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An Analysis of the Environmental Management of Brazil and Colombia of their Amazonian Borders and Territories

Lucila Reyes, Andrés Mauricio Valdivieso y Diego Davila Benavides

Executive Summary

This Policy Paper aims to analyse Brazilian and Colombian environmental management of their shared Amazonian border. To do this, we propose an interpretative framework based on theories of borders, cooperation and environmental security. These interpretative tools allow us to understand and recognise the multiplicity of actors and the complexity of the social and cultural conflicts that converge in the interest of protecting the Amazon region against threats and risks to its conservation. Additionally, they allow us to analyse the relationships and variables that affect the territories, their epistemic protection, the responsibility of the state, and the legal-political frameworks deployed as a common framework for Amazonian security.

In this context, we propose a comparative analysis of how Brazil and Colombia have managed the Amazon region and, with this, identify the challenges and threats the governments must face, and in particular those that can be faced through joint work and binational cooperation. We use primary sources such as inputs derived from institutional instruments, protocols and public circulars, and secondary sources of specialised literature and academic or field reports that have been developed on the object of study.







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Methodological Strategy

This Policy Paper uses the qualitative paradigm of the social sciences and aims at a basic exploratory study, with a comparative analysis divided into two phases. The first phase corresponds to the work and object delimited from and to the border management of the shared Amazonian region by Colombia and Brazil, based on the codification of crimes through state understanding and the policies executed by the current and recent governments.

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The opinions, ideas, considerations, and fndings contained in this publication do not represent in any way the official opinion or consent of the entities to which the author is linked.

*** PhD (c) in Law, Government and Public Policy at the Universidad Autónoma de Madrid, Master's in Social Policy from the Pontifcia Universidad Javeriana, Bogotá, and Master's in Peace and Development Work from the Linnaeus University, Sweden. Full-time Professor of the Master's Degree in Government and International Relations at the Universidad Santo Tomás. Member of the Research Group on Government and International Relations (GEGRI). ORCID ID: 0000-0003-2117-7422. Subsequently, the second phase of this research, planned for 2023, is projected as a reference object of comparative border management by Colombia and Brazil in the Amazon, specifically in the Colombian departments of Amazonas, Vaupés and Guainía and the Brazilian state of Amazonas, within the framework of the main risks and threats. Thus, the comparative analysis with the transversal variables is projected as an investigative point of reference regarding the crimes typified by the two states.

Interpretative Framework: Environmental cooperation from borders theory

In this section, we determine the conceptual basis that allows us to understand the complexity of the events that affect conservation, protection and cooperation in the Amazonian border areas shared by Brazil and Colombia.

The Amazon is a complex ecosystem, and to address the issue of its borders, the role and legal conception of the territory must be considered briefly. There are three conceptions. Firstly, the border territory, which alludes to the physical limit within which states exercise their sovereignty, including physical and spatial limits. Secondly, the theory of the territory as a subject that forms part of the legal personality of the state. And, thirdly, the object territory as domain (property) of a state.

The conjunction between the legal construction and the realities of certain areas or territories can be understood as a reference object of special protection due to its global relevance. However, in order to discern the complexity of converging variables, the legal, political and factual particularities are disaggregated. Thus, in order to differentiate, it is understood that on the legal issue, Brazil and Colombia currently share a 1,645 kilometre border, which runs from the site of the River Negro in front of the Piedra de Cocuy to the Arroyo de San Antonio at its mouth in the River Amazon. The limits were established in the Vásquez Cobo-Martins (1907) and García Ortiz-Mangebeira (1928) Treaties, which are still in force without any disputes.

However, beyond the legal and political limits, borders are complex realities because they contain communities, ecosystems, and social, cultural and commercial dynamics, all of which can forget the border due to common identities







and problems, or because the fight for a territory can exacerbate the sense of belonging to a certain area and generate conflicts. Following Grimson (2000), each border has its own historical delimitation process: "there are borders that appear only on maps and others that have steel walls, borders where nationality is a diffuse notion, and others where it constitutes the central category of identifi-

cation and interaction" (par. 8).

Brazil and Colombia currently share a 1,645 kilometre border, which runs from the site of the **River Negro in front** of the Piedra de Cocuy to the Arroyo de San Antonio at its mouth in the River Amazon. The limits were established in the Vásquez Cobo-Martins (1907) and García Ortiz-Mangebeira (1928) Treaties, which are still in force without any disputes.

From the geographical point of view, there are different types of borders including terrestrial. natural, artificial and political, among others. Therefore, along the same lines, Grimson (2000, par. 3) argues that "it is about approaching state borders with an open and holistic perspective that allows us to detect and understand not only the multiplicity and mixture of identities, but also their distinctions and con-

flicts" which, of course, are related to the construction of the state and the way in which it projects its development policies for its regions. In this context, part of the genesis of local complexities in border regions arises from identity processes related to the legal and political structures that build the state. Generally, the nation-building process tends to be considered a *top-down* process and one that operates from the *centre* to the *periphery* (including borders).

However,

Recovering the dimension of agency of the border populations themselves –instead of universalising their supposed «resistance» to the nation-state– can reveal that, in many cases, there is a dialectic between «above» and «below». Thus, border regions often have a critical impact on the formation of nations and states (Grimson, 2000, par. 4).

Hence, Grimson correctly considers "that each border area, in the historical process of its own delimitation and in the social process of renegotiation and constant conflicts, combines in a peculiar way the relevance of state action and that of the local population" (2000, par. 5), but the relationship between nation, state and culture are highly problematic in border areas in all cases. Consequently:

There is no precise concordance between state and nation. The relations between power and identity at borders, and between borders and their respective states, are problematic precisely because the state does not have sufficient institutional and economic resources to control and manage border areas (Wilson and Donnan, 1998, in Grimson, 2000, par. 7).

However, mobility in border regions becomes a problematic factor for both the identity of the communities that live in those territories and for the construction and presence of the state. For this reason, Tapia (2017, p. 61) considers that:

Border region or space becomes cross-border mainly due to the interaction produced by the mobility of people in their constant and continuous crossings and also because of the deployment of a series of social practices that have the border as a reference and as a resource.

Hence, all social, political, cultural and legal processes become more complex in border areas.

