

CLIMATE JUSTICE IN RIVERSIDE COMMUNITIES: IMPACTS AND  
STRUGGLES IN THE MARAJOARA AMAZON

*JUSTIÇA CLIMÁTICA EM COMUNIDADES RIBEIRINHAS: IMPACTOS E LUTAS  
NA AMAZÔNIA MARAJOARA*

*JUSTICIA CLIMÁTICA EN COMUNIDADES RIBEREÑAS: IMPACTOS Y LUCHAS  
EN LA AMAZONÍA MARAJOARA*



Adrielle Costa XISTO<sup>1</sup>  
e-mail: adrielexisto7@gmail.com



Eunápio Dutra do CARMO<sup>2</sup>  
e-mail: eunapiodocarmo@gmail.com



Janiele do Socorro de Almeida VIEGAS<sup>3</sup>  
e-mail: janieledealmeidaviegas@gmail.com



Patrícia Garcia LIMA<sup>4</sup>  
e-mail: patriciagarcialima123@gmail.com

**How to reference this paper:**

XISTO, Adrielle Costa; CARMO, Eunápio Dutra do; VIEGAS, Janiele do Socorro de Almeida; LIMA, Patrícia Garcia. Climate justice in riverside communities: impacts and struggles in the Marajoara Amazon. **Rev. Cadernos de Campo**, Araraquara, v. 25, n. esp. 2, e025024, 2025. e-ISSN: 2359-2419. DOI: 10.47284/cdc.v25iesp2.20101



| Submitted: 27/02/2025

| Revisions required: 01/10/2025

| Approved: 13/10/2025

| Published: 28/12/2025

---

**Editors:** Prof. Dr. Maria Teresa Miceli Kerbauy  
Prof. Me. Paulo José de Carvalho Moura  
Prof. Me. Luana Estela Di Pires  
Prof. Me. Lucas Barbosa de Santana  
Prof. Me. Maurício Miotti

---

<sup>1</sup> Federal University of Pará (UFPA), Belém – Pará (PE) – Brazil. Undergraduate student.

<sup>2</sup> Federal University of Pará (UFPA), Belém – Pará (PE) – Brazil. Professor.

<sup>3</sup> Federal University of Pará (UFPA), Belém – Pará (PE) – Brazil. Undergraduate student.

<sup>4</sup> Federal University of Pará (UFPA), Belém – Pará (PE) – Brazil. Professor.

---

**ABSTRACT:** In the Marajoara Amazon region, climate emergencies have intensified impacts on riverside communities historically marked by social, environmental, and racial vulnerabilities. This article analyzes the urgency of climate justice in these territories, based on a literature review, fieldwork in the municipality of Breves, and participation in a sociobioeconomy workshop promoted by PRCR/UFPA and Embrapa. The findings indicate that the climate crisis deepens inequalities, undermines traditional ways of life, and reinforces processes of marginalization. The role of local social movements and ancestral knowledge in defending rights and building local alternatives is highlighted. The study concludes that public policies must acknowledge the historical debt to these populations, ensure their participation in the formulation of adaptation strategies, and adopt an anti-racist, territorially grounded, and culturally sensitive approach, thereby strengthening the debate on climate justice in peripheral and traditional contexts.

**KEYWORDS:** Climate justice. Marajoara Amazon. Riverside communities. Inclusive public policies. Anti-racist adaptation.

**RESUMO:** Na Amazônia Marajoara, as emergências climáticas têm intensificado impactos sobre comunidades ribeirinhas historicamente marcadas por vulnerabilidades sociais, ambientais e raciais. O artigo analisa a urgência da justiça climática nesses territórios, com base em revisão bibliográfica, trabalho de campo no município de Breves e acompanhamento de oficina sobre sociobioeconomia promovida pelo PRCR/UFPA e pela Embrapa. Os resultados indicam que a crise climática aprofunda desigualdades, compromete modos de vida tradicionais e amplia processos de marginalização. Evidencia-se o papel dos movimentos sociais e dos saberes ancestrais na defesa de direitos e na construção de alternativas locais. Conclui-se que políticas públicas devem reconhecer a dívida histórica com essas populações, assegurar sua participação na formulação de estratégias de adaptação e adotar abordagem antirracista, territorializada e sensível às especificidades socioculturais da região, fortalecendo o debate sobre justiça climática em contextos periféricos e tradicionais.

**PALAVRAS-CHAVE:** Justiça climática. Amazônia Marajoara. Comunidades ribeirinhas. Políticas públicas inclusivas. Adaptação antirracista.

**RESUMEN:** En la Amazonía Marajoara, las emergencias climáticas han intensificado los impactos sobre comunidades ribereñas históricamente marcadas por vulnerabilidades sociales, ambientales y raciales. El artículo analiza la urgencia de la justicia climática en estos territorios, con base en revisión bibliográfica, trabajo de campo en el municipio de Breves y seguimiento de un taller sobre sociobioeconomía promovido por el PRCR/UFPA y Embrapa. Los resultados indican que la crisis climática profundiza las desigualdades, compromete los modos de vida tradicionales y amplía los procesos de marginación. Se destaca el papel de los movimientos sociales y de los saberes ancestrales en la defensa de derechos y en la construcción de alternativas locales. Se concluye que las políticas públicas deben reconocer la deuda histórica con estas poblaciones, garantizar su participación en la formulación de estrategias de adaptación y adoptar un enfoque antirracista, territorializado y sensible a las especificidades socioculturales de la región, fortaleciendo el debate sobre justicia climática en contextos periféricos y tradicionales.

