DOI: 10.15691/0719-9112Vol14n1a9

Hyper-hotspots of Crime and Hypervictimization in the Amazon Rainforest: The Case of "Potassium War" in Autazes

Hiper-Hotspots de Delincuencia e Hipervictimización en la Amazonía: El Caso de la "Guerra del Potasio" en Autazes

EDUARDO SAAD-DINIZ[*]
GIULIA GIANECCHINI[**]

Abstract

The catastrophe of environmental degradation in the Amazon Rainforest has accumulated harm in so many dimensions that it transcends the usual categories of victimization among individuals. Despite having planetary dimensions, this process is manifested in a concrete and territorialized way. By analyzing the context of the municipality of Autazes, located in the state of Amazonas, Brazil, it is possible to observe how the convergence between multiple levels of socio-environmental harm, criminal practices and conflicts resulting from human rights violations contribute significantly to the intensification of adverse climate effects. This context is expressed in the hypervictimization of local communities. The article focuses on how the cumulative pattern of harmful behavior opens a new chapter in victimological studies, characterized by "hypervictimization" and "hyper-hotspots".

KEYWORDS: Amazon Rainforest; Hypervictimization; Socio-environmental harm; Climate harm; Hyper-hotspot.

Resumen

La catástrofe de la degradación medioambiental en la Selva Amazónica ha acumulado daños en tantas dimensiones que trasciende las categorías habituales de victimización entre los individuos. A pesar de tener dimensiones planetarias, este proceso se manifiesta de forma concreta y territorializada. Al analizar el contexto del município de

[*] University of São Paulo, Brazil - Amazonia Research & Development Center (saaddiniz.eduardo@gmail.com). ORCID: 0000-0002-1214-8753.

[**] University of São Paulo, Brazil (giuliagianecchini@gmail.com). ORCID: 0009-0003-6047-2368. The author expresses her sincere gratitude to the Max Planck Law Network and the University of São Paulo for the financial support to attend the conference, as well as to her colleagues at the Brazilian Institute of Criminal Sciences (IBCCRIM), João Victor Gianecchini and the article's reviewers for their contributions to the research.

Article received on January 6th, 2025, and accepted for publication on December 9th, 2025. Translated by Daniela Pavez.

How to cite this article:

SAAD-DINIZ, Eduardo and GIANECCHINI, Giulia (2026). "Hyper-hotspots of Crime and Hypervictimization in the Amazon Rainforest: The Case of "Potassium War" in Autazes", *Latin American Legal Studies*, Vol. 14 N° 1, pp. 366-413.

Autazes, ubicado en el estado de Amazonas, Brasil, es posible observar cómo la convergencia entre múltiples niveles de daño socioambiental, prácticas delictivas y conflictos derivados de violaciones de los derechos humanos contribuye de manera significativa a la intensificación de los efectos climáticos adversos. Este contexto se expresa en la hipervictimización de las comunidades locales. El artículo se centra en cómo el patrón acumulativo de comportamientos perjudiciales abre un nuevo capítulo en los estudios victimilógicos, caracterizado por la "hipervictimización" y los "hiper-focos".

PALABRAS CLAVE: Selva amazónica; Hipervictimización; Daño socioambiental; Daño climático; Hiper-hotspot.

INTRODUCTION

Scientific evidence reveals that the Amazon Rainforest could collapse by 2050: according to a recent study published at Nature, the biological evolution of trees takes a few million years to adapt to dry seasons caused by environmental degradation in the region[1]. The process of "savannization" is already irreversible: more carbon is being emitted than absorbed[2]. In this essay, it is argued that the collapse of the Amazon Rainforest is more accurately understood when framed as a systematic assault on Amazonian peoples.

Notably, there has been a striking lack of attention to the lived experiences of Indigenous and traditional communities who endure the daily consequences of deforestation. It is proposed that the intense and disproportionate concentration of harm and victimization in this context signals the emergence of a new phase in victimological inquiry —the era of hypervictimization driven by climate harm.

The novelty here is that the social control of environmental degradation is converted into a topic of high global appeal, precisely because the substantial loss of forested areas prevents the formation of the rain cycle throughout South America, unbalancing not only food production in the country, but also the climate dynamics to the indifference of continental borders. Indeed, the literature in the field describes accurately the climate catastrophe in the Brazilian Amazon and the serious consequences of the "arc of deforestation", but it rarely focuses on concrete proposals to reverse it and alleviate the suffering of local communities.

As if it was not worrying enough, the more people flock to local communities, the greater the propensity to be recruited by criminal networks and to complicity in illegitimate activities aimed at environmental degradation (the 2023 Census shows the escalation of violence and population swelling). The country has experienced many years of environmental regulatory rollbacks[3] and its reversal remains a great expectation.

The municipality of Autazes (located in the state of Amazonas, Brazil, in the Amazon Basin) faces territorial disputes, violence, and human rights violations due to the exploitation of the territory's natural resources. Since 2016, the territory has been the scene of conflicts due to a

[1] FLORES, *et al.* (2024), pp. 555–64.
[2] GATTI, *et al.* (2021), pp. 388–93.
[3] SAAD-DINIZ & GIANECCHINI (2021), pp. 257-83.

land dispute between Brazil Potash, and traditional peoples. This corporation is a Canadian-owned company and a subsidiary of the Canadian investment group Forbes & Manhattan. Its shareholders include financial institutions with a global reach, such as the Union Bank of Switzerland (UBS), Morgan Stanley, Rockefeller Capital Management and Goldman Sachs.

The mining project is intended for the exploitation of potassium, an important element for agribusiness. The issue lies in the fact that, in addition to the enterprise being classified as one of high environmental impact, there are three Indigenous Lands that are characterized as areas directly affected by the project: Jauary, Paracuhuba, and Soares/Urucurituba. The area planned for the installation of the project is located approximately 2.97 kilometers from the Jauary Indigenous Land (delimited), 6.33 kilometers from the Paracuhuba Indigenous Land (approved by presidential decree), and overlaps the Soares/Urucurituba Indigenous Land, whose demarcation procedure is currently underway.

The situation is aggravated by the confluence of political and economic interests surrounding the project, driven by the argument that potassium exploration would reduce external dependence —especially on Russia— and promote job and income generation. Those justifications, however, have been mobilized to relativize the observance of territorial and socio-environmental rights constitutionally guaranteed to indigenous peoples.

Based on those assumptions, the essay aims to address the cumulative concentration of harm expressed in the context of Autazes. It will underline how the predatory exploitation of the Amazon Basin has contributed to an increase in violence and victimization of populations, creating a cycle of socioenvironmental degradation and the complexity of the corporate complicity with environmental degradation. The main hypotheses of the article are to question whether a) it is possible to conceive the idea of a "hyper-hotspot" and classify Autazes an one, assuming the convergence between the multiple levels of socio-environmental and climate harm, crimes and violation of human rights in the territory; b) it is possible to glimpse the hypervictimization of traditional peoples as a result of the continuous harm caused in the municipality.

Based on empirical analysis of the Autazes Case, a theoretical approach will be adopted to investigate the convergences and divergences between green criminology, victimology, and the context of exploitation in the municipality. The main purpose is to verify whether the traditional analytical categories of victimology, with regard to the processes and levels of victimization, are sufficient to address victimization in an Amazonian context or whether there is a need for refinement and theoretical advancement of contemporary victimology within a critical and socio-environmental framework.

The central hypothesis is that environmental degradation in the Amazon gives rise to intensified and intersected forms of victimization, characterized as hypervictimization. The investigation is developed through the observation of five analytical topics —(1) deforestation and anthropogenic fires; (2) the exploitation of the territory by the company Brazil Potash; (3) the so-called "Potassium War"; (4) illegal gold mining; (5) climate harm— which operate as empirical vectors to assess the pertinence of the theoretical categories to the concrete case.

The Autazes case was chosen because the municipality reflects the socio-environmental harms affecting the Amazon Rainforest, the largest rainforest on the planet, and contributing to climate change. It will be analyzed how socio-environmental harms are produced and how it

impacts the victims and produces multiple levels of victimization until it reaches hypervictimization. It highlights the need for a multidisciplinary approach, integrating concepts from criminology, victimology and critical environmental justice studies to understand the mechanisms of hypervictimization.