On the other hand, Medina (2019) defines international borders as:

Zonality (*limes* or border areas) or linearity (*boundary* or a precise demarcation line). The border area (pioneer brand or strip) refers to «a society in movement, more or less marginal»; while the border line expresses the territorial limit within which a state can exercise its sovereignty (p. 76). According to Michaelsen and Johnson (2003, p. 25), "the idea of «border» or «border zones» has also been extended to accommodate practically all the space or geography whose border problems can be thematised". In this context, this Policy Paper seeks to analyse environmental problems on the Colombian-Brazilian border.

Different borders and border zones are, of course, different, and the differences proliferate in terms of border issues that are related to and participate in each other. Thus, Michaelsen and Johnson (2003) argue that one of the main contributions to understanding these complexities is that borders have been projected as the meeting place between a dominant culture and a refractory one, both of which require a certain identification. However, this rapprochement has certainly generated challenges in the understanding of cultural, political and even economic clashes. Hence, Michaelsen and Johnson (2003) consider so-called cultural knots, understood as the types of borders that suppress the difference between the internal and the external, as the product of beginnings. What is normally described as identity difference is nothing more than an effect of identity relationality, by which it would seem that cultures still have to *intersect* and not separate.

Therefore, there are numerous political, legal and social variables in border





areas, but, above all, cultural ones, which pose great challenges for states within the framework of the complexity that characterises them. In addition, this requires interdisciplinary, collective and cooperative approaches. However, given all of the above, the binational cooperation of the states and/or the local administrations that share the jurisdictions or border *limits* determined by the construction of the legal subjects becomes relevant.

We can conceive cooperation as:

A strategy that has characteristics of political commitments between nations; seeks to achieve sustainable agreements through reciprocal collaboration and the coverage of many areas. Its actors or organisations, even with a different vision or rivalry, enjoy something in common: working in alliance or in a network with their counterparts (Macana and Valdivieso, 2014, p.151).

For example, the major cooperation agreements around the world have revolved around common interests and/or needs regarding poverty reduction, ensuring peace, protecting the environment, and helping in the globalisation process in a fair and sustainable manner.

According to "this logic of action, the actors seek mutual understanding and the creation of common interests and visions; on the other hand, continuous

communication between the parties allows mutual trust and reciprocity" (Morata, 2004, p. 442). In other words, the principle of reciprocity generates an expectation towards the other legal subject with whom the established limits are shared. Consequently, it is necessary understand that nation-states to individually are not capable of solving the problems involved in the complex processes common to the regions shared by the countries. They must respond to a call for cooperation, in the search for mechanisms that achieve good governance of shared problems and, therefore, they have begun to cooperate with other actors like economic, scientific and citizen institutions, and international organisations (Terz and Pastrana, 2007).

For this reason, spaces for discussion and agreement on the criteria used to understand the common problems of the nations that share a border are relevant. Thus:

The final declarations of summits are the documents in which common interpretations of reality are established in the different areas that support this relationship, including development cooperation, although they also show the great relevance of the commercial axis (Sanahuja, 2012, p. 29).

In short, cooperation is the most suitable tool to address problems common to



states in the territories delimited by shared borders. In this context, one of the biggest challenges facing the international community represented in global multilateral systems is the design and implementation of strategies and programs for the conservation and protection of the environment, with real commitments executed by participating states.

For this reason, one of the main problems facing nation-states derives from threats that know no borders, threats which question the national outlook on security from traditional approaches based on statist, militaristic and competitive criteria. Consequently:

Averting and managing this new type of threat requires both interstate cooperation

and the inclusion of non-governmental and intergovernmental organisations, as well as key actors to address environmental problems that affect the entire problem, but disproportionately and unevenly across many regions (Sánchez, 1998, p.15).

Along these lines, different redefinitions of the concept of environmental security have been promoted, based on the restricted conception of security-based military issues. Therefore, historically excluded factors of non-military threats and risks have been taken into account. Thus, economic and environmental changes in an increasingly interdependent world (Keohane and Nye, 1988) have led to the expansion of the concept of environmental security, which has





generated multiple analytical variables since it represents an alternative paradigm to face certain threats which were never considered as the main reference object of traditional security (Dabelko and Dabelko, 1998).

Thus, its starting point is a new dependent reference on the protection and conservation of environment and social conflicts. According to Matthews (1989), the

There are numerous political, legal and social variables in border areas, but, above all, cultural ones, which pose great challenges for states within the framework of the complexity that characterises them. This requires interdisciplinary, collective and cooperative approaches. However, given all of the above, the binational cooperation of the states and/or the local administrations becomes relevant.

dependent variables of environmental security have been instituted in relation to the close link between environmental degradation and its negative effects on economic potential and human well-being, which in turn contributes to the fuelling of political tensions and community conflicts (Dabelko and Dabelko, 1998). For this reason, according to Galán (2021, p. 76) the new concept of environmental security, must start from the "integrated nature of social and environmental

systems, but not forgetting the importance of the historical and regional concretion of local conflicts generated within the framework of natural resource scarcity". Moreover, incorporating a variable of direct impact like networks of illegality and legal marginality leads to a reconsideration of the struggle to access *socioenvironmental justice*. Consequently:

The processes that construct socioenvironmental justice must go through the recognition of situated scenarios, in which historical inertia and the constitution of state margins have fostered links for survival such as clientelism, the corporatisation of popular classes, the weakening of the division between government actors and illegal groups, and the dispute over territory as the centre of illegality (Galán, 2021, p.100).

The Colombian-Brazilian Amazon Context

This exploratory work covers the territories of the Colombian-Brazilian border, whose area is 1,645 kilometres (see Map 1). The limits were drawn up in the treaties of Vásquez Cobo-Martins (1907) and García Ortiz-Mangabeira (1928). In the latter, "the right to free navigation on the Amazon, Yapurá or Caquetá, Izá or Putumayo rivers and all their tributaries and confluents is recognised, reciprocally and in perpetuity" (Ministerio de Relaciones Exteriores de Colombia, n.d., par. 3). In Colombia, it includes the administrative political division of the departments of Guainía, Vaupés and Amazonas, and in Brazil it includes territories of the state of Amazonas.