**PALABRAS CLAVE:** Justicia climática. Amazonía Marajoara. Comunidades ribereñas. Políticas públicas inclusivas. Adaptación antirracista.

---

## **Introduction**

The Marajó region of the Amazon, characterized by the vastness of its waters and the vitality of its riverine communities, has increasingly become a site of profound social inequalities exacerbated by the climate crisis, highlighting the violations of rights that affect socially differentiated groups. In this context, it is urgent to recognize that the impacts of climate change are not distributed equally. Traditional populations—fishermen, riverine dwellers, quilombolas, Indigenous peoples, and family farmers—face not only environmental effects such as fish scarcity, soil salinization, and increased flooding, but also the erasure of their voices from decision-making processes that shape the future of the region. This reality underscores the need for public policies that consider socioeconomic and territorial inequalities when designing adaptation and mitigation strategies. Despite some emergency initiatives, the effects of climate change remain largely neglected in most Amazonian municipalities. The limited effectiveness of basic rights exacerbates the social hardships caused by climatic imbalance, emphasizing the necessity of placing climate justice at the center of political and institutional debates in response to growing socio-environmental injustice and climate-related racism.

Climate justice requires the active listening and participation of rights-holders—traditional and marginalized communities—whose knowledge, practices, and technologies must occupy a central role in the agenda. These communities act as living territories, resisting across multiple ecosystems, including rivers, forests, and urban peripheries. At the national level, climate justice is essential to ensure that climate policies and actions are developed fairly and competently, requiring the engagement of governments, non-governmental organizations, and civil society, especially the most vulnerable groups. According to Rammê (2012), Brazil is the fourth-largest emitter of greenhouse gases, primarily due to rampant deforestation, and regions such as the Amazon are among the most vulnerable to climate impacts. In this sense, coordination between public policies, solidarity networks, and emergency measures has become critical to mitigate the effects on vulnerable populations, particularly in areas already marked by historical inequalities.

This study is justified by the urgency of understanding and addressing the multiple dimensions of socio-environmental injustice disproportionately affecting Amazonian territories, particularly the Marajó region. The intensification of extreme events, combined with historical state neglect and the marginalization of traditional populations, reveals a context of structural vulnerability that demands critical analysis and transformative action. The absence

of effective public policies, the invisibilization of local knowledge, and the expansion of predatory practices over ecosystems highlight the need to challenge the prevailing development model, which perpetuates socio-environmental inequalities and rights violations. Consequently, this work seeks to analyze the urgency of climate justice in riverine communities historically subjected to social vulnerability, emphasizing the protection of socio-territorial rights, the promotion of well-being practices, and the inclusion of these populations in decision-making processes.

The research was conducted through a bibliographic review on themes such as climate justice, environmental racism, and colonialism, complemented by simple observations and fieldwork. The study focuses on the municipality of Breves, in the Marajó Archipelago, where riverine communities experience the effects of climate emergencies intensely and unevenly. Fieldwork was carried out in the Magébras riverine community, including semi-structured interviews and simple observations. The investigation adopts a dialectical and anti-colonial perspective, integrating land, culture, and self-determination as foundational elements for developing anti-racist and territorially grounded public policies. Access to the field was facilitated by extension activities of the Program “Redes de Comunidades Ribeirinhas” (PRCR), affiliated with the Faculty of Social Work at the Federal University of Pará (Marajó Campus – Breves), with direct engagement between 2023 and 2024. Professors, scholarship holders, and volunteers participated in riverine sociability spaces, observing and recording the intensification of environmental precarization—such as prolonged droughts, fires, water pollution, animal deaths, and increased diseases—and their social implications.

Regarding this direct exchange with riverine communities, on November 13, 2024, the event “Consultation Workshop: Priorities for Research in Socio-Bioeconomics” was held at the Eneida de Moraes Auditorium, Marajó University Campus – Breves, organized by UFPA – Breves Campus, with support from the PRCR and the Brazilian Agricultural Research Corporation (EMBRAPA). Representatives from EMBRAPA and riverine communities across Marajó participated, including Bom Jesus (Breves), Rio Jupatituba (Breves), Remar Community (Currealinho), Vila Intel II (Breves), and Monte Hermon (Portel). The workshop aimed to foster dialogue between the academic community, EMBRAPA, and riverine communities to identify and prioritize research needs in socio-bioeconomics. During the activities, participants shared important accounts of the Marajó territories and how communities are organizing to confront the consequences of climate emergencies and adapt to evolving

educational processes. Notably, during the workshop, the municipality of Breves was experiencing widespread fires producing smoke that affected the entire region.

