

**Climate Catastrophe: Mining, Logging, and Capitalist Politics are Destroying
Indigenous Amazonian Communities and Local Food Sources**

Submission to the United Nations High Commissioner for Human Rights

Revised and Submitted on December 6, 2022, by:

**Drexel University Dornsife School of Public Health Department of Health Management
and Policy**¹

Allie Eastus, Doctoral Student

¹ We would like to acknowledge the work and research conducted by two doctoral students in the Dornsife School of Public Health, Kaira Carter (DrPH student in the Department of Health Management and Policy) and Claudia Zumaeta Castillo (PhD student in the Department of Community Health and Prevention). Additionally, we would like to thank Dr. Mariana Chilton for her support and suggestions in writing this report.

Executive Summary

Under the political control of President Jair Bolsonaro, deforestation surged in the Amazon Rainforest. The start of the Bolsonaro regime in 2019 led to the stripping of regulatory enforcement, budget reductions for science and environmental agencies, and increased support for the agribusiness industry, while simultaneously violating indigenous people's land rights (Jones, 2022). Between August 1, 2019, and July 31, 2021, there was a reported 52 percent increase in the rate of deforestation (Jones, 2022). This political context is necessary to inform the United Nations High Commissioner on Human Rights report concerning the adverse impact of climate change on the right to food. This submission focuses on the intersections between climate change, public health, and the right to food in the context of indigenous communities in the Amazon, focusing on indigenous groups that are located within the national borders of Brazil. We will use a human rights framework to highlight the current human rights violations and will provide recommendations that aim to mitigate the effects of climate change, as well as protect and preserve the rights of the indigenous Amazonian people and their right to adequate food. In order to examine specific human rights violations, this response will use the voices and lived experiences of the Yanomami people to underscore the devastating climate and health disaster and its impact on the right to food.

Introduction

The Yanomami², one of the largest isolated indigenous communities in the world, is a self-sufficient group that has lived for centuries in the Amazon Rainforest around the Brazilian and Venezuelan border. This land, legally demarcated in 1992 by the Brazilian government, is considered sacred by the 29,000 Yanomami and provides sources of food, water, and medicine (OHCHR, 2022). For the past 40 years, the health and well-being of indigenous communities in the Amazon have been affected by illegal gold mining, which has brought deforestation, water contamination, and the poisoning of the life-preserving soil (Minority Rights Group, 2015). The invasion and colonization of indigenous lands in the Amazon Rainforest has negatively impacted the short-term and long-term of hundreds of indigenous communities. Among the Yanomami, 8 out of 10 children are chronically malnourished due to the local food chain interruptions caused by deforestation (Krenak Naknauk, E., 2021). A Latin American research organization, the FIOCRUZ Institute, has found that other indigenous Amazonian tribes also report acute and chronic diseases as a result of illegal mining and logging operations. For example, 6 out of 10 Munduruku people have dangerous levels of mercury in their bloodstream and struggle to obtain all nutritional requirements (Krenak Naknauk, E., 2021). These metrics signal that there are severe health implications that are direct consequences of illegal operations being conducted in the Amazon and the lack of oversight and protections from the national government.

The Evolving Climate Disaster

Climate change, mining, and deforestation are critical factors that have contributed to the evolving disaster in the Amazon rainforest. The mining industry is directly contributing to deforestation and global climate change. Yanomami community leaders and local officials have estimated that there are over 20,000 illegal gold miners distributed throughout the rainforest (OHCHR, 2022). Critically, mining and logging operations are in opposition to current Brazilian laws that intend to protect and preserve the Amazonian rainforest. Yet, the Brazilian government is failing to respond to the current violations. These operations pose a threat to the Yanomami people and all other indigenous communities in the region. A 2018 study published in the International Journal of Environmental Research and Public Health

² "People of the Forest" (Mineo, L., 2019)

discovered that in some Yanomami villages, up to 92 percent of residents had suffered from mercury poisoning from the gold mining operations (Hernandez, Scarr, and Boadle, 2020). This is an act of ecological violence. Mercury poisoning has significant developmental implications for children, and thus continued poisoning is devastating the future generations of Yanomami people. Although mercury poisoning is not directly a consequence of climate change, it is important to emphasize how the poisoning of water is a result of illegal mining operations, which is contributing to increased carbon emissions. The mercury runoff caused by illegal mining is violating the right to safe and adequate sources of food and water, leaving indigenous communities in the Amazon in a cycle of harm due to climate change and racial discrimination (Córdova Montes et al., 2022) (Young, 2022).