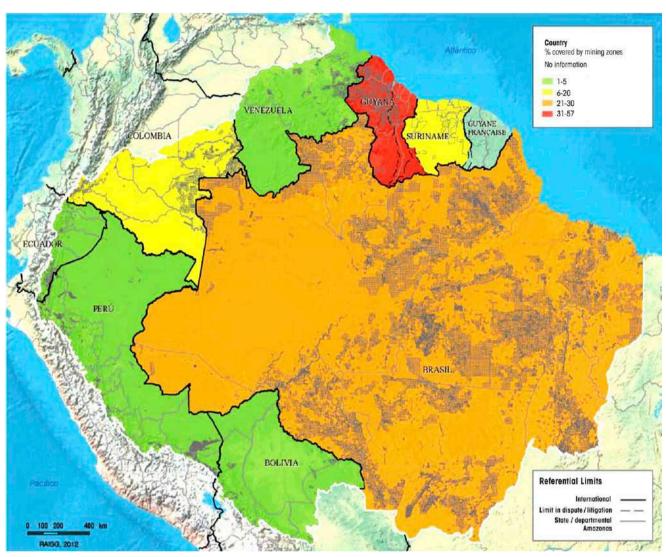
Map 1. Land border of Colombia and Brazil

Source: Ministerio de Relaciones Exteriores de Colombia (n.d.).

Much of the shared border between Brazil and Colombia belongs to the so-called Guiana Shield, a territory that covers 2.5 million square kilometres and extends from Colombia in the West to Brazil in the East, between the Orinoco and Amazon rivers, and which contains 10-15% of the world's drinking water reserves (Tschirhart, 2014). It includes the Guianas, southern Venezuela, and parts of Colombia and northern Brazil. Besides cultural and biological diversity, this area is highly rich in minerals. The object zone of this Policy Paper corresponds to the southwestern part of the shield. Map 2 shows the mining areas of the Amazon basin.







Map 2. Proportion of mining areas by Amazon country

Source: RAISG (2012, p. 33).

To understand border phenomena, it is necessary to briefly highlight some differences between Colombia and Brazil. Firstly, regarding political systems, although both countries have presidential regimes, Colombia is a unitary republic while Brazil is a federal system. Accordingly, the administrative political division in Colombia is made up of departments, municipalities and, in the Amazon region,

so-called non-municipalised areas (hereafter ANMs, acronym in Spanish). ANMs "are territories that do not coincide with the local territorial entities defined in the 1991 Constitution, so their management is in the hands of the departments to which they belong" (Duque-Cante, 2020, p. 307). In other words, they are not contemplated in the Constitution, although they do have some administrative regulations, such as Constitutional Autonomous Decree 618 of 2018, which seeks to give legal bases to fiscal resources in the indigenous territories inside the ANMs, but, respecting the self-determination of the peoples as indicated in the Constitution, it has not been possible for the authorities of these territories to have sufficient power to defend natural resources.

The Colombian Political Constitution contemplates administrative autonomy and decentralisation, but political centralism has historically been very strong and, today, there are still tensions between the centre and the peripheries (Restrepo and Cárdenas, 2004). Meanwhile, Brazil's federal system divides the territories into states and municipalities that enjoy great autonomy in administrative, governance and organisational matters.

Secondly, Brazil has 64.3% of the entire Amazon basin, while Colombia has only 6.2%. However, the percentage of Amazonian territory corresponds to 58.8% of Brazil and 42.3% of Colombia (RAISG, 2012). Therefore, in both Colombia and Brazil, the Amazon occupies an important part each state's territory.

The Colombian Amazon is made up of the departments of Putumayo, Caquetá, Guaviare, Guainía, Vaupés, and Amazonas. However, for the analysis of this region, in addition to the political-administrative limits, it is necessary to consider hydrogeographic and biogeographic limits. In these terms, the southern portion of the department of Vichada, two south-eastern and southern areas of the department of Meta, the so-called Bota Caucana belonging to the department of Cauca, and a part of the foothills of the department of Nariño, are necessary to understand the interrelation of ecosystems and the chains of illegal actions, even though they are not the subject of this Policy Paper.

For its part, Brazil differentiates between the Legal Amazon and the Amazon biome. "The Amazon biome covers 4.2 million km² [...] representing 48% of the national territory" (Santos, Salomão and Veríssimo, 2021, p. 1), while the Legal Amazon includes the Amazon biome, the closed biome and the Great Pantanal: "It covers all the states of the North Region (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima and Tocantins), Mato Grosso and part of the Maranhão. The Legal Amazon represents 59% of the national territory" (Santos, Salomão and Veríssimo, 2021, p. 1).

According to the 2018 census undertaken by the National Administrative Department of Statistics (hereafter DANE, acronym in Spanish), the population of the three Colombian Amazonian departments bordering Brazil was 148,177 inhabitants (2018a). Table 1 shows the projections of the population to 2050. Accordingly, it will continue to be a sparsely populated territory.



Department	2018 Census	2022	2025	2050
Amazonas	66,056	82,068	87,452	143,548
Guainía	44,431	52,061	53,839	70,930
Vaupés	37,690	48,932	55,602	116,162
Total	148,177	183,061	196,893	330,640

Table 1. Population of the Amazon border departments, projection to 2050

Source: elaborated by the authors with data from DANE (2018b)).

The municipalities and ANMs bordering Brazil (Datos Abiertos del Estado Colombiano, 2022) have large areas, as shown in Table 2.

Department	Municipalities* and ANMs	Area (km²)
	Leticia*	5,968
Amazonas	Tarapacá	9,153
	La Pedrera	13,945
	La Guadalupe	6,457
Guainía	Pana Pana	10,097
	Puerto Colombia	15,664
	San Felipe	3,063
	Mitú*	16,422
	Taraira*	6,619
Vaupés	Pacoa	14,108
	Papunaua o Morichal	5,937
	Yavaraté	3,459
Total		110,892

Table 2. Area of the municipalities and ANMs bordering Brazil

* Administrative entities recognised as municipalities.

Source: elaborated by the authors based on information from Datos Abiertos del Estado Colombiano (2022).