This work is structured into four main sections, providing a critical analysis of the Marajó Amazon in the context of the climate crisis. The second section examines how the prevailing economic model contributes to worsening environmental crises, deepening inequalities, and violating the rights of traditional populations. The third section focuses on the concrete impacts of climate change on communities in the municipality of Breves, highlighting the vulnerability of riverine populations amid institutional neglect and environmental racism. The fourth section presents possible actions to enable anti-racist adaptation within territorially grounded public policies. Finally, the fifth section offers concluding remarks, reaffirming the urgency of embedding climate justice as a central axis of political and institutional agendas, particularly in historically vulnerable territories.

### **Climate Emergency and Contradictions in the Destructive Capitalist System**

The climate emergency is a global challenge affecting all regions through heat waves, floods, declining river levels, storms, and other phenomena (Brazil, 2025). These events are neither isolated nor accidental; rather, they result from the dynamics of the capitalist production model, historically rooted in the exploitation and commodification of nature, driven by an expansive logic of capital accumulation and domination (Araújo, 2023). This context frames the occurrence of climate injustices, as Rammê (2012) argues, whereby climate damages and impacts disproportionately affect specific territories and social groups who contributed least to the crisis.

At the national level, the states of Pernambuco, Alagoas, and Paraíba faced storms in 2022 that caused flooding and landslides, resulting in 130 deaths (Brazil, 2023). In 2023 and 2024, Rio Grande do Sul experienced one of the most severe socio-environmental crises in its history, with floods affecting more than 2 million people across 452 of the state's 497 municipalities, 46 of which were declared in a state of calamity (Dowbor *et al.*, 2024). At the end of 2024, the state of Amazonas experienced one of its worst droughts on record and, in 2025, faces one of its worst floods, with 40 of its 62 municipalities in a state of emergency, leaving thousands of residents homeless and causing losses in crops and interruptions to school activities (Climainfo, 2025). Although these events occurred in different regions, they share common features: pronounced inequalities and vulnerabilities in the social protection of the

most at-risk groups, and an inadequate response to climate emergencies, often limited to short-term, market-driven solutions aligned with capitalist production modes.

To fully understand the repercussions of climate emergencies, it is necessary to examine the root causes of the climate crisis and the unequal distribution of its consequences, which are intertwined with the power relations that shaped Brazil's socio-historical and economic formation. In this regard, Mendes *et al.* (2017) contextualize the processes underpinning the constitution of the Brazilian state, beginning in the 16th century with the invasion and expropriation of Indigenous lands, accompanied by the decimation and enslavement of thousands of Indigenous people, and later by strategies of domination over bodies and territories. This initial period, known as the colonial and imperial era, was based on a mercantilist economic system. Between the early 19th and 20th centuries, Brazil witnessed, belatedly compared to other countries, the abolition of slavery, the Proclamation of the Republic, and the rise of capitalism and the bourgeoisie (Mendes *et al.*, 2017).

The outcome of these socio-historical processes is the persistence of coloniality (Quijano, 2005) in Brazilian society, which reproduces colonial ideals such as social hierarchization and systemic violations against Black and Indigenous populations. Colonization, therefore, did not leave only historical marks; it established a global power structure, which Guimarães (2025) associates with the continuity of multiple forms of subalternity. The exclusion of Black, peripheral, and Indigenous peoples from basic rights—such as access to a healthy environment—and the expropriation of their territories are expressions of coloniality within a capitalist mode of production.

In this context, Iamamoto (2013) defines the inequalities generated by capitalist production as the exploitation of labor and the creation of poverty, conceptualized as a “social problem.” Moreover, capitalism privatizes life and social policies according to market logic. Quijano (2005) further analyzes how capitalism expanded in conjunction with colonialism, establishing racial and economic hierarchies. Both authors assert that these inequalities are structural and stem from a destructive capitalist system. These insights provide a conceptual foundation for understanding social struggles for environmental justice, climate justice, and resistance to environmental racism.

Regarding environmental justice, Rammê (2012) and Milanez *et al.* (2017) note that the concept emerged as a movement in the United States during the 1960s and in Brazil in 1998, addressing environmental contamination in communities disproportionately affected along ethnic and racial lines. Milanez *et al.* (2017) summarize that environmental justice seeks to

guarantee individuals' legal rights and intervene in the unequal distribution of environmental harms. Rammê (2012) emphasizes that the movement critically challenges the neoliberal development model and social inequality.

As an extension of environmental justice, the climate justice movement emerged in response to global challenges such as rising temperatures, increased greenhouse gas emissions, and the climate crisis. Vulnerable communities—those least responsible for causing climate change—are often the most affected by its consequences: “the socially most vulnerable communities are also the most victimized by climate change” (Rammê, 2012, p. 43, our translation). Climate justice thus becomes essential to ensure that climate policies and actions are developed fairly and effectively, requiring the participation of governments, non-governmental organizations, and civil society, especially the most vulnerable groups. It also aims to ensure that populations such as Indigenous peoples, quilombolas, and traditional communities are not disproportionately affected by climate change or environmentally degrading economic activities. These groups often inhabit areas prone to landslides, floods, and other environmental hazards, which exacerbate existing social and economic inequalities.

Within this framework, traditional peoples and communities—comprising 28 distinct groups, including riverine populations, Indigenous peoples, quilombolas, and artisanal fishers—are recognized under Decree No. 6.040/2007, which establishes the National Policy for the Sustainable Development of Traditional Peoples and Communities. Article 3 defines them as:

Culturally differentiated groups who self-identify as such, possess their own forms of social organization, occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral, and economic reproduction, and apply knowledge, innovations, and practices transmitted by tradition (Brasil, 2007, [n. p.], our translation).

