of EITI", <https://bit.ly/3kK2W1k>; EITI, Implementing EITI at the Subnational Level, 2011, <https://bit.ly/2FSZiDL>

4. Implement effective compensatory measures for mining-affected rural, low-income and black communities and for disadvantaged groups within those communities.
 5. Ensure that at least 20% of CFEM mining royalties received at municipal level is used for local economic diversification as recommended by Law No. 13,540 of 2017, such as to support family farming, agroecology, ecotourism, small businesses and the solidarity economy.
 6. Call for more federal and state support to ensure that as a mining-affected municipality Conceição do Mato Dentro has sufficient resources to provide adequate public services.
5. Review the Programa Crescer (Grow Programme) local economic diversification initiative in light of the present report's findings and ensure that its benefits are significantly scaled up.
 6. Respond constructively to downstream communities' demands regarding resettlement out of danger from the risk of tailings dam breaches.
 7. Review Minas-Rio's tailings management and communications with at-risk communities in light of the present report's findings and ensure that every possible measure is taken to meet, and where feasible exceed, both the 2020 Global Industry Standard on Tailings Management and the higher standards of the 2020 civil society Guidelines for Responsible Mine Tailings Management.

To Anglo American

1. Undertake a comprehensive human rights impact assessment, including all internationally recognised human rights as a reference point, of Minas-Rio and its tailings and pipeline; publish (including in Portuguese) and implement a human rights management plan to address issues identified; repeat the exercise every three years.
 2. Seek the Free, Prior and Informed Consent (FPIC) of affected communities, whether indigenous or non-indigenous, at every stage of mining operations including prior to the initial decision to extract at any location and before each mine or tailings expansion.
 3. Implement comprehensive compensatory measures for mining-affected rural, low-income and black communities.
 4. Encourage the Brazilian government to join and implement the Extractive Industries Transparency Initiative (EITI) to broaden dialogue with civil society and improve sector-wide governance.
8. Implement actions to remedy Minas-Rio's poor performance against the Responsible Mining Foundation's Mine Site Assessment Tool findings.
 9. Remedy any implementation gaps in company operational-level grievance mechanisms to ensure that provision for affected individuals and communities fully meets in practice the UN Guiding Principles criteria.¹²³
 10. Adopt a mining contract disclosure policy similar to that of Total in the oil sector (considered a best practice example internationally),¹²⁴ seeking the Brazilian and other governments' agreement to proactively disclose contracts on the company website.
 11. Publish and consult with the affected municipalities and communities on a plan for closing down Minas-Rio, rehabilitating the damaged environment and fully compensating affected people for harms caused during the project's lifetime.

¹²³ OHCHR, 2011. Anglo American states that its complaints and grievances mechanism named "Fale Conosco" ("Contact Us") "reflects" the UN Guiding Principles: see comments on draft report, <http://bit.ly/3jrPUWW>

¹²⁴ Total "advocates for the public disclosure by countries of their petroleum contracts and licenses": <https://www.sustainable-performance.total.com/en/business-ethics-0>

12. Amplify and accelerate company investment in technical and social alternatives to reduce the wasteful linear model of extraction, production and disposal of solid minerals and in circular closed loops for mineral resources, increasing reuse, repurposing and recycling.¹²⁵
- affected people and Minas-Rio's poor performance against the Responsible Mining Foundation's Mine Site Assessment.
- h. Use the EITI as a mechanism to demand greater government and company accountability for mining in Brazil at federal and subnational levels.

To civil society in Conceição do Mato Dentro municipality, in Minas Gerais State and across Brazil