I. THE AUTAZES CASE

The municipality of Autazes, located in the Amazon Basin, more precisely in the state of Amazonas, Brazil, is the epicenter of conflicts and harmful behaviors related to the exploitation of natural resources. Indigenous peoples and farmers have long been engaged in constant territorial disputes. On the one hand, indigenous peoples seek to protect the traditional use of their territories, based on their constitutionally guaranteed original rights. On the other hand, farmers seek to expand their grazing areas. Another source of conflict in the territory was the decision to pave Highway BR-319, which is directly connected to the municipality via State Highway AM-254 (known as Autazes highway).

Added to this scenario, illegal gold mining on the Madeira River and the decision to exploit potassium in the territory, within self-demarcated indigenous land, intensified land conflicts and socio-environmental harm in the territory. Ultimately, this convergence of harmful behaviors in the territory culminated in climate harm, as will be discussed in more details.

1.1 Deforestation and Anthropogenic Fires

Concerning deforestation and fires, Autazes is the seventh municipality in the Amazon with the highest rate of burning and deforestation. Much of the circumscription of the municipality has indigenous lands and is under systematic pressure from agricultural activity, with the withdrawal of native vegetation to open new pasture areas. In addition, the livestock is carried out without the environmental licensing required by the law[4]. Autazes has the largest dairy basin in Amazonas, especially in areas of recent or already consolidated deforestation and has lost approximately 580 hectares of forest since 2005, which is equivalent to an area of 540 soccer fields. This deforested area has been transformed into a herd of cattle and buffalo[5].

Another factor that encourages fires and deforestation in the Autazes region is the BR-319 highway, which runs through the Amazon Rainforest, linking the center of the Amazon, the city of Manaus, to the city of Porto Velho. There are 63 Indigenous Lands in the area affected by the highway. In addition, there are five Indigenous communities located outside these Indigenous Lands and one indigenous village isolated from contact with other Indigenous peoples[6]. Of the thirteen municipalities along the BR-319 highway in 2023, twelve accumulated more than 40% of the fires in the state of Amazonas between August and October. One of these municipalities was Autazes, due to pressure and land speculation in the area because of potassium deposits[7].

Brazil is a signatory to Convention 169 of the International Labor Organization (ILO). This Convention is an international human rights treaty, incorporated into Brazilian law with supra-legal status. Although it provides the need for prior consultation (free, informed and consulted through good faith procedures) with Indigenous peoples and traditional communities about

[4] MINISTÉRIO DO MEIO AMBIENTE E MUDANÇA DO CLIMA (2023).
[5] FELIZARDO (2023).
[6] FERRANTE, *et al.* (2020), pp. 1-7.
[7] OBSERVATÓRIO BR-319 (2024).

the process of exploitation of their lands, to date there has been no such consultation. According to the BR-319 observatory, the conservation units located near the BR-319 highway were set on fire in September 2023. The extreme drought in the Amazon, low rainfall and historically low river levels were used as a lobbying tool to pave the BR-319[8]. The project has the potential to encourage land grabbing along the highway, as well as aggravating environmental deforestation and illegal logging[9].

1.2 Brazil Potash

The Autazes Potash Project consists of the exploitation of sylvinite, the ore from which potash is extracted, by the company Brazil Potash. According to information from the National Foundation for Indigenous Peoples (Funai), the municipality of Autazes has more than twenty indigenous lands that have been regularized or are in the process of being demarcated, and at least four registered claims for the regularization of new indigenous lands[10]. Most Indigenous lands are occupied by the Mura Indigenous people, who inhabit the region of the Madeira, Amazonas and Purus rivers since the XVII century.

The Mura people participated effectively in the Cabanagem[11], one of the most violent revolts of this period (1835-1840), were repressed, and suffered processes of social disorganization, dispersal and transfer, which consequently wiped-out entire groups. The recognition of the territories of the Mura Indigenous peoples began in 1910. However, they suffered numerous conflicts over land ownership. In 1931, under the official justification that there were no indigenous populations in the municipalities of Manaus, Itacoatiara (which at the time included the current territory of the municipality of Autazes), Borba, and Manicoré, a Commission of Inquiry was established to investigate complaints made against the Indian Protection Service (SPI).

This institutional context contributed to the worsening of land conflicts in the region and led to the intensification of the process of dispossession of indigenous peoples, especially in Autazes, where extensive areas were appropriated by buffalo breeding enterprises, in clear violation of the indigenous peoples' original right to their traditional lands, as currently recognized by the Brazilian Federal Constitution. According to the documents provided by the Federal Public Prosecutor's Office[12], Brazil Potash began the exploration in the Amazon Basin in 2007. Since 2013, prospecting activities have directly affected areas of Indigenous territories.

As stated by the Federal Public Prosecutor's Office13, the course of the Autazes Potash Project demonstrates a series of vices of will between the parties involved, including public agents. Reports by representatives of the Mura people clarify that the company buys Indigenous land irregularly from its residents and, after the sale, no longer allows them to use it or even pass through the land without their authorization. In addition, some leaders of the Mura peoples are being co-opted by Brazil Potash to influence the acceptance of the company's license to exploit the site.

---

[8] SASSINE (2023a).
[9] SASSINE (2023b).
[10] JF 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SJAM (2020).
[11] HARRIS (2010).
[12] JF 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SJAM (2020); JF 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SJAM (2022).
[13] MPF/AM (2016); JF 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SJAM (2024).

Among the people affected by the project are riverside communities, who inhabit the banks of the Amazon and live along the rivers. They have their own forms of social organization, occupy and use territories and natural resources for subsistence, cultural, social, religious and economic reproduction. Therefore, the harm caused by the Potash Project will not only impact Indigenous peoples, but also the riverside communities living in the Madeira and lower Solimões River regions.

ILO Convention 169 was violated, since there was no prior consultation with the Indigenous communities before the development took place. Consultation was also not considered to be free (from coercion, intimidation or manipulation), not even informed (so that the communities could understand what is happening) or consulted through good faith procedures. Within this context, the Federal Public Prosecutor's Office reported that there had been a double disregard for the right to consultation provided for in ILO Convention 169, because in addition to the Indigenous people, the traditional riverside communities were not even identified and considered in the licensing process.

In view of the socio-environmental and cultural harm that will potentially affect Indigenous lands and traditional communities, the authority to grant environmental licenses is federal, so it should have been carried out by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). However, the license was granted by the State environmental agency, the Environmental Protection Institute of Amazonas´s Preliminary License No. 54/2015 was issued before the Indigenous Component Study was conducted and before FUNAI carried out any technical analysis of the impacts on the communities.

With the installation license, Brazil Potash already has authorization to drill, deforest and build its company in the Soares/Urucurituba Indigenous land. During disputes between the Amazonas Environmental Protection Institute (IPAAM), the Federal Public Prosecutor's Office and the National Foundation for Indigenous Peoples (FUNAI), a scenario of violations of the rights of Indigenous and traditional peoples and serious environmental risks in the region is unfolding.

1.3 The Potassium War

The Indigenous communities of Soares and Jauary are at risk of collapse because the underground mine is under their land. In addition, millions of tons of salt are expected to be placed out in the open during the first years of potash mining by the company. As salt is a waste product extracted along with the sylvinite and because there is nowhere else to put it, it would be exposed in the Amazon Rainforest and there could be contamination of the springs, lakes, igapós, igarapés and rivers of the Amazon Basin.

In the public civil action drawn up by the Federal Public Prosecutor's Office, the Federal Court of Amazonas was also asked to analyze, with a request for urgency, in May 2024, the scenario of human rights violations against the Mura people and the advance of the Brazil Potash enterprise in Autazes. The Federal Public Prosecutor's Office requested a preliminary injunction to suspend the effects of the installation licenses granted to the company by IPAAM. The Indigenous people also reported that the Mura Indigenous Council (CIM) was acting contrary to the rights of the Mura people and in favor of the mining company's interests. The

Mura Indigenous Council has participated in judicial and administrative proceedings requesting the suspension of the demarcation of the Lago do Soares Indigenous Land[14].

In March 2022, the former president of Brazil (2019-2022), took advantage of the international attention surrounding the war between Russia and Ukraine to push for Bill 191/2020[15], which would authorize mining within Indigenous territories. The argument was based on the claim that Brazil, as a major importer of potash from Russia, would be exposed to risks in the supply of essential inputs for the agricultural sector. In this context, it was argued that the approval of the respective bill would be a necessary measure to mitigate Brazil's dependence on foreign sources and ensure greater autonomy in the supply of strategic fertilizers[16].