The decree guarantees principles including the right to territory, food security, access to information in accessible language, health, and socio-environmental pluralism. Violations of these rights generate inequalities, leaving traditional peoples and communities subject to elite exploitation and state omissions, which prevent the full realization of their basic rights. When deprived of these rights, these groups are especially vulnerable to climate emergencies, as “social groups in greater socio-economic vulnerability are often more susceptible to events such as floods and prolonged droughts [...]” (Milanez, 2011, p. 88, our translation).

Regarding strategies that violate the rights of traditional peoples and communities, it is crucial to highlight their connection to a neocolonial expression: environmental racism.

According to Conectas (2023), a broader understanding of environmental racism is grounded in intersectionality, a concept developed by Black feminist scholar and jurist Kimberlé Crenshaw, which links multiple factors influencing inequality, such as gender, class, and ethnicity. In this context, environmental racism against traditional peoples and communities intersects with various social markers. Therefore, achieving genuinely just climate justice requires considering these markers.

In this debate, it is essential to recognize and discuss the socio-environmental demands and specificities of each people and community, challenging the hegemonic view that climate emergencies affect everyone equally. Traditional peoples occupy distinct territories, and each community experiences vulnerabilities and climate impacts differently due to their unique social organization and cultural practices. Among the 28 groups previously mentioned, riverine communities are particularly notable, as they possess traditional knowledge and cultural practices that allow them to live in harmony with their aquatic territories without degrading them.

An important consideration is that riverine territoriality encompasses multiple complexities related to river environments (Fernandes & Moser, 2021). While the relationship between riverine peoples and their territories is evident, it is largely rendered invisible by the state, which fails to implement culturally appropriate public policies. Currently, violations against riverine communities relate to their livelihoods and intersect with ethnic-racial, gender, and age-based issues. State-provided infrastructure and services are often precarious or inaccessible, limiting these communities' access to basic rights and heightening threats to their territories. This reinforces the principle that climate justice recognizes that environmental collapse does not affect everyone equally and that historical and social inequalities shape how communities experience these impacts. According to 123 Ecos (2024), climate justice requires that the consequences of climate crises be addressed equitably, acknowledging that the most vulnerable social groups bear the brunt of adverse environmental effects, taking into account the economic, social, and environmental disparities that affect these groups differently. Without such an approach, mechanisms of social injustice are perpetuated.

## **The Effects of Climate Injustice in the Marajó Region**

The Amazon is the world's largest tropical rainforest, covering approximately 5.5 million km<sup>2</sup> across nine South American countries, with the majority located in Brazil. It is renowned for its immense biodiversity, the water resources of the Amazon River and its tributaries, and its fundamental role in regulating the global climate, serving as a major carbon reservoir. Beyond its environmental significance, the Amazon is home to numerous traditional communities whose sustainable practices and ways of life are closely linked to the region's natural cycles. Becker (2005) emphasizes that the Amazon should not be viewed solely as a space of natural resources but as a territory marked by political and economic disputes, where local populations are often marginalized and subjected to profound environmental and social inequalities. Fernandes and Moser (2021) highlight that the Amazon's socio-historical trajectory has been shaped by a modernization project that prioritized the exploitation of natural resources to serve external economic interests, relegating riverine communities to institutional invisibility. Although these communities play central roles in plant extraction, fishing, and floodplain management, they have historically been treated as “non-actors” in public policies, unable to participate fully in territorial use and governance.

In addition to its territorial expanse and natural wealth, the Amazon exhibits significant ethno-cultural diversity—including quilombolas, Indigenous peoples, riverine populations, caboclos, and rubber tappers—resulting from its historical, social, and economic formation. A vivid example of this pluriversity is the Marajó Amazon, defined by the vastness of its waters and the vitality of its communities. Climate change has intensified inequalities, highlighting rights violations affecting socially differentiated groups. This phenomenon is also observed in riverine communities, which have multiple terms to describe these groups and their ways of life. Chaves and Furtado (2017) use the term “peoples of the waters,” while Furtado and Maneschy (2002) introduced the concept of “riverineness,” pioneering this terminology.

Territorially, the Marajó Archipelago (see Figure 1) consists of 17 municipalities interlaced with a complex river network and rich biodiversity, strongly influenced by riverine culture and the waters of the Amazon and Tocantins Rivers.

**Figure 1** – Map of Municipalities in the Marajó Archipelago



Source: Observatório do Marajó (2024).

Despite the abundant water, the forest is under stress. Melgaço, a municipality with diverse riverine communities, faces significant challenges due to limited infrastructure and poor social indicators, reflecting the concentration of wealth and power in Brazil—one of the world's most unequal countries (Oxfam, 2025). In 2024, the municipality, home to approximately 28,000 residents (IBGE, 2022), became the hottest city in Brazil (Observatório do Marajó, 2024). It experienced a severe climate crisis, marked by 228 days of extreme heat, temperatures reaching 38°C, and significant impacts on health, food production, fishing, and water supply, further exacerbating the vulnerability of its population.

