

The (il)legal contours of tailing dam disasters, Brazil

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Infrastructural Power at Global Frontiers: Prospects for Conflict and Peace

November, 2022

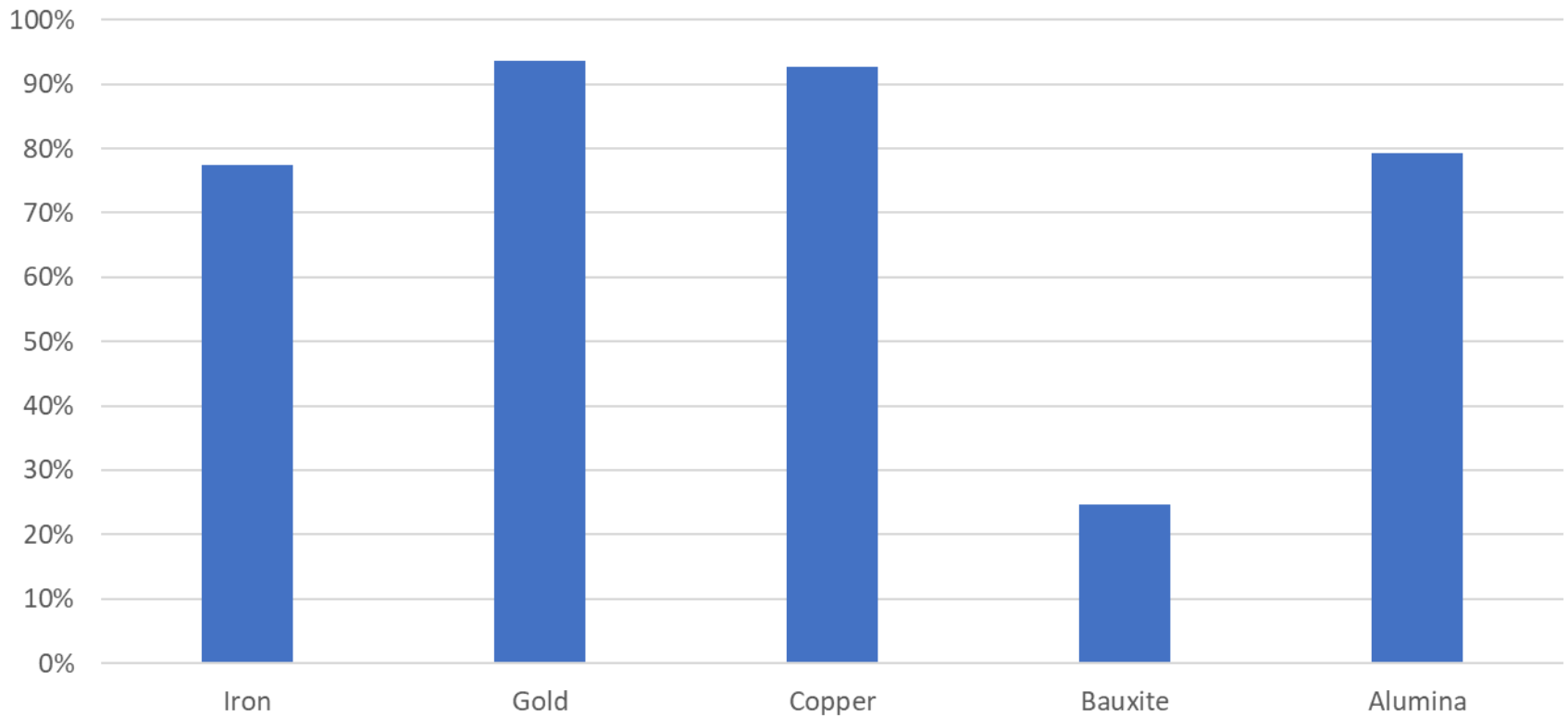
Strucutre

- Mining and the Brazilian economy
- Violence and tailings dams
- A recipe for disaster
 - Regulatory capture
 - Ineffective environmental policy
 - Intentional legal loopholing
 - Privileged access to the judiciary
- Finding a way out