1.4 Illegal Gold Mining and the Mura People

The Madeira River, located around the riverside communities Rosarinho and Indigenous Urucurituba, in the municipality of Autazes, is hotspot of illegal gold mining. Since 2017, the Federal Court has prohibited illegal mining in the river, but the activity does not cease. The mining activity with mercury causes an impact on the entire ecosystem and the surrounding biological chain, because it contaminates the waters and degrades the health conditions of the riverside and Indigenous communities, as well as also reaches nearby cities and extends beyond the region.

Illegal mining activities also converge with illegal deforestation near Indigenous Lands (Gavião, Sissaíma and Pociano) and territories of the Mura people. These three Indigenous territories have been invaded by loggers and land grabbers since 2020. Deforestation and fires in the region, combined with increased mining activity in the beds and banks of rivers and streams, foster a context of insecurity, social conflicts, loss of natural heritage and mercury contamination in the waters, individuals and all associated biodiversity.

The impunity of the miners encourages the practice of environmental crimes in the Amazon and the invasion of Indigenous Lands and Conservation Units. The Federal Police pointed to organized crime as a key source of investment in the great invasion of the Madeira River[17]. Illegal mining has a direct impact on the food security of the indigenous communities in the region, combined with environmental degradation, this forms a scenario of socio-cultural disruption of the indigenous peoples and worsens the climate crisis[18].

1.5 Climate Harm

Climate harm refers to the negative impacts on the environment, ecosystems, human health, and society because of climate change. The combination of frequent fires in the Amazon and rising temperatures, coupled with low relative humidity and stronger wind currents, are factors that contribute to the spread of fire throughout the region. Following the occurrence of fires, the material generated and the gases resulting from the heat sources (smoke) are carried by wind corridors[19], mostly originating from the southern part of the state of Amazonas. This phenomenon disrupts the functioning of the so-called flying rivers (air currents that transport

[14] JF 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SJAM (2024).
[15] CÂMARA DOS DEPUTADOS (2020).
[16] BRASIL (2022).
[17] FARIAS (2022).
[18] MINISTÉRIO DOS POVOS INDÍGENAS (2025).
[19] OBSERVATÓRIO DO CLIMA (2024).

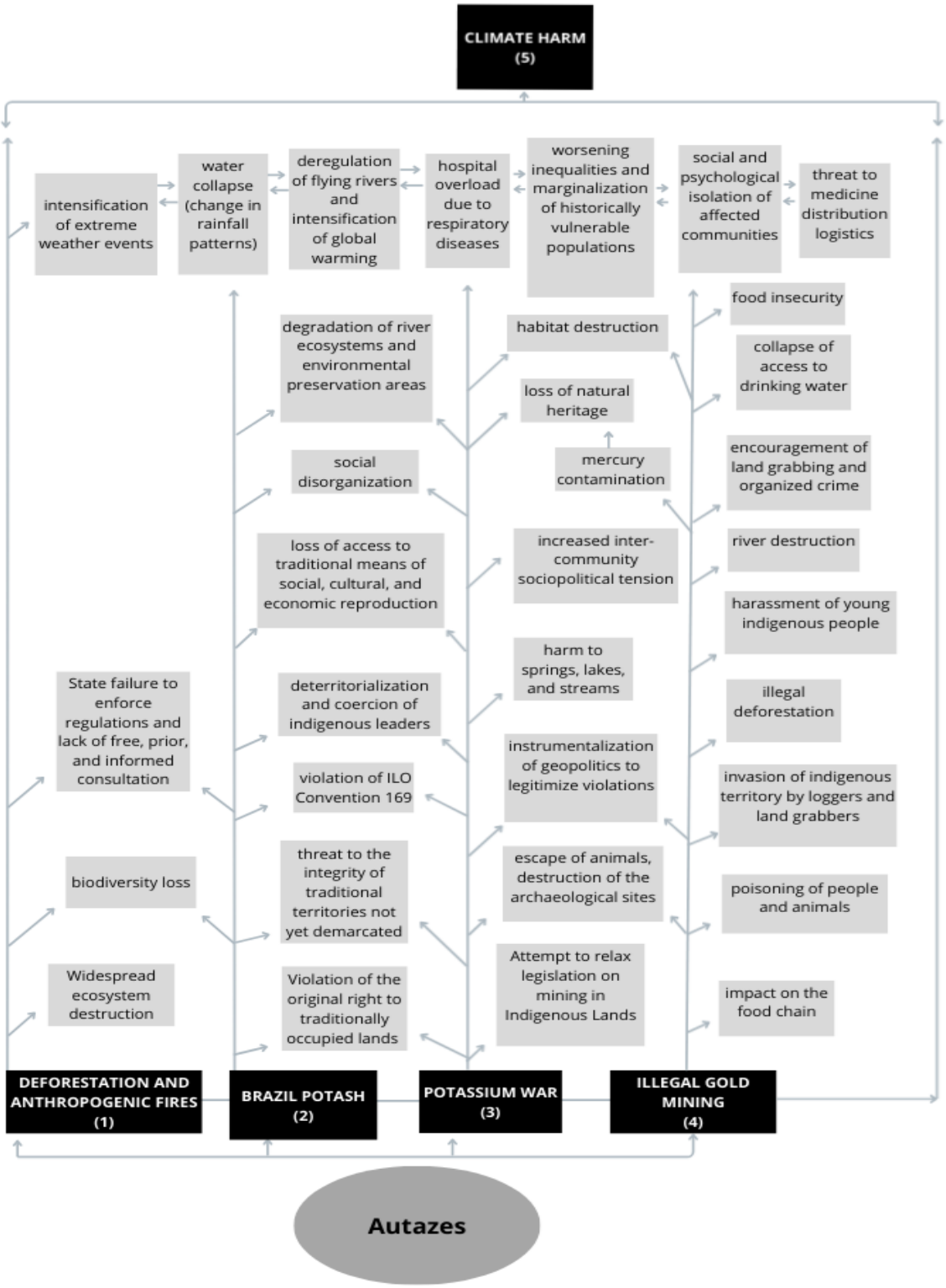
moisture from the Amazon to other South American countries), transforming them into vectors for the transport of soot and toxic air, creating veritable smoke corridors.

Regulatory policies and enforcement strategies distort their functions and, at the same time as they create difficulties for small local farmers, incriminating or leaving them vulnerable to criminal groups, they generate a power vacuum and impunity in relation to large industry (notably soy, meat, timber trafficking and illegal mining). All those anomic glimpses are supposed to begin with land insecurity, in the context of land-grabbing where it is almost impossible to know who owns the land.

Social division plays a significant role in studying the phenomenon of climate justice and victimization. It is the poor, the vulnerable (in terms of environmental victimization, it is the women, the very young and the elderly people), and Indigenous peoples subject to colonization who are the most likely to suffer the worst impacts of global warming[20]. Smoke corridors caused by fires leave a trail of overcrowding in hospitals, as it causes respiratory problems. Resentment and trauma, among and between the Amazonian peoples, severely affect the sense of identity and belonging, in such a way that it repels local communities and isolates them in poor neighborhoods.

The advance of predatory exploitation has transformed the agricultural frontier, aggravated the scenario of environmental injustices and made the region the most violent in the country, submitting the local population to multiple levels of victimization. The convergence of all those crimes and harms is causing a catastrophic scenario of conflicts and violence in Indigenous lands and the riverside communities living in the region. In a more didactic way, the mind map was created to demonstrate how each analytical topic is permeated with harmful behaviors and violations that, when converging, express themselves in victimization:

[20] WHITE (2018), pp. 79-95.