In Melgaço, where most of the population depends on açaí cultivation, extreme heat and drought posed significant challenges. The prolonged dry spells and rising temperatures directly affected family livelihoods, creating a vicious cycle of hardship. The extreme heat experienced in Melgaço in 2024 was not merely uncomfortable but constituted a serious public health concern. Temperatures reaching 38°C greatly exceeded historical averages, increasing health risks for residents, particularly children and the elderly, who are most vulnerable to adverse conditions. In addition to extreme heat, Melgaço experienced a notable increase in wildfires in

2024. “Pará registered a record number of fire outbreaks, and although Melgaço had only 120 incidents, it was severely affected by pollution and persistent smoke. These forest fires not only harm the environment but also exacerbate respiratory problems among the local population” (Redação, 2024, our translation).

In the municipality of Breves, the capital of Marajó, the situation is similarly concerning. In recent years, wildfires have drawn increasing attention from public authorities, as fire outbreaks have multiplied and directly impacted residents’ quality of life. The Observatório do Marajó (2023) reported the presence of smoke across two territories in Breves, alongside areas affected by river and well droughts, which limited agricultural activities, hindered fishing, and caused additional socio-environmental challenges. In November 2024, local residents mobilized against the dense smoke enveloping the municipality. In response, the Public Prosecutor’s Office of Pará initiated an investigation into the causes and accountability related to the intensifying wildfires. The Observatório do Marajó noted that prevention remains a critical gap, as only 18.75% of local government plans include fire brigades or partnerships with the fire department, while the majority lack educational or monitoring measures.

The Public Prosecutor’s Office also highlighted that the alarming wildfire situation affected the entire Marajó region, causing environmental impacts with direct health consequences for the most vulnerable populations, such as children and the elderly. Respiratory illnesses are likely to increase under poor air quality conditions. Other areas, including Portel—most affected by wildfires in October and November 2024, with 797 reported fire outbreaks in the latter month alone—also suffered severe consequences. According to the Observatório do Marajó (2023), seven territories were affected by wildfire smoke, a number equivalent to those impacted by river droughts, which disrupted fishing and imposed additional hardships on local communities. These figures reflect the socio-environmental impacts of smoke, drought, and water salinization.

A particularly emblematic case occurred in the rural riverine community of Magebrás in Breves, home to 30 families. For two months, residents endured widespread fire and smoke that devastated community areas. During field research conducted in November 2024, residents reported sleepless nights and a sense of abandonment by public authorities. Community leaders took the initiative to formally lodge complaints with the Public Prosecutor’s Office. The aftermath revealed extensive destruction and widespread despair. As one resident described, the community experienced moments of total panic. Figures 2 and 3 document the scope of the damage.

**Figure 2 – Jacareranas killed in the fire**



Source: Authors (2024).

**Figure 3 – Fire in the Magebrás Community**



Source: Authors (2024).

Community mobilization is crucial for strengthening autonomy, resilience, and adaptive capacity. Climate justice initiatives in the region include legal actions led by civil society organizations that hold governments and companies accountable for harmful practices, such as illegal deforestation, river contamination, and the unlawful appropriation of traditional territories.

### **The Pursuit of Climate Justice through Anti-Racist Adaptation**

Addressing climate emergencies has involved government agencies, civil society organizations, and social movements, highlighting the contested nature of climate actions

within a socially unequal and elitist context. Among the strategies for implementing climate justice, climate adaptation is one of the most widely employed. However, the Climate Justice Glossary emphasizes that using adaptation in isolation constitutes a capitalist euphemism, as it separates society from nature and neglects both the root causes and recognition of those most affected by climate injustice.

Consequently, climate adaptation must be anti-racist, aligning with the principles of climate justice by acknowledging historical social inequalities and systemic racism against Black communities, traditional peoples, and Indigenous populations. This requires tailored social protection policies, preservation of traditional territories, affirmative action, and the development and implementation of public policies that respect the specificities of each territory and community.

In this regard, according to the Adaptaclima platform of the Ministry of the Environment (Brazil, 2025), adaptation measures for vulnerable peoples and populations should prioritize social inclusion and poverty alleviation; capacity-building through social organization to prevent and respond to extreme events; provision of training, information, participation, and climate consultation; production of anti-racist climate adaptation studies and plans that foreground local peoples and their traditional knowledge; and the promotion of specific national policies that address the needs of vulnerable populations (COEP, 2011; Brazil, 2025). Within this framework, it is essential to recognize that climate adaptation must go beyond mitigating environmental impacts and include structural actions aimed at social inclusion, poverty reduction, and the valorization of traditional knowledge. From this perspective, anti-racist adaptation, free from neo-colonial and neoliberal ideals, is both a viable and necessary reality in the Brazilian context.

In alignment with this view, Belmont (2024) argues that anti-racist adaptation should be considered a central agenda, connected through a national network to address climate crises and promote intersectional and structural public policies, thereby reducing inequalities and ensuring protection for the most affected populations. This anti-racist network should integrate local, ancestral, and traditional knowledge and practices throughout the stages of design, planning, financing, implementation, monitoring, and evaluation, aiming to coordinate climate adaptation policies that counteract the effects of environmental racism.