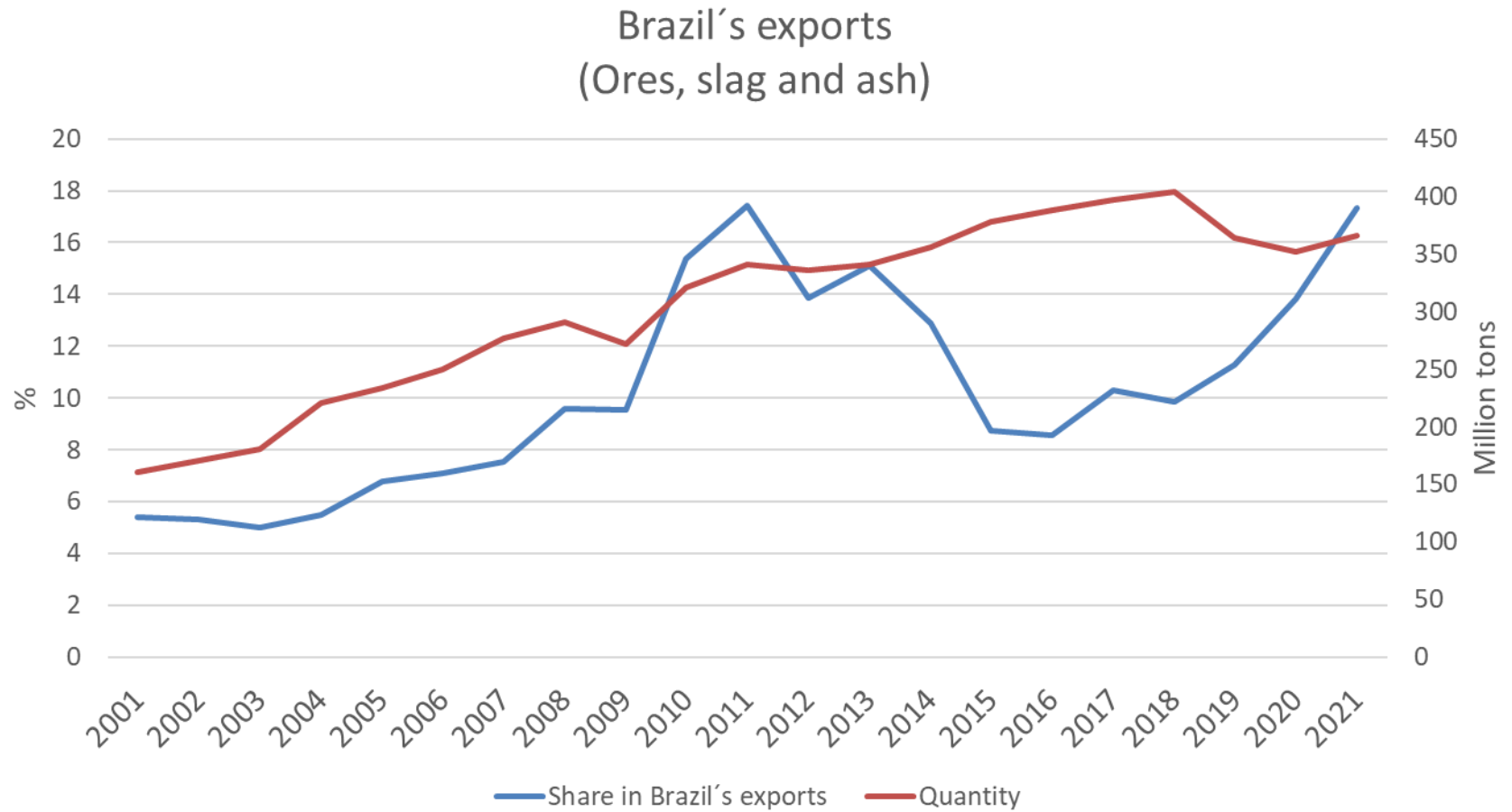
MINING AND THE BRAZILIAN ECONOMY

Mining and the Brazilian economy

Exported/Extracted mineral
2017



Mining and the Brazilian economy



VIOLENCE AND TAILINGS DAMS

The Doce River case

- November, 2015
- Samarco (Vale + BHP Billiton)
- Dam capacity 60 million m³
- Contamination of 660 km along the riverbed + coastal area
- 19 deaths
- Forced resettlement of 500 families
- Agreement involving federal and state governments, judiciary institutions and mining company
- Reparation by private trust (Fundação Renova)
- Collective action in the UK