CLIMATE HARM (5)
intensification of extreme weather events
water collapse (change in rainfall patterns)
deregulation of flying rivers and intensification of global warming
hospital overload due to respiratory diseases
worsening inequalities and marginalization of historically vulnerable populations
social and psychological isolation of affected communities
threat to medicine distribution logistics
food insecurity
collapse of access to drinking water
encouragement of land grabbing and organized crime
river destruction
harassment of young indigenous people
illegal deforestation
invasion of indigenous territory by loggers and land grabbers
poisoning of people and animals
impact on the food chain
habitat destruction
loss of natural heritage
mercury contamination
increased inter-community sociopolitical tension
harm to springs, lakes, and streams
instrumentalization of geopolitics to legitimize violations
escape of animals, destruction of the archaeological sites
Attempt to relax legislation on mining in Indigenous Lands
degradation of river ecosystems and environmental preservation areas
social disorganization
loss of access to traditional means of social, cultural, and economic reproduction
deterritorialization and coercion of indigenous leaders
violation of ILO Convention 169
threat to the integrity of traditional territories not yet demarcated
Violation of the original right to traditionally occupied lands
State failure to enforce regulations and lack of free, prior, and informed consultation
biodiversity loss
Widespread ecosystem destruction
DEFORESTATION AND ANTHROPOGENIC FIRES (1)
BRAZIL POTASH (2)
POTASSIUM WAR (3)
ILLEGAL GOLD MINING (4)
Autazes

II. AUTAZES AS A (HYPER)HOTSPOT

From the patterns of social and environmental harm, it is possible to identify the rise of hotspots as areas where conflicts over resources and territory are concentrated both spatially and temporally[21]. In turn, Weinborn[22] illustrate that hotspots are usually identified by analyzing the number of events in a location, but this does not consider the severity of the events and the weighting of harm in that area. Focusing on the harm makes it possible to impact on the wellbeing of communities, as well as generating fewer costs for the system. However, the authors add that if the focus shifts to weights of the harm and the severity of the crime, it is possible to analyze where the harm associated with crimes is produced.

By studying the convergence between climate harm and socio-environmental harm and configurating Autazes as a hyper-hotspot, it becomes possible to anticipate that other regions experiencing similar resource and territorial disputes will likely host the same (or, at least some of) conflicts, potentially leading them to become new hotspots of conflict.

Autazes can be classified, at the same time, as a harmspot (hotspot of harm)[23] and a hotspot of crime[24]. The crimes and harms in this region spread and propagate what John Braithwaite[25] once conceived as "cascade phenomenon" and turned this place into a "hyper-hotspot" of crimes, conflicts and harms. In the context of the municipality of Autazes, multiple socio-environmental harms can be observed, resulting from different anthropic activities. These practices, carried out by various agents, from criminal networks to predatory companies, converge and feed off each other, resulting in multiple levels of victimization of traditional peoples.

III. HOW CAN GREEN CRIMINOLOGY AND VICTIMOLOGY CONTRIBUTE TO THE STUDY OF SOCIO-ENVIRONTMENTAL HARM IN AUTAZES?

According to Rodríguez[26], legal and normative boundaries of what is understood as crime and transgression emerge, to a large extent, from hegemonic processes informed by the vested interests of dominant social actors, whose forms of production are closely linked to the production of a significant, if not majority, share of environmental harm. These definitional regimes are not neutral; rather, they embody and perpetuate asymmetrical power relations, thereby facilitating the selective recognition and regulation of environmentally deleterious practices. In this context, powerful perpetrators systematically resist the criminalization of their conduct, strategically displacing accountability and externalizing the socio-environmental costs of regulatory violations onto marginalized populations and ecosystems[27].

Hall[28] explains that harmful business practices not only are not criminalized, but they are often legitimized by political and legal mechanisms. This permissiveness is revealed not only in the omission of criminal law, but also in the facilitation of these behaviors through reforms and

[21] BRAITHWAITE (2016).
[22] WEINBORN, *et al.* (2017), pp. 226-44.
[23] WEINBORN, *et al.* (2017), pp. 226-44.
[24] SHERMAN (1995), pp. 35-52.
[25] BRAITHWAITE (2022), pp. 569-616.
[26] RODRÍGUEZ, *et al.* (2017), pp. 19-20.
[27] SOUTH, *et al.* (2013), pp. 27-42.
[28] HALL (2017), pp. 1-22.

flexibilities in civil and administrative law. Hall states that the centrality of harm, even in cases where such conduct is criminalized, makes it possible to take a more comprehensive approach, especially given the insufficiency of jurisdictional mechanisms —national, transnational or international— to adequately hold such violations accountable.

When addressing climate change, criminology focuses on the causes and consequences in a different way from the traditional literature on adaptation and mitigation. It analyzes who is causing or aggravating global warming and who are the victims of its effects. To investigate these harms, it is necessary to explore the relationship between humans and the environment, specifically the criminal and harmful environmental actions practiced mainly by the agents working within and through power structures[29].

More broadly, the purpose of green victimology is to study social processes and institutional responses to victims (human and nonhuman animals) of environmental crimes. Scholars in the green criminology field, whose matrix is guided by an intensive critique of the destructive potential of environmental harm, has for decades denounced the incestuous relationship between the State and the crimes of the powerful (State-corporate crimes)[30]. Remarkably, though, little or no research has been done on the accountability initiatives derived from harmful behavior[31] or to hold accountable those responsible for multiple social and environmental victimization in the corporate field[32].

Southern Green Criminology investigates environmental crime in the Global South from a sociocriminological perspective. Rodríguez[33] denounces the fact that the systematic exploitation of Latin America's natural resources acts as a catalyst for other illicit practices aimed at seizing and controlling those resources, thereby contributing to the escalation of crime, socio-environmental harms and conflict within Latin American societies.

In face of so many anomic glimpses, regulatory policies usually oversimplify the dynamics of local social conflicts. As much as the power of planetary discourse is recognized (above all because it enables global solidarity through the interconnectedness inherent in planetary problems)[34], universalist justifications have found it extremely difficult to recognize the specificities of the Amazonian context. According to a more nuanced literature related to the Amazon Basin, there are "several Amazons", given the biome's global extent[35]. The pluriversality of its peoples is immense, and the challenge of equating the urban Amazon, the occupation of the forest and the abstract limits of demarcated lands are even more complex.

If that were not difficult enough, empirical data on the region, in most cases, does not reflect the recent scenario, making it impossible to analyze more accurately the cycles of poverty, urban mobility and displacement of crime, deterioration of health or the current situation of public security in the region. The current dynamics are not limited to the harm caused by the climate dynamics themselves. Its effects extend to crime triggered by climate strains[36], raising

[29] WALTERS (2023), pp. 283-303; BRISMAN & SOUTH (2013), pp. 17-40; SOLLUND (2015), pp. 1-26.
[30] WALTERS (2023), pp. 283-303.
[31] LAUFER (2008), pp. 392-428; SAAD-DINIZ (2019), pp. 184-90.
[32] LAUFER (2017), pp. 1-63.
[33] RODRÍGUEZ (2021), pp. 1-5.
[34] ROCKSTRÖM, *et al.* (2024), pp. 1-10.
[35] see BECKER (2015).
[36] AGNEW (2011), pp. 21-42.

overall levels of victimization, especially among the groups most exposed and vulnerable to its effects, or even those with the least capacity to adapt, generally located in developing countries.

In particular, the same difficulties related to the selectivity and dysfunctionality of the criminal justice system[37], materialized by impunity or the punishment of scapegoats, end up hindering the progress of innovative proposals for repairing the harm and restoring the conflict. Deforestation in the Amazon threatens not only human beings: as being the most biodiverse region on the planet, forest fires and deforestation put countless species of animals, vegetation and ecosystems at risk of extinction[38].

3.1 Multiple levels of victimization and the limitations of traditional victimology categories in addressing socio-environmental victimization in Autazes

Environmental victims vary according to their attitude, behavior and ability to react to the climate change phenomenon. The dimension for analyzing environmental victimization is not just how harm is caused to individuals and groups, but how these individuals and groups respond to victimization. Environmental victimization focuses mainly on the actions and omissions that cause harm to certain groups of individuals (based on geography, gender, class, age, ethnicity and occupation) and tries to analyze the harm caused to specific ecosystems and non-human animals.

The empirical reality shows a scenario marked by environmental injustice, a context in which environmental harm has a significant impact on human forms of sociability and subsistence. In this context it is possible to understand how and to what extent environmentally harmful behavior ends up being reflected in the deepening of social and economic inequalities, deepening pre-existing vulnerabilities and creating opportunities for harm production on historically marginalized victims[39].

The Amazonian catastrophe, materialized by the convergence of crimes that are difficult to detect, such as land grabbing, illegal logging, illegal gold mining and farming with liabilities for environmental illegalities, namely deforestation and high levels of victimization[40], is triggering various socio-environmental changes. Both in nature, whose harm can be seen in the recent intensification of the savannization process[41], and in society, whose impact can be seen in the high rates of contamination of indigenous peoples[42], as well as the violence practiced due to the invasion of demarcated lands, which reinforce and intensify the process of victimization of marginalized and historically vulnerable populations[43].