From this perspective, anti-racist adaptation is inherently linked to intersectionality, which recognizes that the impacts of environmental racism affect socio-historical groups differently, and ignoring these differences in adaptation efforts risks exacerbating existing

inequalities (Duarte; Silva; Lopes, 2022). Accordingly, an intersectional analysis “acknowledges different ways of thinking and relating to the land” (Conectas, 2023, p. 13, our translation). Climate justice informed by intersectionality thus integrates a set of social protection mechanisms and rights guarantees that account for the specificities of each territory, ensuring that adaptation policies are truly anti-racist.

Furthermore, the struggle to guarantee social protection, as mandated by the Brazilian Federal Constitution (Brazil, 1988) through the Unified Social Assistance System and the Organic Law of Social Assistance (Law No. 8,742/1993 — LOAS), establishes that all three levels of government (federal, state, and municipal) are responsible for providing emergency socio-assistance. In the context of climate emergencies, the Social Assistance Policy must provide targeted social protection measures for populations vulnerable to climate impacts and address the violations of rights exacerbated by these crises.

Within the Special Social Protection of High Complexity framework, the Service for Protection in Public Calamities and Emergency Situations aims to safeguard individuals in emergencies through shelter, socio-emergency services, and temporary benefits, including food, housing, and documentation, representing one of the first institutional responses to crises (Brazil, 2012). According to the guidelines for social assistance action in emergency contexts, social protection is understood as integrated, encompassing basic and special social assistance, as well as intersectoral coordination, to reduce vulnerabilities during emergencies and ensure rights through programs, projects, actions, and benefits (Brazil, 2021).

Thus, the importance of the Social Assistance Policy in protecting vulnerable populations is fundamental. Piedras and Lima (2022), in their literature review on this policy and traditional peoples and communities, note that these groups were recognized as culturally differentiated under Decree No. 6,040/2007 and were integrated into the National Social Assistance Policy in 2016, established in 2004, to respond to vulnerable populations’ needs through benefits, programs, and projects, as part of Brazil’s Social Security system. However, the authors highlight a lack of academic studies addressing how the Social Assistance Policy is applied or adapted to the realities of traditional peoples and communities, with little analysis of implementation challenges, effectiveness, or the recognition of their knowledge and lifestyles. Only some groups—riverine communities, quilombolas, Indigenous peoples, Romani, fishers, and terreiro communities among the 28 recognized groups—have been considered, indicating an academic erasure of many traditional peoples and communities.

In this context, the Program Redes de Comunidades Ribeirinhas (PRCR) operates through its projects to disrupt colonial relationships and value local knowledge within riverine communities. Its objective is to overcome academic erasure, which often disregards these populations' livelihoods, social practices, and challenges (Piedras; Lima, 2022), through extension and research initiatives that involve training and engagement via discussion circles, workshops, meetings, and active participation of riverine communities in research and academic production, thereby increasing visibility of riverine realities.

The program fosters dialogue by connecting researchers and residents in collective knowledge production, strengthening cultural and social identity. Its work amplifies the voices of traditional communities, ensuring that anti-racist climate adaptation is effective in the most vulnerable areas of the Amazon region. Through its projects, PRCR seeks to break colonial patterns and valorize local knowledge in riverine communities to address academic erasure of their ways of life and social practices, facilitating formation and engagement through workshops, discussion circles, and community participation in research and academic outputs (Piedras; Lima, 2022).

One of the workshops organized by the program, in collaboration with riverine communities and the Brazilian Agricultural Research Corporation (EMBRAPA), titled "Consultation Workshop — Inclusive Bioeconomy in the Amazon," was held on November 13, 2024 (Figure 4). Participants included representatives from riverine communities across the Marajó Archipelago along the Jupatituba (Breves, PA), Parauaú (Breves, PA), Taquari (Bagre, PA), Cajubinha (Muaná, PA), Hermom (Portel, PA), and Remar (Curalinho, PA) rivers, totaling 27 individuals. The workshop facilitated valuable knowledge exchange among participants, including reports from community leaders, family farmers, and elder riverine residents regarding the impacts of the climate emergency.

**Figure 4** – Workshop with Riverine Communities and EMBRAPA



Source: Authors (2024).

During the activities, an elder riverine woman expressed deep concern about the advancing climate emergency and frustration with public authorities for their negligence. Family farmers reported health problems, witnessing the decline of their crops and gardens, with produce drying out, including açai, the region's primary food source. The workshop provided a space for dialogue and denunciation, fostering a solidarity network among riverine communities, functioning as an emergent social protection network. Interaction with riverine residents from other municipalities revealed shared challenges, differing only in intensity, highlighting the urgency of climate justice grounded in addressing socio-environmental inequalities.

In 2024, semi-structured interviews were conducted with two Black riverine women from the Magébras community—previously mentioned—revealing that their community had endured at least two months under heavy smoke, impairing residents' respiration and causing multiple additional issues. The community school ceased operations, the local health post closed, and electricity supply became unstable due to wildfires, affecting family well-being. Residents reported anxiety, fear, and hopelessness regarding the future.

Açai harvesters, family farmers, and fishers were unable to carry out their work, directly impacting the community's productive and cooperative activities. Children could not attend school or play in their forested yards. The river, serving as the community's primary thoroughfare, exhibited signs of warming. Health professionals and teachers could not fully perform their duties due to the smoke, and access to Magébras became extremely difficult. The spread of smoke was visible to those navigating the rivers in boats, yet the community remained largely invisible for a considerable period.