Another characteristic of the municipalities and ANMs, apart from their large area, is their distance from the centre of power, in this case the capital city, Bogotá. Only the city of Leticia has an international airport and regular passenger service provided by various companies, as well as companies that offer cargo services. Mitú has a national airport with regular passenger services provided by Satena, while other companies provide non-scheduled passenger services or cargo services (Unidad Administrativa Especial de Aeronaútica Civil, 2022). There are other small airports and airfields, most of them uncontrolled. The department of Amazonas has three airports, Guainía has four, and Vaupés has 27 (Unidad Administrativa Especial de Aeronaútica Civil, 16 July 2020). Some of those that are near the border with Brazil are La Pedrera, Tarapacá, San Felipe, Taraira, Caño Colorado, Campo Alegre, Bocoa Querarí, Los Ángeles, Pacoa, Pacú, Piedra Ni, Piracuara, Santa Isabel, Santa Rita, Sonana, Tapurúcuara, Teresita, Tiquié and Wasay¹. Access to the municipalities and ANMs is by air and by river.

Table 3. Distance to Bogotá, in a straight line, from municipalities and ANMs on the Colombia-Brazil border

Municipalities* and ANMs	Distance (km)
Leticia*	1,086.64
Tarapacá	794.11
La Pedrera	697.62
La Guadalupe	870.28
Pana Pana	621.40
Puerto Colombia	691.88
San Felipe	784.60
Mitú*	578.77
Taraira*	745.14
Ραςοα	649.58
Papunaua o Morichal	477.58
Yavaraté o Morichal	706.00

* Administrative entities recognised as municipalities.

Source: elaborated by the authors based on http://co.lasdistancias.net/.

For its part, article 18 of the Brazilian Constitution establishes that its political-administrative organisation is composed of

¹ The identification of these airports and aerodromes was undertaken based on Information from the Unidad Administrativa Especial de Aeronaútica Civil (2022) and geolocation with the Google Earth Pro tool.

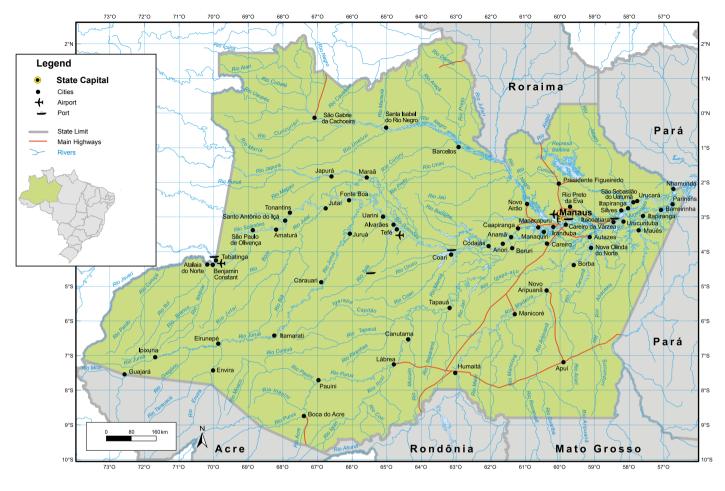
"the Union, the States, the Federal District and the Municipalities, all autonomous". In accordance with article 25, numeral 3, this autonomy allows the states "through complementary law, to establish metropolitan regions, urban agglomerations and micro-regions, constituted by groups of neighbouring municipalities, to integrate the organisation, planning and execution of public functions of common interest". The Constitution exhaustively determines the matters in which the Union can intervene. In addition, article 225 of the Constitution, referring to specific territories, establishes that "The Brazilian Amazon Forest [...] is a national heritage, and its use shall be made, in accordance with the law, under conditions that ensure the preservation of the environment, including the use of natural resources" (Presidência da República, n.d.).

The state of Amazonas is the only one that borders Colombia. In 2021, it had an estimated population of 4,269,995 inhabitants and an area of 1,559,167.878 square kilometres (Instituto Brasileiro de Geografia e Estatística, n.d.a), making it the largest state with 18% of the country's surface. It also borders Peru, Venezuela and the Brazilian states of Roraima, Pará, Mato Grosso, Rondonia and Acre. It is the least populated Amazon state, with a demographic density of 2.70 inhabitants per square kilometre in 2020, and has 62 municipalities, of which only four border Colombia (Santos, Salomão and Veríssimo, 2021).





Map 3. Amazon country



Source: IBGE (n.d.b).

Information on land use in the state of Amazonas is registered as shown in Table 4.

Table 4. Land uses in the Brazilian state of Amazonas, 2019

Sustainable use	Integral protection	Areas of environmental protection	Indigenous lands	Rural settlements	Rural environmental cadastre	Military areas	Others
15.90%	8.28 %	1.21%	29.23%	5.62%	6.24%	0.06%	33.46%

Source: elaborated by the authors based on Santos, Salomão and Veríssimo (2021, p. 31).

The only municipalities in the state of Amazonas that border Colombia are shown in Table 5. São Paulo de Olivença is a municipality very close to the border with Colombia, but it does not directly border it.

Municipality	Area (km²)	Inhabitants
Tabatinga	3,239	52,279
Santo Antônio do Içá	12,201	24,005
Japurá	56,042	12,942
São Gabriel da Cachoeira	109,185	42,342
Τοταί	180,667	131,568

Table 5. Area and inhabitants of the Brazilian municipalities bordering Colombia

Source: elaborated by the authors based on data from Governo do estado do Amazonas (2007).

Of the municipalities that border Colombia, only Tabatinga has an international airport. The remaining four municipalities have regional airports. There are small, populated centres on the border with airfields such as Ipiranga, on the River Putumayo, opposite Tarapacá; Vila Bittencourt, on the River Caquetá (Japurá), near La Pedrera; Yauareté, on the River Vaupés, in front of Yavareté; Querari, on the River Vaupés; Sao Joaquim, Cucui, on the triple border between Brazil, Colombia and Venezuela, with an Army Border Platoon. As in the case of the Colombian Amazon, there are other small aerodromes, but transport is generally undertaken by river.

Table 6. Distance to Manaus from the Brazilian municipalities bordering Colombia

Municipality	Distance (km)	
Tabatinga	1,106	
Santo Antônio do Içá	879	
Japurá	787	
São Gabriel da Cachoeira	852	

Source: elaborated by the authors based on http://br.distanciacidades.net/.

Brazil has historically considered the Amazon to be a territory of geostrategic importance (Vega Díaz, 2020). Therefore, São Gabriel da Cachoeira, a municipality that borders Venezuela and Colombia, is considered a National Security Area and has an important military presence, with the 5th Jungle Infantry Battalion. The only urban area on the border with Colombia is Tabatinga, which is located 1,106 kilometres from Manaus and forms a conurbation with Leticia.