The impact of climate change in the Amazon region and its relationship with the victimization of local communities highlights the need for a victimological approach to understand and mitigate the adverse effects. Victimological studies show that some social groups are even more vulnerable, producing "selective victimization" through the spread of socially and environmentally harmful behavior. Some regions will heat up more than others, some will

[37] KÖLBEL (2019), pp. 249-68; SCHMIDT (2024), pp. 59-86; BURCHARD & SCHMIDT (2024), pp. 83-110.
[38] VAN SOLINGE (2010), pp. 263–77; WHITE (2018), pp. 79-95.
[39] PELLOW (2018), pp. 303-6; TAYLOR (2000), pp. 508-80.
[40] WAISBICH, *et al.* (2022), pp. 1-42.
[41] GATTI, *et al.* (2021), pp. 388–93.
[42] BASTA, *et al.* (2024).
[43] DE CARVALHO, *et al.* (2021), pp. 251-71.

suffer from intense rainfall and others will endure more droughts, marginalized regions will suffer from the overlapping injustices to which they will be subjected, including, in addition to global warming, the worsening of climate insecurity situations and the overloading of public health systems, amid an increasingly alarming scenario, due to the spread of epidemics and threats of new pandemics[44].

The development of a typology of victims of crime and environmental harm is necessary to guide research, policy and methods[45]. Furthermore, Saad-Diniz insists that it is important for understanding the limits of the legitimacy of accountability based on the concept of the victim, and for representing the interaction between the victim, the perpetrator and society. However, the use of undifferentiated universal categories cannot be permitted, as they obscure the dynamics of victimization and undermine the formulation of public policy.

For the field to advance, a specific and context-sensitive theoretical foundation is required. Therefore, the foundations of environmental victimology must be empirically grounded in order to identify more precisely the processes of recognition, inclusion and legitimization from the victims' perspective[46]. The development of typologies helps to formulate strategies aimed at identifying and preventing victimization through the analysis of behavioral patterns and potential forms of intervention[47].

The victimization process, as described by Walklate[48], consists of an interactive process through which certain subjects are identified and recognized as victims. The author also points out a second meaning of the term, of a more structural nature, in which victimization is understood as a socially unequal phenomenon, manifesting itself disproportionately among different social groups, based on indicators such as age, class, gender, and ethnicity. This perspective is particularly relevant in highlighting that certain segments of the population —such as ethnic minorities, notably indigenous peoples and riverine communities— are more vulnerable to victimization. Thus, victimization takes on systematic and repeated contours, revealing different levels of victimization, based on the victim's relationship to the fact, the State, and social groups: as a) primary victim; b) secondary victim and c) tertiary victim[49].

Primary or direct victimization (a) encompasses the immediate effects of the criminal offense upon the victim (economic, physical, emotional, and social, as well as the victim's perceptions regarding the risk of future victimization)[50]. Secondary, indirect, or collateral victimization (b) refers to the treatment of the victim within the criminal justice system, particularly the intimidation, revictimization, and institutional discomfort generated by procedural dynamics, especially in circumstances in which victims are discredited, marginalized, or rendered vulnerable by institutions charged with providing protection and support. Tertiary victimization (c) extends beyond the individual sphere, producing repercussions at the collective level, affecting families, communities, public order, social cohesion, public administration, and

[44] MCKINNON (2022).
[45] SOUTH, *et al.* (2013), 43-58.
[46] SAAD-DINIZ (2019), p. 130.
[47] MCSHANE & EMEKA (2011), p. 4.
[48] WALKLATE (2017), pp. 30-45.
[49] SAAD-DINIZ (2019), pp. 130-33.
[50] SHAPLAND & HALL (2007), pp. 175-217.

governmental structures, insofar as it concerns the broader relational dynamics among individuals, social groups, and institutions[51].

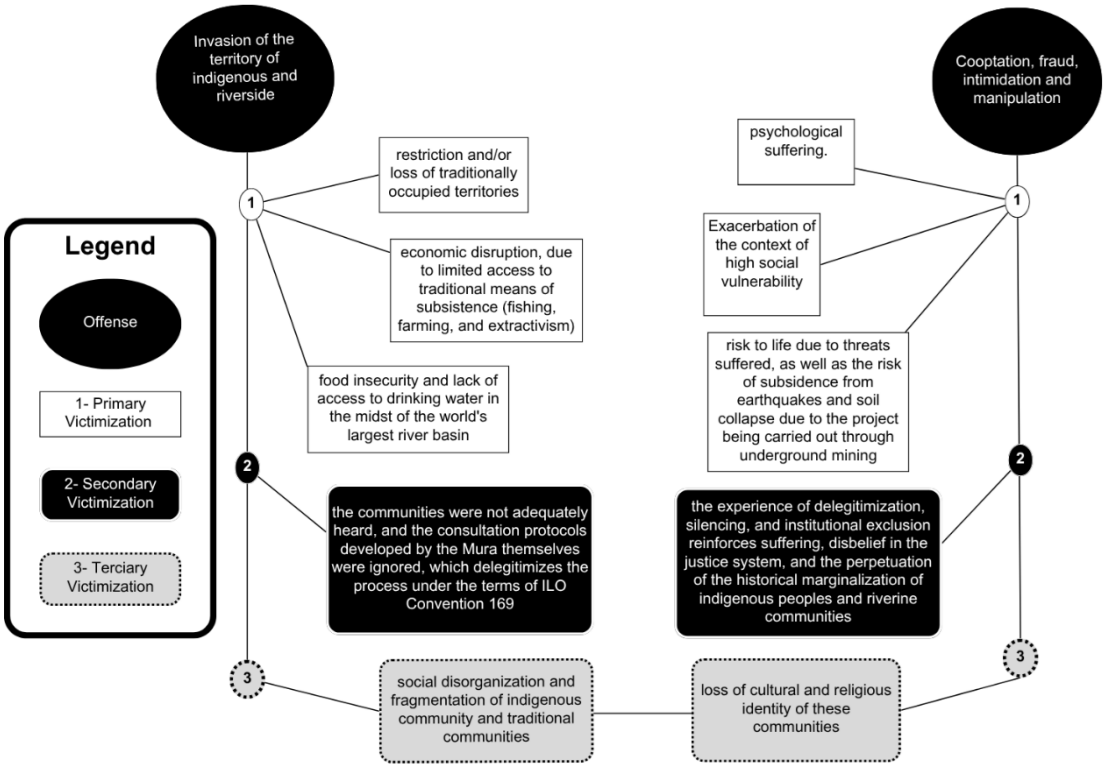
3.2 The State as a co-author and reproducer of the institutional and collective violence of the socio-environmental conflict in Autazes

This traditional taxonomy needs to be reformulated when dealing with socio-environmental victimization. In the context of Autazes, for example, the State acts at all levels of victimization. The case reveals a pattern of institutional negligence, irregular environmental licensing, and a lack of free, prior, and informed consultation, as required by the Brazilian Federal Constitution and Convention No. 169 of the International Labor Organization.

The Paracuhuba (approved) and Jauary (in the process of demarcation) Indigenous Lands, in addition to other claimed areas, are under increasing socioeconomic and land pressure. The company Brazil Potash began mineral prospecting activities without due observance of legal procedures. It obtained a preliminary license from the Amazonas Environmental Protection Institute (IPAAM), which is a state agency, despite the legal jurisdiction of the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), which is a federal agency, for high-impact projects and the absence of an Indigenous Component Study (ECI). The National Indigenous Peoples Foundation (FUNAI), the Brazilian government's official indigenous agency, remained silent on its demarcation duties, even in the face of repeated provocations from the Federal Public Prosecutor's Office[52].

A mind map was made to demonstrate in a more didactic way how the offenses derived from mining in the territory result in the victimization of traditional communities.

[51] HOWARTH & ROCK (2000), pp. 58-77.
[52] JF 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SJAM (2020).



State (in)action directly contributes to the production and reproduction of the levels of victimization to which the Mura people and riverine communities are subjected. At the primary level, because it allowed, through political and administrative decisions, the implementation of a project with high potential for environmental degradation in traditional territory. At the secondary level, because it revictimized communities in legal proceedings and neglected institutional duties. At the tertiary level, it contributed to the social fragmentation of the community by recognizing the validity of the consultation and consent carried out in an irregular manner.