These testimonies illustrate the realities of environmental racism and climate injustice, affecting fundamental human rights such as the right to breathe. One interviewee experienced severe health complications and required medical care in the urban center of Breves, an hour by boat from the community. Upon arrival at the Emergency Care Unit (UPA), she observed numerous others with similar respiratory difficulties. Her condition worsened, necessitating transfer to Belém, the state capital, for specialized care. She currently resides in a support house awaiting diagnosis and further medical procedures; her condition is considered serious.

These accounts underscore the necessity of integrating anti-racist climate adaptation measures with socio-emergency social assistance services. Both represent rights that must be realized to ensure social protection and climate justice. The situations described cannot be seen as isolated cases in the Marajó region, particularly regarding the violations of rights guaranteed under Decree No. 6,040/2007. This underscores the urgency of climate justice for riverine communities, confronting their historical socio-territorial exclusion and affirming that their lives matter. Riverine communities, alongside other traditional peoples, are the custodians of the forest and its preservation.

### **Concluding Remarks**

The Marajoara Amazon faces the direct consequences of the climate emergency. The studies presented here reveal an increasing vulnerability of riverine communities. Engagement with local residents highlighted social invisibility resulting from prolonged exposure to wildfire smoke. In Magébras, community mobilization successfully drew the attention of civil and governmental authorities to the need for infrastructure and equipment to mitigate climate emergency impacts, particularly regarding transportation for machinery and other essential resources.

Workshop participants on bioeconomy collectively emphasized the demand for services addressing the needs of rural populations distant from urban centers, reflecting structural social inequalities. These communities advocate for democratic debate on climate adaptation and mitigation that considers class, race, gender, and ethnicity as mechanisms to promote climate justice and the right to a healthy environment. Socioeconomic vulnerability, gender, ethnicity, and race should not determine exposure to violence or climate injustices. Recognizing that climate impacts are not neutral, but shaped by colonial markers, is essential. Coloniality, as a

persistent logic structuring power relations, continues to shape public policies, invisibilizing local knowledge and perpetuating the subordination of traditional peoples.

Since 2019, the PRCR has addressed invisibility and rights violations affecting Marajó's riverine communities through extension activities, research, and knowledge production. The program supports rights advocacy and research collaborations, highlighting the importance of popular education and social mobilization as instruments of resistance against environmental racism and state neglect.

This study significantly advances the debate on climate justice in Brazil, with a focus on peripheral and traditional territories, where climate impacts are most severe and often neglected. Its primary contribution lies in linking climate justice, coloniality, and socio-territorial vulnerability, proposing an intersectional and decolonial approach to better understand climate change effects in historically marginalized contexts. By foregrounding the experiences of riverine communities in the Marajó Archipelago, the study values local knowledge and strengthens knowledge production committed to social transformation and public policies sensitive to territorial and cultural specificities.

In conclusion, addressing climate injustice in Marajó requires an intersectional and decolonial approach that respects the territorial and cultural specificities of riverine populations. Building a collective future depends on guaranteeing rights, dismantling colonial logics, and valuing local knowledge as a foundation for transformative public policies. Recognizing the Amazon as a territory of resistance affirms that climate justice is fundamentally social justice—a prerequisite for a collective project of well-being.

## REFERENCES

- ALADRÉN, Gabriel. O tráfico de escravos e a escravidão na América portuguesa. *In*: DANTAS, Carolina; MATTOS, Hebe; ABREU, Martha. (org.). **O negro no Brasil: trajetórias e lutas em dez aulas de história**. Rio de Janeiro: Objetiva, 2012. p. 13-22.
- ARAÚJO, Gabriel Pires de; RODRIGUES, Leticia S.; DUNDER, Beatriz D. A emergência climática sob o neoliberalismo: reflexões desde a perspectiva da justiça climática latino-americana. **Simbiótica**, Vitória, v. 10, n. 3, p. 57-72, 2023.
- BARROS, Ilena Felipe. O agronegócio e a atuação da burguesia agrária: considerações da luta de classe no campo. **Serviço Social & Sociedade**, São Paulo, n. 131, p. 175-197, 2018.
- BECKER, Bertha K. **Amazônia: geopolítica na virada do III milênio**. 2. ed. Rio de Janeiro: Garamond, 2005.
- BELMONT, Mariana. Adaptação antirracista é possível para combater o racismo ambiental. **Jornal de Psicanálise**, São Paulo, v. 57, n. 107, p. 225-230, 2024.
- BRASIL. [Constituição (1988)]. **Constituição da República Federativa do Brasil de 1988**. Brasília, DF: Presidência da República, 2025. Available at: [http://www.planalto.gov.br/ccivil\\_03/constituicao.htm](http://www.planalto.gov.br/ccivil_03/constituicao.htm). Accessed in: 14 Mar. 2025.
- BRASIL. Ministério do Desenvolvimento e Assistência Social, Família e Combate à Fome. **Norma Operacional Básica do Sistema Único de Assistência Social**. Brasília, DF: MDS, 2012.
- BUNKER, Stephen G. **Underdeveloping the Amazon: extraction, unequal exchange and the failure of the modern state**. Chicago: University of Chicago Press, 1988.
- CARNEIRO, Sueli. **Racismo, sexismo e desigualdade no Brasil**. São Paulo: Selo Negro, 2019.
- CHAVES, G. P.; FURTADO, Lourdes de Fátima Gonçalves. Entre rios, furos e igarapés: o ambiente aquático no imaginário social dos ribeirinhos de uma sociedade amazônica. **Contribuciones a las Ciencias Sociales**, Málaga, p. 1-13, 2017.
- CLIMAINFO. **Cheia no Amazonas afeta mais de meio milhão de pessoas**. [S. l.]: ClimaInfo, 2025.
- CONECTAS DIREITOS HUMANOS. **Relatório climático: impulsionando a ação climática a partir dos direitos humanos**. São Paulo: Conectas, 2023.
- DOWBOR, Monika *et al.* Catástrofes político-climáticas e a (não) participação social: o caso das enchentes no Rio Grande do Sul. **Redes**, Santa Cruz do Sul, 2024.
- ECHEVERRI, Andrea *et al.* **Glossário da justiça climática**. [S. l.]: Plataforma Latino-Americana e do Caribe para a Justiça Climática, 2025.