The Amazon is a region rich in biodiversity. However, the quality of life of its inhabitants is below the national averages. The six Colombian Amazon departments contribute 1% of GDP (Departamento Nacional de Planeación, 2019). The contribution to the GDP of the departments of Amazonas



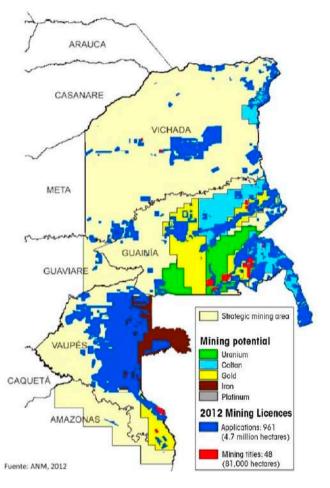


and Guaviare is based on tourism, but "the development of research and other scientific activities contribute another 11%, which shows the potential of the region for the development of products and services based on the knowledge and use of biodiversity" (p. 1229). In the case of Brazil, the per capita nominal monthly family income in the state of Amazonas for 2020 was 800 BRL, thus occupying one of the last places, after Maranhão and Alagoas (Instituto Brasileiro de Geografia e Estatística, IBGE, n.d.).

Socioenvironmental Conflicts in the Border Zone

Gudynas defines environmental conflicts as "the confrontations that occur in public space between organised collective actors who maintain different perceptions, values or perspectives on the environment" (2007, p. 3). The socioenvironmental conflicts in the study area are related to the exploitation of natural resources: mining, deforestation, drug trafficking, and the illegal trafficking of flora and fauna. Regarding mining, in Colombia there are potential mines of gold (Arias and López, 2019), silver (Lugo and Bernal, 2019), iron (Ulloa Nieto, 2019) and diamonds (Murillo, 2019). Taking into account that the political-administrative limits do not correspond to the territory as a biome, and that, as previously mentioned, all this area has the same geological origin, the mineral and biological wealth is similar in Brazil.





Source: Mendoza (June 2013, p. 3).

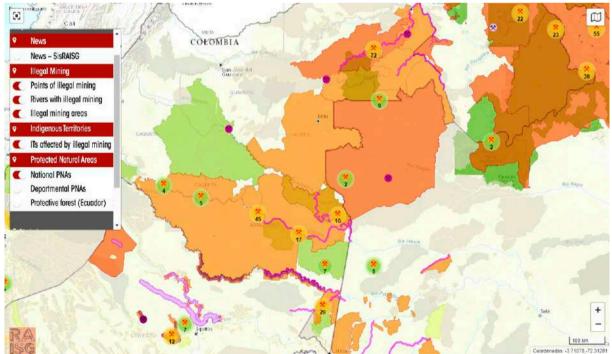
Mining is one of the main problems as it entails deforestation, water pollution, and pressure on communities and indigenous peoples. In the Amazon there is legal, illegal and subsistence mining. According to Sanabria Cuervo, in 2018 "188 mining licences were registered in 122,571.49 hectares of the Colombian Amazon [...] applications for mining licenses increased in 2018: a total of 527 applications were registered, equivalent to 846,603.42 hectares" (6 April 2021, par. 4). By way of example, in 2018 Pana Pana had 20 mining titles, and this ANM "is the territorial entity with the largest titled area with 36,697.84 hectares, followed by Puerto Colombia with 27,888.82 hectares and Taraira with 12,521.5 hectares, with this latter showing an increase compared to the 2016 report" (Salazar Cardona *et al.*, 2019, p. 74). This case is illustrative since it is an ANM that lacks an institutional framework to allow the ordering of its territory, without authorities that can serve as interlocutors between all the actors that dispute the territory for mining resources.

The same is not true of illegal mining. According to Salazar Cardona *et al.*, "in the

departments of Guainía and Vaupés it is worth highlighting the absence of significant figures due to the high level of informality" (2019, p. 72). The same study indicates the existence of minerals like iron and coltan "so there may be the presence of illegal extraction of unaccounted for minerals in these two departments" (p. 72).

Map 5 shows the latest update made by the Amazon Georeferenced Socioenvironmental Information Network (RAISG, acronym in Spanish) which mapped "4,472 illegal mining localities and their incidence on Indigenous Territories and Protected Natural Areas in the Amazon" (RAISG, n.d.).

Map 5. Illegal mining in the Colombian-Brazilian Amazon



Leafert Powered by Earl East HERE Garmin FAO NOAA USGS RAISG - Rede Amazonica de Informação Socioambiental Georeferencia

Source: RAISG (2020).





Legal mining activity can be quantified and, therefore, its economic weight can be established and monitored by the state. However, as the United Nations Office on Drugs and Crime (UNODC) stated in its 2021 annual study on alluvial gold exploitation, "formal gold production is not reversed in these territories, making them favourable scenarios for the presence of organised criminal structures that dispute territorial control due to the high profitability of illicit economies" (Oficina de las Naciones Unidas contra la Droga y el Delito, June 2022, p. 9).

According to a study by InSight Crime, due to the increase in international gold prices:

The criminal groups that were previously dedicated exclusively to drug and arms trafficking have ventured into illegal mining [...] the Colombian Amazon region is dominated by Non-State Armed Groups

[GANE, acronym in Spanish] made up largely of dissidents of the former FARC (InSight Crime, 8 September 2021, pars. 1 and 9).

However, the ELN, criminal gangs and paramilitary groups also operate. The illegal gold is transported down the River Caquetá and finally reaches the town of Tefé, in the Brazilian state of Amazonas. The magnitude of this crime requires a chain of bosses, criminal entrepreneurs, leaders of criminal organisations, and miners and indigenous people who are exploited with 12-hour workdays and extortion. Most of the bosses are of Brazilian origin (InSight Crime, 8 September 2021).

As various studies have shown, there is a relationship between organised crime, particularly illegal mining, and environmental crimes (Erthal Abdenur, Pellegrino, Porto and Brasil, 2019).