The State did not act only at the secondary level of victimization, as proposed by victimological studies. On the contrary, the State acted as a co-author and reproducer of the institutional and collective violence that permeates the socio-environmental conflict in Autazes. This demonstrates precisely how the State and the Brazil Potash company conspired, in an act of collusion, so that both extremely powerful entities not only benefited from the extraction of sylvinite, but also reinforced each other in order to facilitate and normalize forms of embezzlement. This context further concentrates State-corporate power[53], expressing the experience of delegitimization, silencing, and institutional exclusion reinforces suffering, disbelief in the justice system, and the perpetuation of the historical marginalization of indigenous peoples and riverine communities.

The convergence of interests between the Brazilian State and the Brazil Potash company in the municipality of Autazes creates a situation of institutional collusion that favors the overlap

[53] BARAK (2017), pp. 122-24.

between crimes and socio-environmental harm, particularly with regard to the violation of indigenous peoples' rights. This dynamic exemplifies, in the words of Ruggiero[54], the way in which corporate agents, by normalizing criminal behavior, trigger imitative processes, so that their crimes become criminogenic and the harms cause continuous and systematic harms when concentrated in a territory as crucial as the Amazon Basin, converting the spot into a hyper-hotspot that is expressed in the hypervictimization of local populations.

Furthermore, a neutralized Judiciary ends up revictimizing (secondary victimization), not only because it creates a sense of impunity, institutional vacuum, and greater presence of organized crime, but also because it breaks the cycle of trust and legitimacy in the eyes of the victim. The State absence is the gateway to the hyper concentration of violent crime, generating a cycle that is filled by tertiary victimization.

The precariousness of public policies to encourage education, health, transportation, and employment creates a scenario conducive to indigenous peoples and riverine communities, without prospects, being recruited by organized crime for environmental crime or drug trafficking so that they can have access to opportunities. In this sense, the State is not sufficient to provide local development or social inclusion, allowing illegal economies to become the local "livelihood". In the State absence, the Amazon becomes a strategic route for the activities of organized crime and fosters an "environmental crime ecosystem", which is manifested by the convergence of environmental crimes and related non-environmental crimes (fraud, money laundering, corruption, homicide, threats, illegal possession of weapons, ammunition, and explosives, drug and human trafficking)[55].

The result is increased violence and territorial conflicts, with marked (hyper)victimization of local peoples and communities. Tertiary victimization combined with the lack of public policies reinforces the negative impact of hypervictimization on local communities.

The construction of typologies in the field of environmental victimology enables a more systematic analysis of human–environment interactions and the harms affecting specific beings and regions. Such frameworks can inform more appropriate responses regarding accountability, sanctions, and restorative measures for different types of victims. Even in the face of all the difficulties, there is room for a corpus theoricus of a "victimology of the Amazon Rainforest" and, as a first and decisive step towards identifying the evolution of multiple levels of victimization to the configuration of hypervictimization, there is a huge potential in the convergence with ethnographic studies (especially related to research on who and how is victimized in the dynamics of environmental exploitation in the region).

IV. HYPERVICTIMIZATION AS A RESULT OF THE ACCUMULATION AND CONVERGENCE OF HARM, CRIMES AND CONFLICTS IN AUTAZES

The concept of hypervictimization is often used to express discrimination, continuous social isolation of marginalized and silenced people as an act of power and submission[56]. In this study, the concept is explored from the perspective of the exploitation of the Amazon Basin.

---

[54] RUGGIERO (2025), pp. 1-9.

[55] WAISBICH, *et al.* (2022), pp. 1-42.

[56] BOLIVAR (2024), pp. 20-4; BUIST & SEMPREVIVO (2022), pp. 1-12; COX (2023), pp. 4123-37; PROJANSKY (2001), pp. 154-95; RISTIĆ (2018), pp. 391-405.

As this is a case of victimization in the Amazon, substantially affecting local communities (tertiary victimization), the climate harm responsible for generating smoke cloud accumulation culminates in a cognitive dimension and triggers hypervictimization of local communities. This is explained by the fact that the hyperhotspot, characterized by a high concentration of conflicts, crime and harm in the Amazon Basin, causes a process whereby harm accumulates and systematically triggers further harm, ultimately converting environmental harm into climate harm. Thus, the levels of victimization —primary, secondary, and tertiary— are interdependent and cumulative, feeding back into each other and producing continuous and progressive harm.

From conventional socio-environmental disasters (deforestation and degradation) to the threat of predators from the extractive industry and local organized crime to the fact that riverside dwellers and residents of urban, peri-urban and rural communities have suffered from drought, fires and rising temperatures, it is quite possible to identify the cognitive accumulation of victim conflict[57]. Hypervictimization in its cognitive dimension goes beyond the harm suffered and encompasses exponential harm, which intensifies the multiple levels of socio-environmental harms and increases the consequences of climate harm. And it is precisely the objective determination of these mechanisms of hypervictimization that should guide the study of harm and its overlaps in the climate crisis scenario, if it is indeed the case to think about possible solutions to the current scenario.

Despite the planetary dimensions of the conflicts and the transnational effects of local environmental issues[58], it is the local population that is subjected to the suffering derived from this equation between climate injustice and the multiple processes causing socio-environmental harm in the region. Individuals are systematically forced to abandon the igarapés and the precariousness of urban settlements, daily subjected to violence and extortion by organized crime, not to mention widespread depression and frustration at the self-destruction and trivialization of death in urban and suburban centers. Even more delicately, in the Amazon context, indigenous peoples are extremely vulnerable to climate change, as they depend on land and natural resources for their livelihoods.

Climate events do not just affect the most disenfranchised communities. In a global scenario forged by environmental injustices, environmental harm has a significant impact on human forms of sociability and subsistence. The difference is that wealthy nations invest in adaptation to deal with these events, which increases environmental injustice[59]. Capitalism and neoliberal policies intensify environmental injustices, because economic structures prioritize profit over social and environmental well-being, which causes ecological degradation and disproportionately affects marginalized communities[60].

The Autazes Case illustrates what White refers to as "patterns of differential victimization"[61], in which certain individuals (in this case, the Mura indigenous peoples) are more vulnerable to environmental victimization and environmental injustices. Furthermore, the territory also highlights another dimension of this selective victimization conceived by the author, which involves people's subjective disposition and awareness of these damages and socioeconomic

[57] CHRISTIE (1977), pp. 1-15.
[58] SOLLUND (2016), pp. 3-14.
[59] KLINENBERG, *et al.* (2020), pp. 649-99.
[60] FABER (2018), pp. 8-28.
[61] WHITE (2013), pp. 15-20.

pressures to accept the risks arising from environmental problems. In this case, this was evident in the violation of ILO Convention 169, due to the failure to comply with protocols for free, prior, and informed consultation before procedures that directly affect their communities.

This hypervictimization has produced a generational trauma much more severe than post-traumatic stress disorder. The trauma accentuates the fact that this hypervictimization to which Amazonian people are exposed has already reached intolerable levels that demand emergency interventions, guided by social practices that lead to the need for very basics public health-oriented solutions. And this does not require much more sophisticated solutions than reception measures and the distribution of justice, with simple emergency reception interventions and immediate care for the victims, taking control for the last time of the escalating and accumulating injustices in the region.

V. CONCLUDING REMARKS

From this case study of the multiple harms processes caused by the socio-environmentally harmful behavior of the Brazil Potash company and other activities that explores the territory, it is possible to verify that the main victims of the socio-environmental harms have lost their rights to participate. The conflicts generated by the dispute over territories harm not only the Mura people, but also social systems. Christie[62] believes that one way of reducing attention to the conflict is to reduce attention to the victim. The central objective of the trials is to attribute guilt, but not to question what could undo the act considered criminal. If the victim were (re)introduced into the case, the action could turn to how to mitigate the victim's losses or restitution.

This research sought to demonstrate that traditional categories of victimization are insufficient to encompass the complexity of socio-environmental victimization in the Amazonian context. The overlap of levels of victimization —primary, secondary, and tertiary— engenders a new dimension of victimization, characterized by the absence of direct and immediate causality, thus constituting a form of victimization that is diffuse in nature and has a remote causal link. The Autazes context also showed that climate harm results from the convergence and accumulation of multiple socio-environmental harms in the region - a dynamic in which the harm itself becomes a generator of new layers of harm, reinforcing cycles of vulnerability and degradation.