Source: Milanez, 2015

The Paraopeba River case

- January, 2019
- Vale
- Dam capacity 11 million m³
- Contamination of 360 km along the riverbed
- 270 deaths
- Agreement involving state government, judiciary institutions and mining company
- Reparation by the mining company

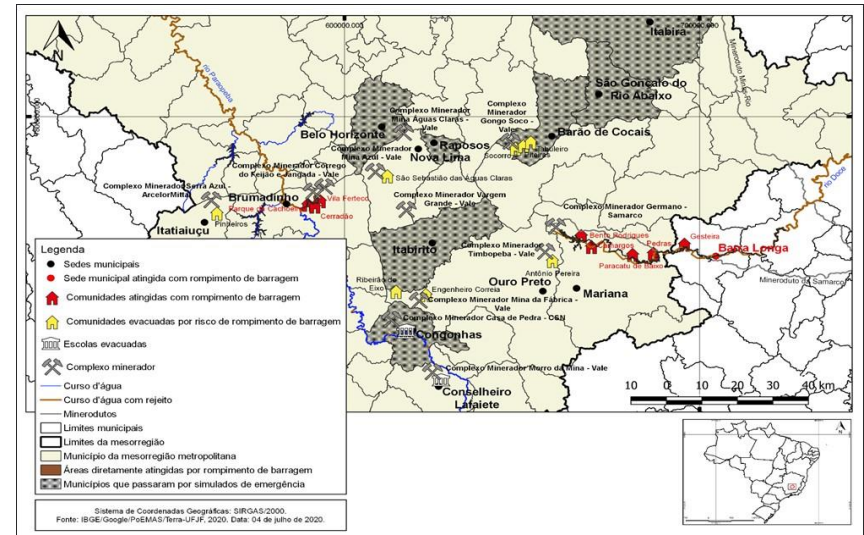


Source: Antonio Cruz/Agência Brasil, 2019

Forced displacement

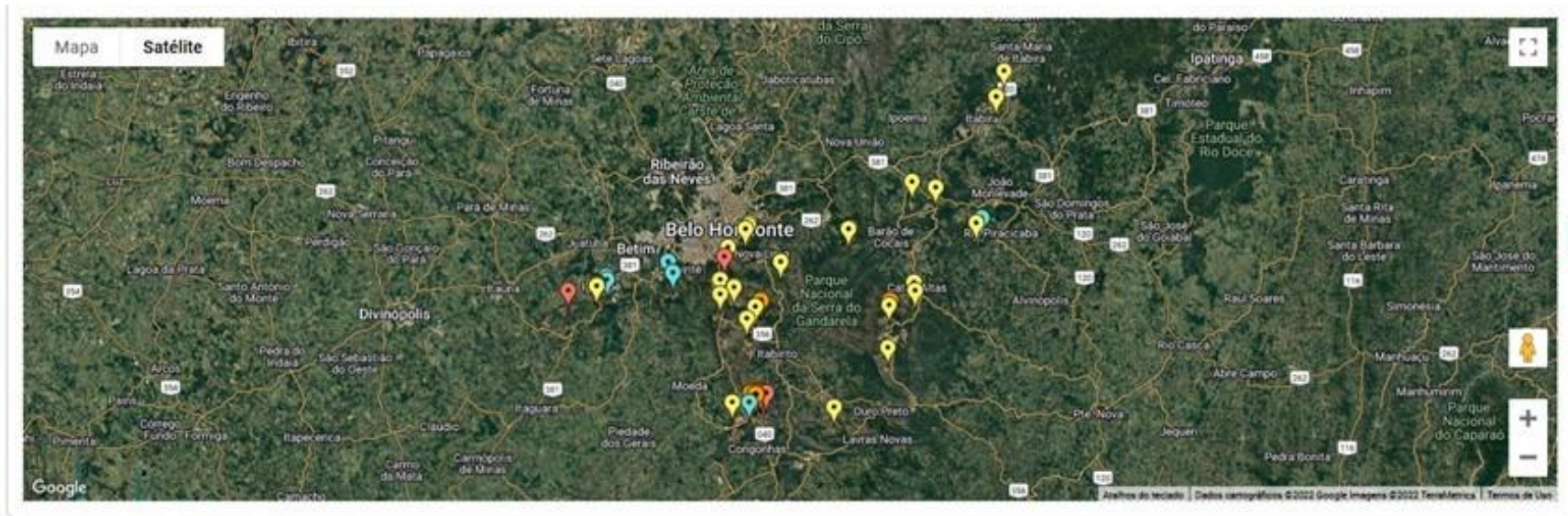
1. Barão de Cocais (Vale)
2. Itatiaiuçu próximas (ArcelorMittal)
3. Macacos, Nova Lima (Vale)
4. Itabirito / Ouro Preto (Vale)
5. Itabirito / Nova Lima (Vale)
6. Rio Acima (NAMISA)
7. Quéias, Brumadinho, (EMICON)
8. Antônio, Ouro Preto (Vale)
9. São José do Brumadinho, Barão de Cocais (VaLE)