Map 6. Routes and destinations of illegal mining in the Colombian Amazon



Source: InSight Crime (8 September 2021)

The Amazon basin has important collaboration instruments such as the Amazon Cooperation Treaty (ACT), the Amazon Cooperation Treaty Organisation (ACTO) and numerous declarations by heads of state, ministers of foreign affairs and bilateral commissions. Agencies like Interpol and Europol play a key role in the fight against transnational crime. Likewise, in this case, the states have political constitutions and penal codes that protect the Amazon and nature. However, as the corresponding agencies show, far from diminishing the problem is increasing, reflecting the complex governance of the Amazon. For example, Colombia has the high-tech Anti-Narcotics Monitoring System of the Police (SIMA, acronym in Spanish), which makes it possible to locate illicit crops and illegal mining (Erthal Abdenur *et al.*, 2019), but there is a lack of real control.

The causes of the ineffectiveness of the systems include geographical, cultural, ethnic and political complexity, in addition to corruption, poverty, state weakness,





institutional disarticulation, and a lack of real cooperation and will by the states. A single state cannot effectively combat the problem, since it is about illicit production chains that require the work of impoverished indigenous people and peasants, and about regional, national and international networks that demand cooperation and coordinated work between the states. The international crime networks are related to and involve other crimes in addition to drug trafficking, such as the illegal trafficking of wild flora and fauna, arms, human beings, slavery, prostitution and money laundering. The criminal groups share routes.

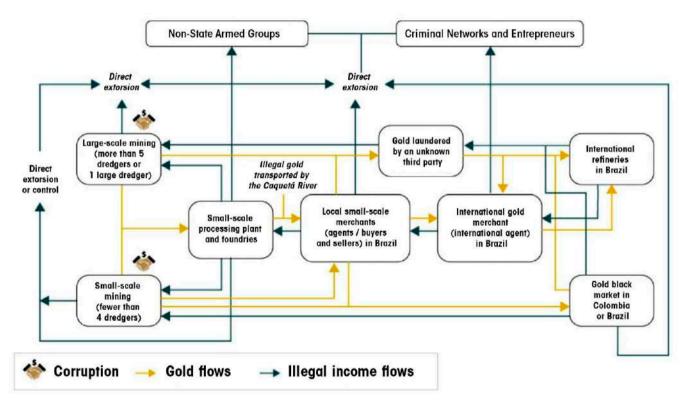


Figure 1. The illegal gold mining chain in the Amazon

Source: InSight Crime (8 September 2021).

Another problem that threatens the Amazon is drug trafficking. Rivers are the means used to transport drugs. Regarding the ANM of La Pedrera:

It is consolidated as a strategic point used by traffickers to transport drugs to Brazilian territory through the River Japurá, through small canals that connect to the River Marié, a fluvial corridor that leads to the River Negro, the main transit route to the city of Manaus – Brazil, where the hallucinogens are traded with alleged members of the *Familia del Norte* and the *Comando Vermelho* (*Mi Putumayo Noticias*, 2022, par. 3). In a journalistic report for Mongabay on the Peruvian border with Colombia and Brazil, Vélez Zuazo and Torres synthesise the problems that affect Amazonian indigenous communities:

The absence of the state to establish basic services, the lack of a strategy to deal with criminal mafias and of a budget to implement it, and a growing violence led by armed and criminal groups that affects the most vulnerable, the indigenous communities (22 September 2022, par. 7).

According to the Atlas of Environmental Justice (2022), in October 2022 there were four reported and documented socioenvironmental conflicts in border areas between Brazil and Colombia related to the exploration of mining deposits, which involved water and air pollution, deforestation and tailing basins for mines. Three of these conflicts were in Colombia: the Puinawai National Natural Reserve, Taraira and Yaigojé-Apaporis; and in Brazil there was one, related to the Mining Code, which affected indigenous territories. It is necessary to clarify that these conflicts have been the object of study and legal claims, without this meaning that they are the only ones that exist. On the contrary, it is important to catalogue all the socioenvironmental conflicts that should be monitored.

The Colombian National Development Plan 2018-2022

Since the Constitution of 1991, Colombian governments have set programs, guidelines, and goals regarding the Amazon. All development plans have focused their visions on the developmental-extractivist economic model, which in the area of study is manifested in mining activities. A WRI study, cited by Sanabria Cuervo in an article published by the Centre for Sustainable Development Goals for Latin America, established that "large-scale mining concessions cover more than 18% of the continental Amazon" (6 April 2021, par. 4). The author also points out in paragraph 7: "despite the fact that on paper about 66% of the territory of the Amazon is declared to be under some figure of special protection, the situation is different on the ground."

The previous Development Plan (*Pact for Colombia, pact for equity*) addressed the Amazon in *Chapter XXII Amazon Region Pact: Sustainable development for a living Amazon* (Departamento Nacional de Planeación, 2019). The base document of the plan diagnosed the problems that afflict the Colombian Amazon, as well as "the challenges that the population dispersion and low connectivity of the Amazon Region represent for territorial control, together with the lack of effective presence of the state" (p. 1227).





This document of the National Planning Department (DNP, acronym in Spanish) identifies three important problems that this region suffers and that the government aspired to solve in its Development Plan: "(1) the increase in activities that degrade the environmental base; (2) poor connectivity and the precarious provision of services in rural settlements; and (3) the low development of the productive potential of Amazonian biodiversity in relation to other activities" (2019, p. 1228). Figure 2 synthesises the proposal of the Colombian National Development Plan 2018-2022.

Figure 2. National Development Plan, borders



Source: elaborated by the authors based on Departamento Nacional de Planeación (2019).

It is necessary to take into account that, as a result of the 2016 Peace Agreement signed with the FARC guerrilla group, the Development Programs with Territorial Focus (PDET, acronym in Spanish) were created in 2017 as planning and management instruments for a term of "15 years to transform the territories most affected by poverty, illegal economies and institutional weakness, and thus achieve the rural development required by these 170 municipalities" (Agencia de Renovación del Territorio, n.d., par. 1). In the Amazon there are two subregions with PDETs, but there is no prioritised municipality or ANM on the border with Brazil, which is contradictory to the Development Plan which sought to reach the border areas that lag furthest behind (Departamento Nacional de Planeación, 2019).

