

# **ENVIRONMENT, CLIMATE CHANGE AND DAM FAILURE**

PARLIAMENTARY OBSERVATORY OF THE UNIVERSAL PERIODIC REVIEW\*

#### **RECOMMENDATIONS TO BRAZIL**

	Recommendation	Assessment
54	To further continue the efforts to punish those responsible for the breaking of the retaining walls in Jacarei and Mariana, and to ensure that the victims of this event are guaranteed their right to access to justice, and their right to fair compensation, remediation and reparations for the damage caused. We recommend that Brazil share these acquired experiences through its constructive and substantive participation in the Intergovernmental Working Group established through resolution 26/9 of the Human Rights Council (Ecuador).	•
55	Continue its efforts on the implementation of the National Policy on Climate Change on reducing deforestation in the Amazon region (Ethiopia).	4
226	Ensure that the rights of indigenous people and respect of the environment and biodiversity are taken into due consideration in economic activities. (Holy See)	1

Caption: (in progress)



### **BRAZILIAN ENVIRONMENTAL LEGISLATION**

Early 20th century

Specific standards: water, mining, forestry, fishing codes; and the Federal Law of Fauna protection 1981

National Environmental Policy (Law No. 6.938/1981) - reorganized environmental legislation 1988

The Federal Constitution, art. 225: right to an ecologically balanced environment Decade of 1991

Dam safety standards, constantly improving in adequacy in recent years 201<u>0</u>

National Dam Safety Policy (Law No. 12.334/2010) 2020

Law No. 14.066/2020

Changed the
National Dam
Safety Policy
and led to
significant
changes in extra
judicial rules











<sup>\*</sup> The Observatory is a government mechanism to monitor the effectiveness of the recommendations made to Brazil in order to improve our human rights situation. It is a partnership between the House of Representatives and the United Nations in Brazil (UN Brazil)

### **DAMS**

Midtwentieth century The construction of industrial and mining dams was considered a technical advance. Before that, in Brazil, a newly industrialized country, the residues and tailings were commonly thrown directly into the soil or watercourses.

Second half of the 20th century

With the advent of environmental legislation, dams began to be built massively, but since they were, in general, small, the frequent leaks or disruptions due to more intense rains, had no major harmful effects, with a few exceptions.

21st century

Dams, in general, have now acquired larger dimensions, and the evolution of construction and maintenance techniques have not evolved sufficiently to avoid or contain tragedies.

#### THREE MAIN CAUSES OF DAM COLLAPSE

Fundão da Samarco Mineração Dam	Mineradora Rolando Comércio de Areia Dam	Vale Mining Dam B1	
11/5/2015 – Mariana (MG)	2/5/2016 – Jacareí (SP)	1/25/2019 – Brumadinho (MG)	
Considered the largest environmental disaster in the country involving Dams, it released about 45 million m³ of iron ore tailings, which spread over 663 km of tributaries and the Doce river itself, reaching the Atlantic Ocean.	It discharged sand mining tailings on the Paraíba River, damaging the water supply of three cities located in the valley of its watercourse.	13 million m³ of iron ore tailings were discharged into tributaries of the Paraopeba River, starting at the Municipality of Brumadinho (MG).	

321,000 people were impacted, 18 dead, one missing, 380 sick, 644 homeless, 716 displaced and others affected.

It affected 75% of the urban population (500,000 people) for more than a day.

270 people died, and about half of them were Vale employees. Until the preparation of the report of the Parliamentary Observatory, 11 bodies still had not been found.

Over the last six years, the Renova Foundation, created to manage the socioeconomic and socioenvironmental programmes provided for in the agreement, has sought to comply with defined actions, although most actions are largely in a state of delay. Renova has been facing other problems, such as the rejection of its accounts in the last four years, also accused of resource misuse, paying high salaries to its directors and absorbing employees into its maintainers (Samarco, Vale and BHP Billiton), paying them twice the amount they had previously earned. The Public Prosecutor's Office of Minas Gerais has already requested that it be extinguished by judicial demand.