1. Advocate and campaign for the recommendations above, including for:
 - a. Brazil to join and implement the Extractive Industries Transparency Initiative (EITI).
 - b. Public disclosure of Brazil's extractive taxes, contracts and licences.
 - c. Transparency in the use of mining royalty receipts.
 - d. Sufficient income for mining municipalities to provide adequate public services and at least 20% of mining royalties to be used for local economic diversification.
 - e. Public human rights impact assessments of current and proposed new mining projects.
 - f. Mining-related state-based and operational company grievance mechanisms that meet UN Guiding Principles criteria.
 - g. Anglo American to reach satisfactory agreement on resettlement plans with affected communities, assess Minas-Rio's tailings facilities against the new Global Industry Standard and civil society Guidelines for Responsible Mine Tailings Management, and to remedy areas of risk to
2. Raise public awareness of the EITI and use it as a mechanism to demand greater government and company accountability for mining in Brazil.
3. Document direct and indirect economic, social, environmental and human rights impacts of Minas-Rio and other mining projects, with a focus on differential impacts on women/girls, men/boys, youth and people of colour, and communicate findings to mining company managers to improve the debate with the company.
4. Investigate the evidence and arguments that Anglo American's 2021 letter to IBASE and PWYP UK offers about Minas-Rio and its impacts,¹²⁶ compare this evidence with our findings, and report on the results.
5. Call on Anglo American to publish frequent Portuguese language updates on economic, social, environmental and human rights developments relating to Minas-Rio and to hold regular company-community consultation meetings with affected communities and local civil society.
6. Support the right of currently and potentially affected communities to say no to mining.¹²⁷

¹²⁵ Brunel University London, "Centre for circular metals launches at Brunel", Nov. 2020, https://www.brunel.ac.uk/news-and-events/news/articles/Centre-for-Circular-Metal-to-launch-at-Brunel?mc_cid=e468a0d044&mc_eid=803c7fd46d

¹²⁶ Anglo American comments on draft report, <http://bit.ly/3jrPUWW>

¹²⁷ Gaia Foundation, <https://www.gaiafoundation.org/mining-affected-communities-around-the-world-say-no-to-mining/>

To international financial and multilateral institutions and institutional donors

1. Use influence to encourage the Brazilian federal government to implement the Extractive Industries Transparency Initiative at federal and potentially subnational levels in Minas Gerais.
2. Seek out and fund more civil society transparency, participation and accountability initiatives directed at securing more equitable and sustainable outcomes in producer countries and subnational localities from the extraction of non-renewable natural resources.
3. Increase support for capacity building for civil society organisations working on extractive sector accountability.

POSTSCRIPT

Brazil's new Environmental Licensing Act

This case study is the outcome of many months' joint work by IBASE and PWYP UK. As we finalised the text for translation in May 2021, Brazil's Chamber of Deputies approved a new Environmental Licensing Act.¹²⁸ The new Act eases the country's environmental licensing rules under a "self-declaration system" that allows companies to license their own projects, and in some cases waives licensing altogether. The Act covers mining, oil and gas, various industrial processing plants, solid waste management and disposal, agroindustry and cattle raising. Former ministers have criticised the Act for killing off one of Brazil's key measures for protecting biodiversity and mitigating and adapting to climate change, and the Act removes the power of indigenous communities to veto projects that affect them.

IBASE research in 2018 found that in mining, oil and other industries, environmental licensing was the only way for Brazil's indigenous and traditional communities to claim and use Free, Prior and Informed Consent (FPIC) in accordance with ILO Convention No. 169 (which Brazil has ratified) and the UN Declaration on the

Rights of Indigenous Peoples (which Brazil has committed to support).¹²⁹ The new Act therefore represents a huge setback for human rights in Brazil.

Ecological debt and the right to say no

As the main authors of this case study, we have reflected on our collaboration and on recent comparable work involving Publish What You Pay members, including co-published PWYP case studies on the extractive sectors in Kazakhstan (2020)¹³⁰ and Nigeria (2021).¹³¹ We recognise, although we have not discussed this in the pages above, how central to the international extractive industries are questions of both intergenerational equity (mentioned briefly on page 11 above) and unequal ecological exchanges and transfers of wealth from lower-income, resource-dependent countries to more powerful higher-income countries and to Southern elites. In this unjust exchange, higher-income countries and Southern elites accumulate, consume and often ultimately destroy nature's wealth by extracting from lower-income countries and communities non-renewable oil, gas and solid minerals while paying inadequate levels of compensation.¹³²

128 Projeto de Lei 3729/2004, see <https://glo.bo/3wkNezN>

129 BASE, Citizen Participation in Management of Non-Renewable Natural Resources (Oil, Gas and Ores): The Brazilian Case (trans.), 2018, <https://bit.ly/347Pe2h>

130 <https://www.pwyp.org/pwyp-resources/pwyp-report-kazakhstan-extractives/>

131 <https://www.pwyp.org/pwyp-resources/pwyp-report-nigeria-extractives/>

132 The climate crisis is also a feature of this unjust exchange. See P. Bond and R. Basu, "Unequal ecological exchange' in natural resources worsens across time and space, creating growing Northern environmental liabilities", working paper, 2021, <https://www.cadm.org/Unequal-ecological-exchange-worsens-across-time-and-space-creating-growing>; and P. Bond and R. Basu, "Intergenerational equity and the geographical ebb and flow of resources: the time and space of natural capital accounting", ch. 22 in M. Himley, E. Havice and G. Valdivia (eds), *The Routledge Handbook of Critical Resource Geography*, forthcoming, 2022.