In terms of environmental and border issues, the 2018-2022 Development Plan left a lot to be fulfilled, although it remains necessary to have precise reports and analyses because it is still in force. Deforestation figures, despite public announcements, are alarming. According to former Minister of the Environment, Manuel Rodríguez Becerra: The fact that the deforestation of the Amazonian national parks in this presidential term has been the highest in history is very negative, despite the fact that the President promised to bring it to zero before August 7, 2022 (10 July 2022, par. 2).

On the border with Brazil are two of the parks hit by mining and officials were forced to leave the territories due to threats. According to Professor Rodríguez Becerra, in the same article, the government planted 130 million trees, but deforestation "would have been 500 to 600 million" (10 July 2022, par. 2).

The new president, Gustavo Petro, has promised to change the environmental model and its vision of the Amazon. In his Government Program he promised "to move towards a productive econo-

my based on respect for nature, leaving behind the exclusive dependence on the extractivist model [...] to allow us to face the effects of climate change and thereby contribute to overcoming the global environmental crisis" (Petro and Márquez, 2022, p.13). At the time of writing this Policy Paper, there are positive announcements regarding investment in the Amazon, but no concrete plans.

It is necessary to understand that nationstates individually are not capable of solving the problems involved in the complex processes common to the regions shared by the countries. They must respond to a call for cooperation.

The Amazon from the Development Perspective of the Federal Government of Jair Bolsonaro

Background

Brazil has become a relevant actor in the international context of global governance for climate change and, particularly, in the protection of the Amazon (Franchini, Evangelista and Viola, 2020). Under the presidency of Lula Da Silva, the country became a global leader, not only in terms of the political position adopted on environmental protection and the reduction of emissions, among others, but also for the federal policies to protect ecosystems, and the significant reduction of deforestation and illegal mining. The positions adopted

> by the Lula administration had a significant impact on the realisation of the Copenhagen Agreement, which was definitive prior to the achievement of the Paris Domestically, Agreement. the National Congress approved a climate change law at the end of 2009, with Law 12187 which established the National Climate Change Policy. This was the first general climate law adopted in Latin America and, furthermore, was one of the





first adopted by non-members of the Organisation for Economic Cooperation and Development (OECD) (Franchini, Evangelista and Viola, 2020). Federal bureaucratic structures were also consolidated in order to deal with the design and implementation of public policies oriented towards environmental issues.

Franchini, Evangelista and Viola (2020) affirm that the main achievement of the Lula administration was marked by the policy of controlling illegal deforestation in the Amazon, allowing it to abandon a defensive position with respect to its protection mechanisms. By 2009, the deforestation rate per square kilometre was the

lowest since the 1990s, with a downward trend throughout the Lula administration. It was also possible to reduce the country's emissions, going from 22 tons of carbon dioxide equivalent in 2004 to 10 tons of carbon dioxide equivalent in 2009. Additionally, the country managed to strengthen internal governance mechanisms regarding environmental issues. The city and state of São Paulo adopted laws to address the challenges of climate change, including targets for reducing greenhouse gases (GHG). For their part, the Amazonian states, coming together in the Amazon Forum, sought greater cooperation with the federal government regarding international commitments to protect the



Amazon rainforest, while also seeking access to international funds to invest in the protection of the rainforest and its ecosystems.

With the arrival of Dilma Rousseff to the presidency, the development of the climate agenda slowed down. Exceptions were marked by commitments acquired at the Rio+20 Conference and in the Paris Agreement. The administration's position was much more conservative, seeking to subordinate the development of the environmental agenda to the country's economic interests (Franchini, Evangelista and Viola, 2020). At the end of the Rio+20 Conference, Rousseff even eliminated a tax on gasoline -the Intervention Contribution in the Economic Domain- which impacted the import and sale of oil, gas and their derivatives. The international agenda in her second term was marked by environmental diplomacy before the Paris Conference and, particularly, the cooperation agreement signed with the Obama administration. This agreement, announced in Washington in July 2015, included a 43% reduction in Brazil's GHG emissions by 2030. It also included measures to protect the Amazon and control deforestation. However, these commitments were far from the goals and projections made during the Lula administration, and the reference data for reducing the country's emissions used 2005 as the base year, meaning levels much higher than those reached during the previous government.

Internally, the decisions adopted by the Rousseff administration affected the scope of the National Climate Policy, while the sectoral plans for agriculture, manufacturing and transportation, among others, had very limited goals with respect to emissions. The Sectoral Plan to Combat Deforestation in the Amazon also suffered significant setbacks due to the reduction in the control power of the Brazilian Institute of the Environment (IBAMA, acronym in Portuguese)

and the low capacity of the Federal Police to act in the region (Franchini, Evangelista and Viola, 2020). These and other decisions led environmental movements to break the alliances they had established with the federal government since 2003. They accused the government of destroying the environmental achievements made in recent

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decades, and even classified environmental management as the worst since the military regime of 1964-1985. The degradation of the environmental agenda did not change with the arrival of Michel Temer to the presidency after Rousseff's dismissal, as he maintained the conservative position implemented by his predecessor: he sought to strengthen relations with the agro-industrial sector, oil exploration and the reduction of price controls on oil and its derivatives.





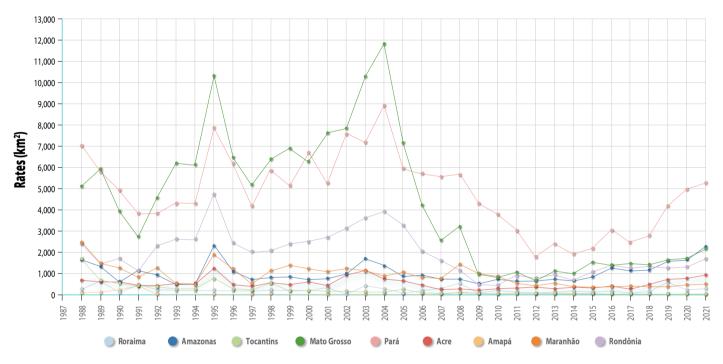
Changes in the environmental management of the Amazon under the Bolsonaro administration: a balance

When Bolsonaro took office, Brazil's environmental policy continued to disintegrate. This is reflected in the high rates of deforestation, the expansion of the agricultural frontier and the increase in illegal cattle ranching. For Bolsonaro, the Amazon is a strategic asset and, thus, adopting mechanisms for its exploitation is a priority for his administration, as well as guaranteeing the exercise of sovereignty over the Amazonian territories. This position was clear in the electoral period, since he stated that the federal regulatory conditions limited the use of the Amazon (Sengupta, 17 October 2018). Regarding the special protection of indigenous communities, he also stated that "keeping indigenous territory intact [...] only increases poverty and isolation [...] Unfortunately, some people, both inside and outside Brazil, with the support of NGOs, insist on treating and maintaining our indigenous peoples like cavemen" (Guimón, 25 September 2019, pars. 6-7).