By the afternoon of the next day, the dam collapse had been contained. The company was fined R\$5 million by Cetesb and R\$11,760 by the Municipality of Jacareí, twice as much as expected, as it had already been fined previously for noncompliance with municipal legislation. The disparity in treatment given to sand mining activity - prohibited in São José dos Campos and allowed in Jacareí - reflects the lack of regional planning and leads to various conflicts, including the risk of new dam failures.

Structures of the company were located just over 1 km downstream of dam B1, giving little chance of escape for those in that area. In February 2021, a Judicial Agreement was signed for Full Repair of the Dams B-I, B-IV and negotiations were conducted in confidentiality, without the participation of those affected or their legislative representatives. The agreement, however, does not involve individual rights, which are being claimed individually or collectively, with the assistance of the Public Defender's Office of the State of Minas Gerais

In June 2021, Vale was ordered by the Labor Court of Justice to pay an indemnity of R\$1 million for moral damages to each family of employees that were killed in the disaster. However, the decision benefited only the families of the 131 workers who were directly linked to the company, excluding outsourced workers.<sup>1</sup>



## **CLIMATE CHANGE AND DEFORESTATION**

Law No. 12.187/2009

Establishes the National Policy on Climate Change (PNMC) Commitment made by Brazil with the United Nations Framework Convention on Climate Change to reduce greenhouse gas emissions between 36.1% and 38.9% until 2020

Regulation initially published in Decree No. 7.390/2010, later repealed and replaced by Decree No. 9.578/2018 Forecast of an 80% reduction in annual deforestation rates in the Legal Amazon compared to the average between 1996 and 2005

### **DEFORESTATION OF THE BRAZILIAN AMAZON FOREST (1988-2020)**

2004 to 2012

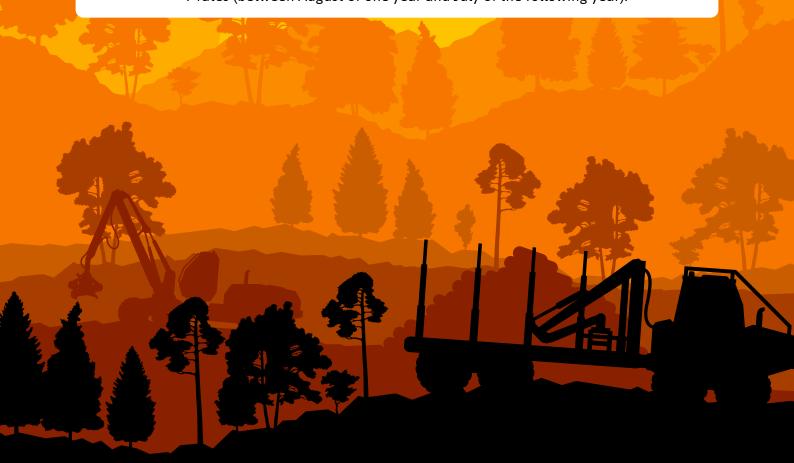
Rapid and consistent reduction in deforestation in the Legal Amazon 2013 to 2018