The article highlights the urgency of concrete actions to tackle hypervictimization in the Amazon, recognizing it as a central issue for the protection of people and the preservation of the planet. The case study provides an agenda for future researches: (i) the correlation between human rights and the environment, because the invasion of indigenous lands, violation of access to their territories, and the violation of ILO Convention 169 has a direct impact on the processes of victimization to which individuals are subjected, until it reaches social disorganization, loss of cultural and religious identity and loss of their own territories. (ii) And also an analysis of harm to victimization to think about solutions for the reparation and reversibility of the negative impacts of supply chains.

[62] CHRISTIE (1997), pp. 1-15.

BIBLIOGRAPHY

AGNEW, Robert (2012). "Dire forecast: A theoretical model of the impact of climate change on crime", in *Theoretical Criminology*, Vol. 16, N.° 1, pp. 21-42.

BARAK, Gregg (2017). *Unchecked Corporate Power: Why the Crimes of Multinational Corporations are Routinized Away and What We Can Do About It*, Routledge.

BASTA, Paulo Cesar (2024). "Impacto do mercúrio em áreas protegidas e povos da floresta na Amazônia: uma abordagem integrada saúde-ambiente", in *Relatório Técnico-Fundação Oswaldo Cruz-Fiocruz*, Editora Fiocruz.

BECKER, Bertha (2015). *As Amazônias: Ensaios Sobre Geografia e Sociedade na Região Amazônica*, Vol. 3, Garamond.

BRAITHWAITE, Alex (2016). *Conflict Hot Spots: Emergence, Causes and Consequences*, Routledge.

BRAITHWAITE, John (2022). *Macrocriminology and Freedom*, ANU Press.

BRASIL, Katia (2022). *Garimpo invade o Rio Madeira:* July 18, 2022, Amazonia real. Available at: <https://amazoniareal.com.br/especiais/balsas-no-madeira/>.

BRASIL. CÂMARA DOS DEPUTADOS (2020). *Projeto de Lei n° 191/2020 [Bill No. 191/2020]*: Regulates § 1 of art. 176 and § 3 of art. 231 of the Constitution to establish specific conditions for conducting research and mining mineral and hydrocarbon resources and for the use of water resources for electricity generation on indigenous lands, and establishes compensation for restrictions on the use of indigenous lands, Brazil. Chamber of Deputies. Available at: <https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=1855498&filename=PL%20191/2020>.

BRISMAN, Avi & SOUTH, Nigel (2013). "Introduction: Horizons, Issues and Relationships in Green Criminology", in SOUTH, Nigel & BRISMAN, Avi (eds.), *Routledge International Handbook of Green Criminology*, Routledge, pp. 17-40.

BOLIVAR, Andrea (2024). "Trans* of Color im/possibilities in Trans Language Activism", in *Journal of Sociolinguistics*, Vol. 28, N.° 3, pp. 20-24.

BUIST, Carrie & SEMPREVIVO, Lindsay (2022). "Introduction: Towards Freedom, Empowerment, and Agency: An Introduction to Queering Criminology in Theory and Praxis: Reimagining Justice in the Criminal Legal System and Beyond", in BUIST, Carrie & SEMPREVIVO, Lindsay (eds.), *Queering Criminology in Theory and Praxis*, Bristol University Press, pp. 1-12.

BURCHARD, Cristoph & SCHMIDT, Finn-Laurentz (2024). "Kritik des Klimastrafrechts", in SATZGER, Helmut & VON MALTIZ, Nicolai (eds.), *Klimastrafrecht: Due Rolle von Verbots – und Sanktionsnormen im Klimaschutz*, Nomos Verlagsgesellschaft mbH & Co. KG, pp. 83-110.

CHRISTIE, Nils (1977). "Conflicts as property", in *British Journal of Criminology*, Vol. 17, N.° 1, pp. 1-15.

COX, Nicole (2023). "The butterfly effect: sexual assault and the aftermath on Netflix´s 13 Reasons Why", in *Feminist Media Studies*, Vol. 23, N.° 8, pp. 4123-4137.

DE CARVALHO, Salo, GOYES, David R. & VEGH, Valeria (2021). "Politics and indigenous victimization: The case of Brazil", in *The British Journal of Criminology*, Vol. 61, N.° 1, pp. 251-271.

FABER, Daniel (2018). "Global Capitalism, Reactionary Neoliberalism, and the Deepening of Environmental Injustices", in *Capitalism Nature Socialism,* Vol. 29, N.° 2, pp. 8-28.

FARIAS, Elaíze (2022). *The potassium war in Autazes*: April 5, 2022, Amazonia Real. Available at: <https://amazoniareal.com.br/especiais/the-potassium-war-in-autazes/>.

FELIZARDO, Nayara. (2023). *Avô de tiktoker da capivara está entre os causadores da fumaça em Manaus:* November 6, 2023, Intercept Brasil. Available at: <https://www.intercept.com.br/2023/11/06/fumaca-manaus-esses-sao-desmatadores-que-contribuiram-por-anos/#:~:text=Segundo%20o%20relat%C3%B3rio%20do%20Ibama,96%20mil%20bois%20e%20b%C3%BAfalos>.

FERRANTE, Lucas, GOMES, Mércio & FEARNSIDE, Philip (2020). "Amazonian indigenous peoples are threatened by Brazil´s Highway BR-319", in *Land Use Policy,* Vol. 94, N.° 104548, pp. 1-7.

FLORES, Bernardo M., *et al.* (2024). "Critical transitions in the Amazon forest system", in *Nature*, Vol. 626, N.° 7999, pp. 555–564.

RODRPIGUEZ, Luciana V., *et al.* (2021). "Amazonia as a Carbon Source Linked to Deforestation and Climate Change", in *Nature*, Vol. 595, N.° 7867, pp. 388–393.

HALL, Mathew (2017). *Exploring Green Crime: Introducing the Legal, Social and Criminological Contexts of Environmental Harm*, Bloomsbury Publishing, pp. 1-22.

HARRIS, Mark (2010). *Rebellion on the Amazon: the Cabanagem, Race, and Popular Culture in the North of Brazil, 1798-1840,* Cambridge University Press.

HOWARTH, Glennys & ROCK, Paul (2000). "Aftermath and the Construction of Victimization: the Other Victims of Crime", in *Howard Journal of Criminal Justice*, Vol. 39, N.° 1, pp. 58-77.

KLINENBERG, Eric, *et al.* (2020). "Sociology and the Climate Crisis"*, in Annual Review of Sociology,* Vol. 46, N.° 1, pp. 649-699.

KÖLBEL, Ralph (2019). "Die dunkle Seite des Strafrechts", in *Neue Kriminalpolitik*, Vol. 31, N.° 3, pp. 249-268.

LAUFER, William S. (2008). *Corporate bodies and guilty minds: The Failure of Corporate Criminal Liability.* University of Chicago Press.

LAUFER, William S. (2017). "The Missing Account of Progressive Corporate Criminal Law", in *New York University Journal of Law and Business*, Vol. 14, pp. 1-63.

LAUFER, William S. (2018). "A Very Special Regulatory Milestone", in *University Pennsylvania Journal Business Law*, Vol. 20, pp. 392-428.

MCKINNON, Catriona (2022). *Climate Change and Political Theory*, Polity Press.

MCSHANE, Marilyn & EMEKA, Traqina (2011). *American Victimology*, LFB Scholarly Pub.

MINISTÉRIO DO MEIO AMBIENTE E MUDANÇA DO CLIMA (2023). *Ibama combate queimadas e desmatamento em Autazes (AM)*: December 11, 2023, Ministério do Meio Ambiente e Mudança do Clima. Available at: <https://www.gov.br/ibama/pt-br/assuntos/noticias/2023/ibama-combate-queimadas-e-desmatamento-em-autazes-am>.

MINISTÉRIO DOS POVOS INDÍGENAS (2025). *Mineração em Terras Indígenas viola direitos indígenas e agrava crise climática, aponta relatório*: December 1, 2025, Ministério dos Povos Indígenas. Available at: <https://www.gov.br/povosindigenas/pt-

br/assuntos/noticias/2025/11/mineracao-em-terras-indigenas-viola-direitos-indigenas-e-agrava-crise-climatica-aponta-relatorio>.

OBSERVATÓRIO BR-319 (2024). *Retrospectiva 2023: desmatamento e focos de calor na área de influência da rodovia BR-319*. Available at: <https://observatoriobr319.org.br/wp-content/uploads/2024/02/Relatorio-Retrospectiva-Desmatamento-Queimadas-2023-v3.pdf>.