EMERGÊNCIA climática no Brasil: a necessidade de uma adaptação não-racista. [S. l.]: Adaptacaoantirracista, 2023.

FERNANDES, Joyce Sampaio Neves; MOSER, Liliane. Comunidades tradicionais: a formação socio-histórica na Amazônia e o (não) lugar das comunidades ribeirinhas. **Revista Katálysis**, Florianópolis, v. 24, n. 3, p. 532-541, 2021.

FORO, Carmen. **Os grandes projetos na Amazônia e os desafios de enfrentamento ao capital na região**. São Paulo: CUT Brasil, 2021.

GUIMARÃES, Jacqueline T. da Silva. Por um marxismo negro e amazônida: enfrentamento à branquitude, ao racismo/sexismo epistêmico e ao extrativismo intelectual. **PRACS: Revista Eletrônica de Humanidades do Curso de Ciências Sociais da UNIFAP**, Macapá, v. 18, n. 1, p. 188-217, 2025.

IAMAMOTO, Marilda Villela. O Brasil das desigualdades: “questão social”, trabalho e relações sociais. **Serviço Social & Sociedade**, São Paulo, n. 113, 2013.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. **Censo Demográfico 2022**. Rio de Janeiro: IBGE, 2022.

INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS. **SGI 2.5**: introdução ao sistema de informações geográficas. São José dos Campos: Imagem Geosistemas, 2023.

LOUBACK, Andreia Coutinho. **Justiça climática**. São Paulo: ClimaInfo, 2022.

MARQUES, Gilberto de Souza. **Amazônia**: riqueza, degradação e saque. São Paulo: Expressão Popular, 2019.

MILANEZ, Bruno; FONSECA, Igor Ferraz da. Justiça climática e eventos climáticos extremos: uma análise da percepção social no Brasil. **Terceiro Incluído**, Goiânia, v. 1, n. 2, p. 82-100, 2011.

NEVES, Thais; CASEMIRO, Poliana. Isolada, sem água e energia: como a cidade de Melgaço sobreviveu ao maior extremo de calor de 2024. **G1 Pará**, 2025.

OBSERVATÓRIO DO MARAJÓ. **Calamidade climática no Marajó**. [S. l.]: Observatório do Marajó, 2023.

OBSERVATÓRIO DO MARAJÓ. **Relatório sobre crises climáticas em Melgaço**: 2024. Marajó: Observatório do Marajó, 2024.

OXFAM BRASIL. **Um retrato das desigualdades brasileiras**. [S. l.]: Oxfam, 2025.

QUIJANO, Aníbal. Colonialidade do poder, eurocentrismo e América Latina. *In*: LANDER, Edgardo. (org.). **A colonialidade do saber**: eurocentrismo e ciências sociais, perspectivas latino-americanas. Buenos Aires: CLACSO, 2005. p. 117-142.

RAMMÊ, Rogério Santos. **Da justiça climática aos direitos e deveres ecológicos:** conjecturas político-filosóficas para uma nova ordem jurídico-ecológica. 2. ed. Caxias do Sul: EDUCS, 2012.

SANTOS, Milton. O dinheiro e o território. *In*: SANTOS, Milton; BECKER, Bertha K. (org.). **Território, territórios:** ensaios sobre o ordenamento territorial. 3. ed. Rio de Janeiro: Lamparina, 2007. p. 13-21.

WATTS, Jonathan. **A elite climática precisa ser cobrada pelos seus crimes e pagar por seus danos.** [S. l.]: Sumaúma, 2023.

---

***CRedit Author Statement***

---

- Acknowledgements:** None.
  - Funding:** None.
  - Conflicts of interest:** The authors declare no conflicts of interest.
  - Ethical approval:** None.
  - Data and material availability:** None.
  - Authors' contributions:** All authors contributed equally to the development of this work.
- 

**Processing and editing: Editora Ibero-Americana de Educação**  
Proofreading, formatting, standardization and translation