David Kopenawa, a Yanomami shaman and leader, has explained that their community has experienced significantly hotter summers, droughts, fewer fish in the rivers, pollution, and smog suffocating the air throughout the mountains and forest (Mineo, 2019). One of the most worrisome effects of climate change is the shortage in food availability, which puts the Yanomami's sustainable livelihood in jeopardy. While the Amazon was once one of the richest biomes in the world, climate change brought on by illegal mining and logging has disrupted the local vegetation, mammal, and marine life in and around the forest (OHCHR, 2022). To illustrate the severity of this crisis, Figure 1 provides an aerial view of the Amazon Rainforest and demonstrates how illegal mining operations are killing the rainforest. Alongside this image, we present a quote by David Kopenawa to showcase the sacred relationship that the Yanomami share with the forest.



“The forest takes care of us; it keeps us healthy; it gives us food, fresh air, and clean water. We believe we were put in a sacred place to be protected by the forest, and that’s why we want to protect it.”

David Kopenawa, Yanomami shaman and leader

Figure 1. Deforestation and habitat loss as a result of illegal mining on indigenous lands in the Amazon Rainforest.

Rights to Food

The Right to Adequate Food is secured in several United Nations documents and treaties, including but not limited to Article 11 in the International Covenant on Economic, Cultural, and Social Rights (ICESCR), General Comment 12, and General Comment 14. Article 11 in the ICESCR demonstrates the right to an adequate standard of living and encompasses rights to food, housing, clothing, and an adequate standard of living that is culturally relevant (ICESCR, 1966). Adequate food should not be restrictive and should be equated to food and/or housing security. Further, adequacy speaks to the social, economic,

cultural, and environmental conditions that lead to food security (ICESCR, 1966). Based on these specifications from the ICESCR, the Brazilian government is failing to respect and protect the rights to food for the Yanomami people.

The failure to protect the right to food is evident in the lack of action taken to stop illegal mining and logging operations, which directly contributes to the loss of habitats in the Amazon. This is negatively impacting the marine and animal life that is connected to the traditional Yanomami diet and way of life (OHCHR, 2022). The destruction of the Amazon Rainforest is resulting in child malnutrition among Yanomami children, and despite knowledge of illegal mining and logging operations in protected lands, the Brazilian government has not pursued action to protect the rights of food and housing that is culturally and spiritually tied to the rainforest. These clear violations of the right to food in Yanomami land are also causing and contributing to the evolving climate catastrophe. It is important to emphasize that the violation of the right to an adequate standard of living (which is inclusive of the right to food) is directly related to the lack of mitigation efforts and political will to reduce carbon emissions.

The Special Rapporteur on the Right to Food documented failures to respect, protect, and fulfill the right to food in Brazil in 2009 (De Shutter, 2009). While this investigation was over a decade ago, it is important to acknowledge that there has been little action taken to protect the rights of the Yanomami, preserve the Amazon rainforest, and encourage the Brazilian government to take action to uphold the rights of indigenous communities. The report indicated that while progress had been made to reduce rates of malnutrition, there is still a disproportionate burden of poverty and malnutrition among African, Afro-Brazilian, and Indigenous communities across the Amazon Rainforest (De Shutter, 2009). While this report is not specific to the Yanomami tribe, it emphasizes the violation of rights across all 400 indigenous tribes in the Amazon Rainforest. Together, protecting, fulfilling, and respecting the right to food is central to the success of all other human rights documents and articles, and so it is pertinent that the Brazilian government respond to these violations. Further, inaction by the Brazilian government is perpetuating ecological violence through the implementation of environmentally racist policies that are infringing upon the right to adequate food (Cordova Montes et al., 2022).