Source: Thell Rodrigues, preprint



Source: Lucas Magno, preprint

Risk of new disasters



Informações extraídas do SIGBM: 21/09/2022 10:40:12

Legenda:

- Barragens com nível de Alerta
- Barragens com nível de Emergência 1
- Barragens com nível de Emergência 2
- Barragens com nível de Emergência 3
- Barragens sem Emergência

Total Geral de Barragens: 48
Total de Barragens com Nível de Alerta: 8
Total de Barragens com Nível 1: 29
Total de Barragens com Nível 2: 7
Total de Barragens com Nível 3: 4
Total de Barragens Sem Emergência: 0

A RECIPE FOR DISASTER

Regulatory capture

- Funding of electoral campaigns
- Rotating door
- Sitting at environmental councils
- Provision of reports and training
- Lobby

J. Mendo
CONSULTORIA

CONTRATO Nº 48000.003155/2007-17: DESENVOLVIMENTO DE ESTUDOS PARA ELABORAÇÃO DO PLANO DUODECENAL (2010 - 2030) DE GEOLOGIA, MINERAÇÃO E TRANSFORMAÇÃO MINERAL

MINISTÉRIO DE MINAS E ENERGIA - MME
SECRETARIA DE GEOLOGIA, MINERAÇÃO E TRANSFORMAÇÃO MINERAL-SGM

BANCO MUNDIAL
BANCO INTERNACIONAL PARA A RECONSTRUÇÃO E DESENVOLVIMENTO - BID

PRODUTO 01
A ECONOMIA BRASILEIRA E MUNDIAL; O SETOR MINERAL BRASILEIRO E MUNDIAL E SUAS PERSPECTIVAS DE EVOLUÇÃO A LONGO PRAZO

Relatório Técnico 01
HISTÓRICO E PERSPECTIVAS DE EVOLUÇÃO MACROECONÔMICA SETORIAL DA ECONOMIA BRASILEIRA A LONGO PRAZO

CONSULTOR
Gilberto Dias Calaes

PROJETO ESTAL
PROJETO DE ASSISTÊNCIA TÉCNICA AO SETOR DE ENERGIA

JUNHO de 2009

Regulatory capture

Today I received feedback from the staff of a large mining company. They requested to be allowed to extend the deadline by three months for the release of tailings into a pit. Oh, I won't give it for three months. Because it does not make sense. If this launch was already allowed, if all the technical conditions were already met, why only three months? Why not a year? In three months, they will apply again. And they were happy, and it worked out. (Production Superintended, National Mining Agency)