OBSERVATÓRIO DO CLIMA (2024). *Na newsletter: rios voadores viram corredores de fumaça [In the newsletter: flying rivers become smoke corridors]*: August 26, 2024, Observatório do Clima [Climate Observatory]. Available at: <https://www.oc.eco.br/na-newsletter-rios-voadores-viram-corredores-de-fumaca/>.

PELLOW, David Naguib (2018). "What is critical environmental justice?", *in Review of Agricultural, Food and Environmental Studies*, Polity Press, Vol. 99, pp. 303-306.

PROJANSKY, Sarah (2001). *Watching Rape: Film and Television in Postfeminist Culture*, New York University Press.

RISCTIĆ, Katarina (2018). "The Media Negotiations of War Criminals and Their Memoirs: The Emergence of the `ICTY Celebrity´", in *International Criminal Justice Review*, Vol. 28, N.° 4, pp. 391-405.

ROCKSTRÖM, Johan, *et al.* (2024). "The Planetary Commons: A New Paradigm for Safeguarding Earth-regulating Systems in the Anthropocene", in *Proceedings of the National Academy of Sciences*, Vol. 121, N.° 5, pp. 1-10.

RODRÍGUEZ, David (2021). "Environmental Crime in Latin America and Southern Green Criminology", in *Oxford Research Encyclopedia of Criminology*.

RODRÍGUEZ, David, *et al.* (2017). *Introducción a la criminología verde: conceptos para nuevos horizontes y diálogos socioambientales*, Temis.

RUGGIERO, Vincenzo (2025). "Fields of Victimization: When Crime Generates Crime", in *Crime, Law and Social Change*, Vol. 83, N.° 1, pp. 1-9.

SAAD-DINIZ, Eduardo & GIANECCHINI, João Victor (2021). "Regulatory Rollbacks in the Amazon Rainforest: A Nuanced Look into the Effects of Environmental Victimization", in *State Crime Journal*, Vol. 10, N.° 2, pp. 257-283.

SAAD-DINIZ, Eduardo (2019). *Vitimología corporativa*, Tirant lo Blanch.

SASSINE, Vinicius (2023a). *Área da BR-319 concentrou 40% das queimadas no Amazonas em período crítico da seca:* December 12, 2023, Folha de S. Paulo. Available at: <https://www1.folha.uol.com.br/ambiente/2023/12/area-da-br-319-concentrou-40-das-queimadas-no-amazonas-em-periodo-critico-da-seca.shtml>.

SASSINE, Vinicius (2023b). *Seca severa é usada para pressão por BR-319 na Amazônia, e governo Lula cria grupo de trabalho:* October 4, 2023, Folha de S. Paulo. Available at: <https://www1.folha.uol.com.br/ambiente/2023/10/seca-severa-e-usada-para-pressao-por-br-319-na-amazonia-e-governo-lula-cria-grupo-de-trabalho.shtml>.

SCHMIDT, Finn-Laurentz (2024). "Alternativloses Klimaschutzstrafrecht? Klimakatastrophismus und Exzeptionalisierungen des Strafrechts als Treiber in eine imaginative Sackgasse", in *RW Rechtswissenschaft*, Vol. 15, N.° 1, pp. 59-86.

SHAPLAND, Joanna & HALL, Matthew (2007). "What Do We Know About the Effect of Crime on Victims?", in *International Review of Victimology*, Vol. 14, N.° 2, pp. 175-217.

SHERMAN, Lawrence W. (1995). "Hot spots of crime and criminal careers of places", in *Crime and place,* Vol. 4, pp. 35-52.

SOLLUND, Ragnhild Aslaug (2015). "Introduction: Critical Green Criminology—An Agenda for Change", in SOLLUND, Ragnhild Aslaug (ed.), *Green Harms and Crimes: Critical Criminology in a Changing World,* Palgrave Macmillan UK, pp. 1-26.

SOLLUND, Ragnhild (2016). "Chapter 1. Eco-global crimes: Contemporary problems and future challenges", in ELLEFSEN, Rune; SOLLUND, Ragnhild & LARSEN, Guri (eds.), *Eco-global Crimes: Contemporary Problems and Future Challenges*, Routledge, pp. 3-14.

SOUTH, Nigel, *et al.* (2013). "A Guide to a Green Criminology", in Brisman, Avi & SOUTH, Nigel (eds.), *Routledge International Hhandbook of Green Criminology,* Routledge, pp. 27-42.

TAYLOR, Dorceta E. (2000). "The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social construction of Environmental Discourses", in *American Behavioral scientist*, Vol. 43, N.° 4, pp. 508-580.

VAN SOLINGE, Tim Boekhout (2010). "Deforestation Crimes and Conflicts in the Amazon", in *Crit Criminol,* Vol. 18, pp. 263–277.

WAISBICH, Laura, *et al.* (2022). "O Ecossistema do crime ambiental na Amazônia: uma análise das economias ilícitas da floresta", in *Instituto Igarapé*, pp. 1-42.

WALKLATE, Sandra (2017). "Defining victims and victimization", in DAVIES, Pamela, *et al.* (eds.), *Victims, Crime & Society: An Introduction*, second edition, Sage Publications, pp. 30-45.

WALTERS, Reece (2023). "Ecocide, Climate Criminals and the Politics of Bushfires", in *The British Journal of Criminology*, Vol. 63, N.° 2, pp. 283-303.

WEINBORN, Cristobal, *et al.* (2017). "Hotspots vs. Harmspots: Shifting the Focus from Counts to Harm in the Criminology of Place", in *Applied Geography*, Vol. 86, pp. 226-244.

WHITE, Rob (2013). *Crimes Against Nature: Environmental Criminology and Ecological Justice*, Willan Publishing.

WHITE, Rob (2018). *Climate Change Criminology*, Bristol University Press.

CASE LAW

JUSTIÇA FEDERAL DA 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SEÇÃO JUDICIÁRIA DO AMAZONAS. BRASIL (2020). Ação Civil Pública N.° 0019192-92.2016.4.01.3200 [Public Civil Action N.° 0019192-92.2016.4.01.3200], July 18, 2025. Available at: <https://www.mpf.mp.br/grandes-casos/caso-potassio/documentos-importantes/acp-2016-parte-1 and https://www.mpf.mp.br/grandes-casos/caso-potassio/documentos-importantes/acp-2016-parte-2>.

JUSTIÇA FEDERAL DA 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SEÇÃO JUDICIÁRIA DO AMAZONAS. BRASIL (2022). Petição Inicial da Ação Civil Pública N.° 1015595-88.2022.4.01.3200, January 26, 2026. Available at: <https://www.mpf.mp.br/grandes-casos/caso-potassio/documentos-importantes/peticao-inicial-acp-demarcacao>.

JUSTIÇA FEDERAL DA 1ª REGIÃO, 1ª VARA FEDERAL CÍVEL DA SEÇÃO JUDICIÁRIA DO AMAZONAS. BRASIL (2024). Tutela Antecipada Antecedente 12135 na Ação Civil Pública N.° 1014651-18.2024.4.01.3200 [Petition for preliminary injunction 12135 in the Public Civil Action N.° 1014651-18.2024.4.01.3200]. September 16, 2024. Available at: <https://www.mpf.mp.br/am/sala-de-imprensa/docs/00.PET.%20INICIAL%20-%20Acao%20tutela%20antec.%20antecedente%20-%20LI%20IPAAM.Potassio%20-1.pdf>.

MINISTÉRIO PÚBLICO FEDERAL, PROCURADORIA DA REPÚBLICA NO ESTADO DO AMAZONAS, 5º OFÍCIO. BRASIL (2016). Inquérito Civil N.° 1.13.000.000852/2015-88, July 7, 2016. Available at: <https://www.mpf.mp.br/grandes-casos/caso-potassio/documentos-importantes/recomendacao-2016>.

LIST OF ABBREVIATIONS

UBS	Union Bank of Switzerland
ILO	International Labor Organization
FUNAI	Fundação Nacional dos Povos Indígenas (National Foundation for Indigenous Peoples)
SPI	Serviço de Proteção aos Índios (Indian Protection Service)
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Renováveis (Brazilian Institute for the Environment and Renewable Natural Resources)
IPAAM	Instituto de Proteção Ambiental do Amazonas (Environmental Protection Institute)
CIM	Conselho Indígena Mura (Mura Indigenous Council)
ECI	Estudo de Componente Indígena (Indigenous Component Study)