There are various mechanisms that are in place to measure and monitor the impacts of climate change and the realization of the right to food in Brazil and specifically within indigenous communities located in the Amazon Rainforest. For example, Brazil's National Institute for Space Research monitors how the Amazon Rainforest has changed over time from an aerial view (Roy, 2022). There are 25 national research institutions in Brazil that are using various technological platforms to monitor deforestation and forest fires in the rainforest (The World Bank, 2022). Key institutions include The National Center for Monitoring and Early Warning of Natural Disasters (CEMADEN); The National Indigenous People Foundation (FUNAI); Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA); Chico Mendes Institute for Biodiversity Conservation (ICMBio); Brazilian Institute of Geography and Statistics (IBGE); Ministry of the Environment (MMA); Defense Ministry/Amazon Protection and Surveillance System (SIPAM); Brazilian Forest Service (SFB); Brazilian Agricultural Research Corporation (Embrapa) (The World Bank, 2022). This demonstrates that there is no shortage of data to understand the severity of the deforestation in the Amazon, and how ecological violence and indigenous discrimination directly impact the right to food, land rights, and the right to an adequate standard of living for all indigenous Amazonian communities, including the Yanomami community.

Indigenous Peoples' Rights

The rich diversity of the Amazon Rainforest has fueled the ideology that the rainforest is something to be conquered and modernized. The Brazilian government's interest in the Amazon's natural resources can be traced back to the 1800s and has created a legacy of destruction and inhumane treatment towards the Yanomami people and other indigenous Amazonian communities (Bebbington et al., 2018). Brazil's Constitution of 1988 acknowledges the importance of protecting and preserving the rights of indigenous peoples. Specifically, Chapter VIII states that the government should recognize and uphold the cultures of indigenous communities, and importantly grants land rights and respect for their sovereign land (Constitution of the Federative Republic of Brazil 1988, as Amended to 2017, Art 231). However, the government has not intervened in the illegal mining and logging operations that are poisoning the indigenous land they occupy. This is preventing the right to food for indigenous Amazonian communities from being fully realized.

Rather, the Brazilian government views the mining industry as a lucrative and profitable business, regardless of the legality of the operation. The Brazilian government is violating Article 231 by allowing the invasion of indigenous lands and failing to intervene to preserve and protect the land rights of indigenous Amazonian tribes. The Special Rapporteur on The Rights of Indigenous Peoples addressed the Supreme Court of Brazil in response to the violation of land rights and demanded that the government cease all legal and illegal operations located on indigenous land. (OHCHR, 2022). Further, the Special Rapporteur highlights that the indigenous people's rights are not granted by the Brazilian government. All indigenous Amazonian communities are the original inhabitants and have lived on the land centuries before Europeans colonized Brazil (OHCHR, 2022). This must be the foundation of preserving and protecting the Amazon – it cannot and will not be protected without first protecting the rights of indigenous people.

The Articulation of Indigenous Peoples of Brazil (APIB), an organization aimed to promote and defend indigenous rights addressed the Brazilian Supreme Court regarding the human rights atrocities that have been reported within the Yanomami communities and other indigenous tribes. APIB was successful in petitioning the Brazilian House of Representatives and established an external committee to investigate violations and crimes against indigenous groups in the Amazon (Barbieri, 2022). The creation of this external committee is an important step to preserving the rights of the Yanomami people and their land, but this action is not enough - powerful organizations are forcibly removing indigenous people from their rightful land and there must be opportunities created to increase political participation among indigenous persons. The Brazilian government can no longer turn a blind eye to the active colonization of the Yanomami people, other indigenous communities, and protected Amazon land. We must continue to call out the racist and discriminatory policies of the Brazilian government and hold them accountable as they continue to ignore the atrocities against the original habitants of the land they have taken over.

Recommendations

The Brazilian government is perpetrating violence against the Yanomami indigenous community and is violating the rights to adequate food, land and property, and indigenous peoples' rights. Despite having mechanisms in place to measure the effects of deforestation and the levels of carbon emissions in the Amazon Rainforest, the Brazilian government is failing to respond to the growing climate crisis.