BBC Entrar Menu

BRASIL

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Busca

Novo código da mineração é escrito em computador de advogado de mineradoras

Ricardo Senra - @ricksenra
Da BBC Brasil em São Paulo

7 dezembro 2015

Compartilhar

New mining bill is written in the computer of mining companies' lawyer

Pinheiro Neto Advogados
r contra embaraços e

Pinheiro Neto Advogados
ital

Pinheiro Neto Advogados

Pinheiro Neto Advogados

Pinheiro Neto Advogados

Institui o Código de Mineração Brasileiro, cria Conselho Nacional de Política Mineral e dá outros

O CONGRESSO NACIONAL decreta:

SADEHU
MICROSOFT WORD

Dados criptográficos revelam que texto foi criado em um laptop do escritório Pinheiro Neto, que defende Vale e BHP, e modificado por um de seus sócios, o advogado Carlos Vilhena

Principais notícias

Eleição sem disputa: a campanha para prefeito em cidades com candidato único

Em 97 municípios do Brasil, apenas um nome se apresentou nas urnas: quais são as consequências para a campanha e a população?

20 setembro 2015

Com pagamento em dinheiro, motorista do Uber vê crescer risco de assaltos em São Paulo

19 setembro 2015

O que se sabe sobre a explosão em NY e as bombas achadas em outras cidades

19 setembro 2015

Destaques e Análises

Source:

http://www.bbc.com/portuguese/noticias/2015/12/151202_escritorio_mineradoras_codigo_mineracao_rs

Ineffective environmental policy

Fundão Dam environmental permit

Year	Company	Municipality	Description
1986	Itaminas	Itabirito	Dam burst causing seven deaths
2001	Mineração Rio Verde	Nova Lima	Dam burst causing silting of 6,4 km of Taquaras stream and five deaths
2006	Rio Pomba Cataguases	Miraí	Overflow of 1.200.000 m ³ of tailings polluting streams, killing fish and disrupting water supply
2007	Rio Pomba Cataguases	Miraí	Dam burst, release of 2.280.000 m ³ of tailing flooding the cities of Miraí e Muriaé and displacing 4.000 people.
2008	CSN	Congonhas	Failure of the spillway of the dam, increasing the volume of the Maranhão river and displacing 40 families.
2008	N/D	Itabira	Dam failure with overflow of chemical tailings of gold mining
2014	Herculano Mineração	Itabirito	Dam burst causing three deaths.

Ineffective environmental policy

Fundão Dam environmental permit

PERIGO/ CENÁRIO ACIDENTAL	CAUSA	EFEITO	CATEGORIA DE RISCO
- Grande rompimento da barragem com efeito dominó, com rompimento da barragem de Santarém.	<ul style="list-style-type: none"> - Falha estrutural; - Manutenção inadequada; - Excesso de material assoreado; - Baixa capacidade de retenção; - Chuvas excepcionais. 	<ul style="list-style-type: none"> - Carreamento de sólidos e lama nos cursos d'água. - Danos a instalações; - Ferimento e morte na população a jusante 	Magnitude: IV - Catastrófica Frequência: A - Improvável Risco: IIV A - Moderado

“Although it is considered of moderate risk, because it is **improbable**, we have identified an event with catastrophic consequences. It relates to the dam burst with cumulative effects over the Santarém dam. It is recommended a quantitative study to mode this event and precisely identify its consequences, particularly over the Bento Rodrigues community” (Brandt, 2005 p. 217)

Ineffective environmental policy

Córrego do Feijão Dam environmental permit

[...] the SUPPRI technical team understands that the activities were not listed in in SISEMA Instruction 01/2018 but [...] that it can be redirected to LAC1 [...] ”
(SUPPRI, 2018)

“Although the locational criteria direct the project to LAC2, the SUPPRI technical team understands that [...] it can be reoriented to LAC1”
(SUPPRI, 2018)

Privileged access to the judiciary

I CONGRESSO
MINEIRO SOBRE
EXPLORAÇÃO MINERÁRIA
BELO HORIZONTE · MINAS GERAIS · BRASIL · AMAGIS 60 ANOS

24 A 26 DE JUNHO DE 2015



Realização



Apoio



**OBSERVATÓRIO DA
MINERAÇÃO**

Desde 2015 investigando o que o setor mineral não quer que você saiba

More than 140 jurists and organizations request the immediate removal of Mariana disaster case judge

Maurício Angelo 30 de abril de 2021 Caso Samarco english

More than 140 jurists, researchers and politicians sign an open letter in which they request the immediate removal of the substitute judge Mário de Paula Franco Júnior from the Samarco Case.