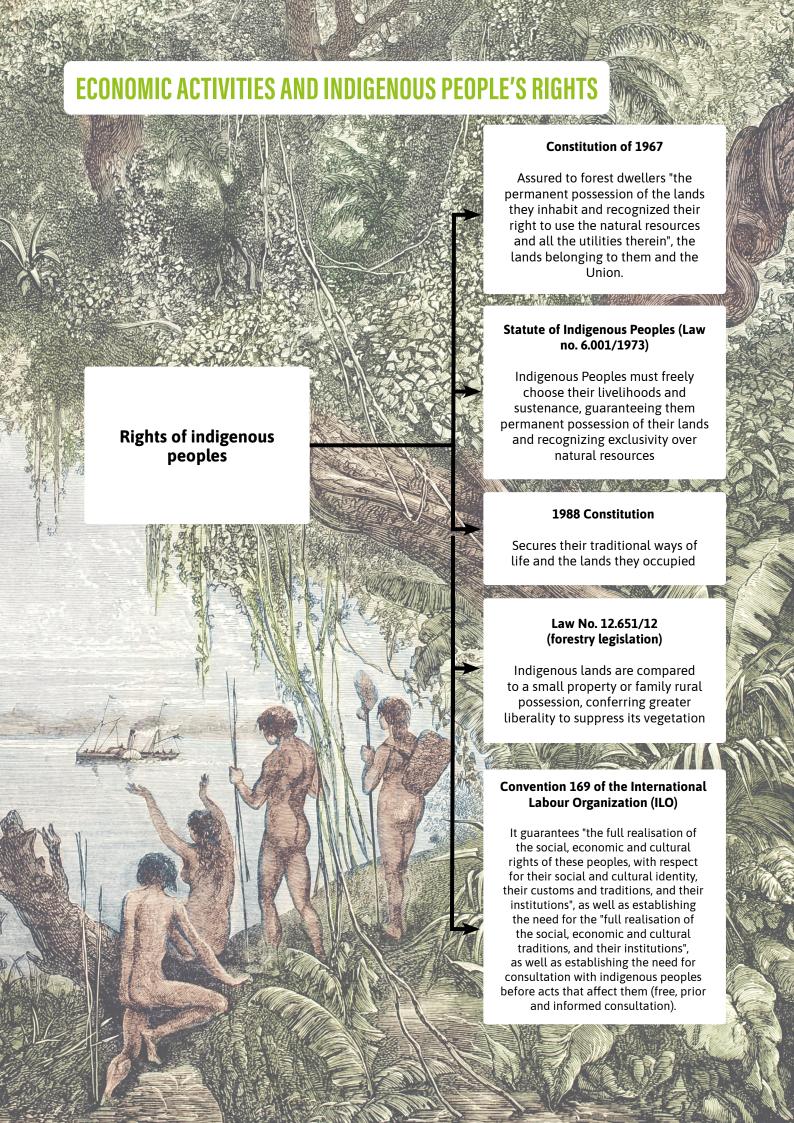
Period of tentative maintenance of low annual rates

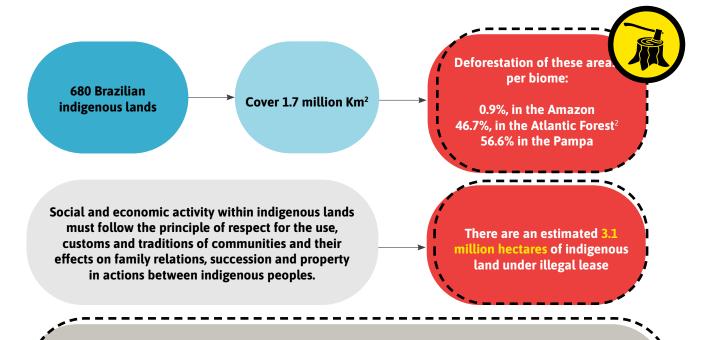
2019 and 2020

Indicators resume increase

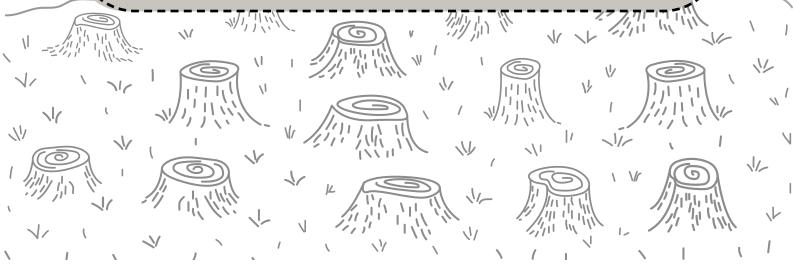
National Institute of Spatial Research (Inpe) monitoring of annual shallow logging → rates (between August of one year and July of the following year).







If these initiatives prosper and if changes in legislation are approved to accelerate and expand the exploitation of natural resources on indigenous lands, the potential of vegetation removal which may occur, within the terms of the law, amounts to 275,824.1 km², an increase of 1,449% compared to current deforestation (Schneider et al., 2021 (op. cit)).



<sup>&</sup>lt;sup>2</sup> Schneider, M., Biedzicki de Marques, A.A. & Peres, C.A. 2021. Brazil's Next Deforestation Frontiers. Tropical Conservation Science, 14, p.19400829211020472.

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Full report - Environment, climate change and dam failure

Public Hearing on 10/27/2021

**Report on the hearing** 

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