The right to adequate and nutritious food is fundamental to the realization of all other human rights. The violations being perpetuated by the Brazilian government and illegal mining and logging operations are impeding the ability of indigenous communities to live healthily, free from discrimination, and the destruction of their ancestral home. Critically, the environmental destruction and lack of action to cease

the operations are not only directly contributing to carbon emissions and the severity of the climate change disaster but are putting all indigenous communities at great risk of environmental harm.

Global responses to climate change cannot take place without the inclusion and voices of indigenous people. The 26th and 27th United Nations Climate Change Conference (COP) included indigenous leaders across Brazil in order to demand urgent actions be taken by the international community in response to the growing climate catastrophe (APIB, 2022). Most importantly, indigenous leaders have highlighted that the rights of their people must be respected in responding to climate change and that the foundation of the response must include the demarcation of all indigenous lands (APIB, 2022). This requirement would enforce the Brazilian government to remove and prosecute illegal mining and logging operations, include indigenous leaders and communities as equal and respected political partners, and would be an effective way to stop deforestation and environmental destruction in the Amazon. Further, this is a critical first step in responding to the climate disaster since the rainforest is currently emitting more carbon dioxide than it can absorb (Carrington, 2021). Previously, the Amazon Rainforest served as a carbon sink, absorbing the carbon emissions that have created this emergency (Carrington, 2021). However, as a result of the burning of land to make way for beef and soy production, the Amazon Rainforest has now become a source of carbon emissions and no longer acts as a natural mitigation tool (Carrington, 2021). These disturbing facts are a cry for help from the environment – and the response to the climate catastrophe will not be successful without participation and engagement from indigenous communities.

Therefore, to address these severe human violations, Brazil should:

- Immediately respond to the growing presence of illegal miners and loggers in the Amazon. This response must include enforcement of the indigenous land protections and implement severe financial penalties for individuals and corporations that fail to abide by the demarcation of indigenous territories.
- Enforce and implement harsher penalties for contaminating water in protected areas within the Amazon Rainforest.
- Implement health campaigns to monitor mercury levels in indigenous communities and provide quality healthcare free to all who wish to receive care.
- Reparations in the form of:
 - Repatriation of indigenous land
 - Rehabilitation services for physical and mental health
 - Monetary and material compensation for the losses endured as a result of the illegal mining, climate disaster, and related health implications.
- Ensure that these violations are not repeated.
 - Efforts to ensure non-repetition may consist of:
 - Publicly reprioritizing and verbalizing commitment and accountability to ensuring indigenous people’s rights and land rights in accordance with the 1988 Brazilian Constitution, the UNDRIP, and ILO 169.
- Require that all government policies and practices must include indigenous leaders as equal and respected partners in the decision-making process.
- Create an interdisciplinary national board consisting of indigenous leaders who can review governmental policies and programs and pursue legal action against the government if they find legislation to be discriminatory against indigenous people. This group should resemble an accountability committee that specifically evaluates indigenous peoples’ rights.