In a new paper, Bond and Basu cite the World Bank's 2018 finding from natural capital accounting that, largely through under-compensation for non-renewable natural resources extracted and transferred to other regions, "Sub-Saharan Africa ... is ... the only region with periods of negative levels [of Adjusted Net Savings] (averaging -3 percent of GNI over the past decade), suggesting that its development policies are not yet sufficiently promoting sustainable economic growth ... Sub-Saharan Africa was the only region with a decline in per capita wealth in the earlier analysis".¹³³ The World Bank's admission that "development policies" in some lower-income countries don't yet sufficiently promote "sustainable economic growth" is another way of acknowledging that some Southern countries are, in effect, growing poorer as the victims of the gross injustice of current predatory patterns of South-North financial and ecological exchange.

Since its inception in 2002, PWYP's position and advocacy on natural resource governance have developed to reflect the dynamic evolution of both the extractives sector and our own movement. Most recently (April 2021), PWYP's Global Council adopted new global positions on the climate crisis and energy transition.¹³⁴ Key elements include the responsibility of historically high carbon emitting and higher-income

countries to act fastest and to finance the global energy transition – implying recognition and repayment of ecological debt – and the rights of communities and nature to be respected and protected in the extraction of transition and other minerals.¹³⁵ Implicit in the latter is, we believe, the right of communities in specific circumstances to say no to extraction.

This is not to deny that in-country employees, contractors and suppliers, and in some cases the wider society, can and do at times benefit from multinational extractive operations in host countries. But such gains are often insufficient to compensate for the permanent loss of non-renewable resources, especially when environmental and social "externalities" (pollution, environmental degradation, health impacts, lost livelihoods, contracting civic space, etc.) are factored in. Few if any of these costs and losses are accounted for in conventional analysis of the costs and benefits of extractives projects.

The right of citizens and communities to decide on whether or how their countries' non-renewable resources are extracted and exploited must include, we believe, freedom – to quote the WoMin African Gender and Extractives Alliance – to resist "specific destructive extractives mega projects on the basis of the Right to Say NO".¹³⁶

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133 Bond and Basu "Unequal ecological exchange...", 2021, p. 2; World Bank, The Changing Wealth of Nations 2018, <https://bit.ly/3wkiH5g>, p. 63

134 E. Peter, <https://www.pwyp.org/pwyp-news/how-our-global-movement-can-fight-a-global-crisis/>, Apr. 2021.

135 <https://www.pwyp.org/wp-content/uploads/2021/04/Energy-Transition-Positions.pdf>

136 WoMin African Gender and Extractives Alliance, "Consent and the right to say no", <https://womin.africa/the-right-to-say-no>. See also our report's recommendation above on Free, Prior and Informed Consent (FPIC).

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IBASE and PWYP UK – and for its specific contribution the Responsible Mining Foundation – are alone responsible for the report's content and accuracy. To comment on the report and/or to inform us of any use for research, education, public awareness raising or advocacy/ campaigning, please contact Athayde Motta (athayde@ibase.br), Clara Araújo (mclara@ibase.br), Iracema Dantas (iracema@ibase.br) and/or Miles Litvinoff (mlitvinoff@pwypuk.org).

The international Publish What You Pay civil society movement (www.pwyp.org), comprising more than 1,000 members and 50 national chapters, campaigns for extractive companies to publish their payments to governments and for governments to disclose their receipts, to increase accountability across the sector. Transparency deters government and company corruption and mismanagement. It assists civil society in scrutinising transactions, assessing the quality of public financial management, judging how far extraction projects represent fair value, and demanding more equitable and sustainable outcomes for citizens and future generations.



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Front cover photo: Minas-Rio mine tailings, with mine works in the background. Photo by Marcelo Cruz.