The letter is based on the revelations made by the Mining Observatory in March 2021 that motivated the judge's request for suspicion formalized by five institutions – Public Prosecutor's Office, Public Prosecutor's Office of Minas Gerais, Public Defender's Office, Public Defender's Office of Minas Gerais and Espírito Santo – in the end of the last month.

"The seriousness of the facts revealed to the Brazilian society about the procedural conduct in this case requires that the conduct be investigated seriously, with the immediate appointment of a judge or a substitute judge, in view of the pressing danger of irreparable damage to these already tired victims", says the letter, which was also signed by institutions including social movements, NGOs, research centers and legal organizations.

Intentional legal loopholing

- Decommissioning of upstream dams
 - Resolution 04/2019: 2021
 - Resolution 13/2019: 2027
 - Act 14.066/2020: 2022
 - The monitoring agency **may** postpone the deadline

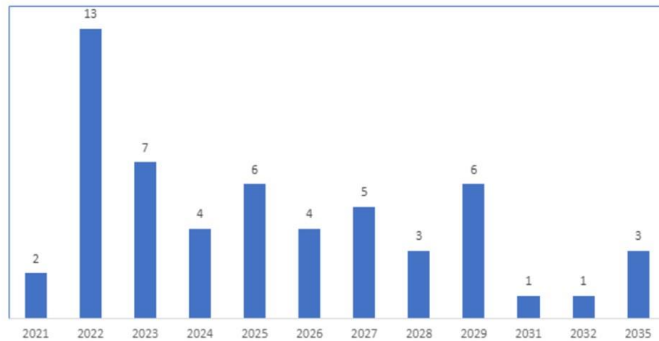


Figura 7 – Distribuição temporal da previsão de conclusão das obras de descaracterização das barragens a montante.

Source: ANM, 2022

- The monitoring agency **may** demand financial assurance
- Safety inspections must be carried out by external staff, **hired by the mining companies.**
- When communities live immediately downstream from a dam, the dam may be decommissioned or suffer reinforcement, or the community may be resettled, **depending on economic feasibility and recommendation by the mining company**

FINDING A WAY OUT

Upscaling social contestation

- Mining and steel making Working Group – Brazilian Network for Environmental Justice (2007)
- International Network of People Affected by Vale (2010)
- National Committee in Defence of Territories against Mining (2013)
- Movement of People Affected by Dams(1980s/2015)
- Movement for Popular Sovereignty over Mining (2017)

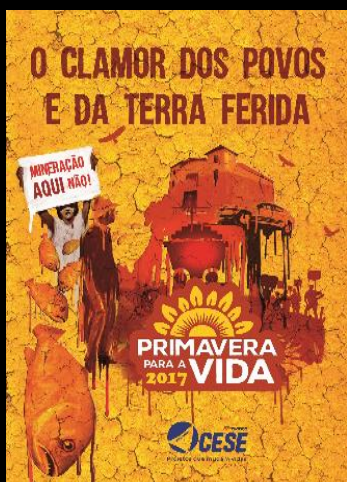


Diversifying social strategies

- Blockages
- Publications
 - Books, handbooks, handouts
- Political education
 - Courses, experience exchange meetings, theatre plays, podcasts
- Participation in public hearings
- Advocacy
 - Direct lobby, proposal of new legislation
- Name and shame initiatives
- Strategic litigation
- Mining-free Territories



Debate over Mining Bill, House of Deputies, 2014



Thank you!

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www.ufjf.br/poemas