References

- Articulation of the Indigenous Peoples of Brazil (APIB). Indigenous COP 26/27 and Indigenous Mobilization (2022). <https://apiboficial.org/sobre/?lang=en>
- Brazil: Reject Anti-Indigenous Rights Bill. (2021, August 24). *Human Rights Watch*. <https://www.hrw.org/news/2021/08/24/brazil-reject-anti-indigenous-rights-bill>
- Carrington D, editor DCE. Amazon rainforest now emitting more CO2 than it absorbs. *The Guardian*. <https://www.theguardian.com/environment/2021/jul/14/amazon-rainforest-now-emitting-more-co2-than-it-absorbs>. Published July 14, 2021. Accessed December 5, 2022.
- Constitution of the Federative Republic of Brazil 1988, as amended to 2017*. (n.d.). Retrieved November 7, 2022, from <https://constitutions.unwomen.org/en/countries/americas/brazil?provisioncategory=3b1b2696e4f54ddd9636e5644ffb33b9>
- Córdova Montes. D, Steele. M, Kamvisseli Suarez. P, Seethal J, Leira. L. (December 1, 2022). Violence and the Right to Food in the U.S. Submission to the United Nations Special Rapporteur on the Right to Food Mr. Michael Fakhri.
- Hutukara Associação Yanomami, & Associação Wanasseduume Ye'kwana. (2022). *Yanomami under Attack: Illegal mining on Yanomami Indigenous land and proposals to combat*. https://acervo.socioambiental.org/sites/default/files/documents/yal00067_en.pdf
- International Labor Organization. (1989). *Convention C169—Indigenous and Tribal Peoples Convention, 1989 (No. 169)*. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169
- Jones, B. (2022, October 31). *What Lula's victory in Brazil means for the Amazon rainforest and climate change*. Vox. <https://www.vox.com/down-to-earth/2022/10/31/23431867/lula-bolsonaro-brazil-election-amazon-rainforest>
- Krenak Naknauk, E. (2021, November 22). *Amazonian Indigenous Peoples Face Human Rights Violations, Climate Change, and a Nutrition Crisis*. <https://www.culturalsurvival.org/news/amazonian-indigenous-peoples-face-human-rights-violations-climate-change-and-nutrition-crisis>
- Mineo, L. (2019, May 3). 'We can do our part to stop the destruction.' *Harvard Gazette*. <https://news.harvard.edu/gazette/story/2019/05/shaman-davi-kopenawa-discusses-climate-change-at-harvard/>
- Minority Rights Group. (2015, June 19). *Yanomami*. <https://minorityrights.org/minorities/yanomami/>
- OHCHR. (2022, August 9). *In the Amazon rainforest, an indigenous tribe fights for survival*. OHCHR. <https://www.ohchr.org/en/stories/2022/08/amazon-rainforest-indigenous-tribe-fights-survival>
- OHCHR. (2021, August 23). *Brazil: Supreme Court must uphold indigenous land rights – UN expert*. Retrieved November 7, 2022, from <https://www.ohchr.org/en/press-releases/2021/08/brazil-supreme-court-must-uphold-indigenous-land-rights-un-expert>
- OHCHR. (n.d.-d). *OHCHR | Committee on the Elimination of Discrimination against Women*. Retrieved November 7, 2022, from <https://www.ohchr.org/en/treaty-bodies/cedaw>

- Phillips, D. (2019, January 3). *Jair Bolsonaro launches assault on Amazon rainforest protections*. The Guardian. <https://www.theguardian.com/world/2019/jan/02/brazil-jair-bolsonaro-amazon-rainforest-protections>
- Poirer, C., & Vargas, A. (2022, May 19). *Illegal Miners Terrorize Brazil's Yanomami Communities* [Amazon Watch]. <https://amazonwatch.org/news/2022/0519-illegal-miners-terrorize-brazils-yanomami-communities>
- Plummer, J. P. (2015). *The Yanomami: Illegal Mining, Law, and Indigenous Rights in the Brazilian Amazon*. Boston University School of Public Health.
- Roy D. Deforestation of Brazil's Amazon Has Reached a Record High. What's Being Done?
Council on Foreign Relations. Accessed December 5, 2022. <https://www.cfr.org/in-brief/deforestation-brazils-amazon-has-reached-record-high-whats-being-done>
- Survival International. (2022). *Yanomami*. Retrieved November 6, 2022, from <https://www.survivalinternational.org/tribes/yanomami>
- UN Committee on Economic, Social and Cultural Rights (CESCR). (2003). *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*. <https://www.refworld.org/docid/4538838d11.html>
- United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf
- United Nations (General Assembly). (1966). *International Covenant on Economic, Social, and Cultural Rights*. *Treaty Series*, 999, 171.
- Vega, C. M., Orellana, J. D. Y., Oliveira, M. W., Hacon, S. S., & Basta, P. C. (2018). Human Mercury Exposure in Yanomami Indigenous Villages from the Brazilian Amazon. *International Journal of Environmental Research and Public Health*, 15(6), Article 6. <https://doi.org/10.3390/ijerph15061051>
- The World Bank. Using Technology to Monitor Deforestation and Prevent Forest Fires in Brazil's Cerrado Biome. World Bank. Accessed December 5, 2022. <https://www.worldbank.org/en/results/2022/05/02/using-technology-to-monitor-deforestation-and-prevent-forest-fires-in-brazil-s-cerrado-biome>