Indigenous peoples and environmental groups have said that threats against them have increased since Bolsonaro took power, as the climate created by government authorities has encouraged farmers to illegally seize land, as well as other actors associated with the illegal felling of trees or illegal mining in protected areas (Esiele, 22 September 2022). Additionally, environmental and control authorities like IBAMA have been weakened, the Action Plan for the Prevention and Control of Deforestation in the Amazon (PPCDAM) has been neglected, there have been changes in the CONAMA environmental council, and the Amazonian fund has been frozen (Esiele, 22 September 2022). This latter issue was a result of international tensions with countries such as Germany and Norway, which decided to freeze the allocation of resources for the protection and preservation of the Amazon due to the decisions adopted by the Bolsonaro administration. This aligns with the position of Erika Bechara, a professor of Environmental Law at the Pontifical Catholic University of São Paulo (PUC):

It is true that deforestation in the Amazon rainforest was very high in the 2000s. But thanks to the Action Plan for the Prevention and Control of Deforestation in the Amazon (PPCDAM) and other measures, the alarming figures were reduced. That is why it is disappointing to see that deforestation has exploded again, there has been regression instead of progress (Esiele, 22 September 2022, par. 4).

Deforestation in the Brazilian Amazon has once again reached alarming levels, close to those recorded at the beginning of the 21st century. According to data from the National Institute for Space Research (INPE, acronym in Portuguese), records show an increase in the nine Amazon states, particularly in the states of Pará, Mato Grosso and Amazonas (see Graph 1). The case of Pará generates greater concern since it has reached levels of deforestation that had not been registered for 10 years and, additionally, they are located in conservation zones that include indigenous lands.



Graph 1. Annual deforestation rates in Brazilian Amazon states

Source: TerraBrasilis of the INPE.

According to the Ibero-American Agency for the Diffusion of Science and Technology (16 April 2022), the average annual clearing rate (deforestation) in the last three years was 89% above the annual average registered since 2012, reaching 419 square kilometres. Only the Apyterewa Indigenous Land, in the municipality of São Félix do Xingu in the Brazilian state of Pará, concentrated 20.7% of the total area deforested in indigenous lands in 2021. Between 2016 and 2019, the devastated area was calculated at 362 square kilometres, but this increased in less than three years to 570 square kilometres. This situation has been studied by Guilherme Augusto Verola Mataveli from the Earth Observation and Geoinformatics Division of the Brazilian INPE, and Gabriel de Oliveira from the University of South Alabama in the USA:

By studying the satellite data, we detected that the conversion of forests takes place principally to open up pastures







and for agriculture. But we located some points within Indigenous Lands. Regarding the emissions of polluting gases, we registered an increase in the aforementioned period, but it did not proceed at the same rate, since the clearing is not always carried out through the use of fire (Agencia Iberoamericana para la Difusión de la Ciencia y la Tecnología, 26 April 2022, par. 10).

Deforestation levels and the affecting of protected areas have been recurrent during the Bolsonaro administration, not only in the state of Pará, but across the different Amazonian states. A research report by Forest Declaration Assessment (FDA) analyses the contribution of indigenous

peoples and local communities (PILC, acronym in Spanish) as carbon sinks and, in parallel, how they can influence national climate commitments. In the Brazilian case, the emission reduction goal by the year 2030 is 600 million metric tons of carbon dioxide equivalent. Disaggregating this goal, PILCs are expected to contribute 28% (Forest Declaration Assessment, 2022). In other words, protected areas inhabited by indigenous populations not only represent a value in terms of forest preservation, but they also contribute to the reduction of GHGs. According to data reported in the same study, "the titling of indigenous lands between 1982 and 2016 led to a 66% reduction in deforestation" (Forest Declaration Assessment, 2022, p. 12). Consequently,

the decisions adopted by the Bolsonaro administration have not only impacted the living and security conditions of the people who inhabit the protected areas, particularly indigenous populations, but they have also impacted the forms of local environmental governance that have had significant achievements in the past.

The government decisions of the Bolsonaro administration and the consequences described previously, are framed within a conservative vision of development and the protection of national interests and, furthermore, are distant from the diplomatic efforts of different countries and non-governmental organisations to conceive the Amazon as heritage of humanity. For example, during Bolsonaro's presidential campaign and first years in office, a recurrent proposal was the revival of the Calha Norte (North Canal) project. Designed in the 1980s, this project sought to develop strategic infrastructure for the protection of the Brazilian territory on the country's northern border, as well as to respond to possible threats stemming from the presence of the Cuban military in Suriname and guerrilla structures on the border with Colombia; in other words, concerns regarding the expansion of communism in Latin America. This project included the extension of the BR-163 highway to the border with Suriname, the construction of a two-kilometre bridge in the Óbidos port, and the construction of a hydroelectric power station on the River Trombetas. All these

infrastructure projects would have significant environmental impacts and affect protected areas, natural parks and indigenous territories.

At present, the federal government has advanced in the consolidation of railway projects in the so-called Northern Arc, in order to promote the commercialisation of raw materials. It crosses the Amazon and Cerrado regions, connecting the

main transit centres and facilitating the export of goods through northern the and north-eastern ports (Bourscheit, 19 May 2022). With the construction of infrastructure in the Northern Arc, access to mineral, oil and natural gas reserves in Guyana and Suriname could also be facilitated. According to Bourscheit:

The decisions adopted by the Bolsonaro administration have not only impacted the living and security conditions of the people who inhabit the protected areas, but they have also impacted the forms of local environmental governance.

Together, the gas reserves of these countries exceed 283,000 million cubic metres, which is equivalent to all the reserves of Peru [...]. For this reason, Petrobras, ExxonMobil and Chevron are some of the companies seeking investment (19 May 2022, par. 15).

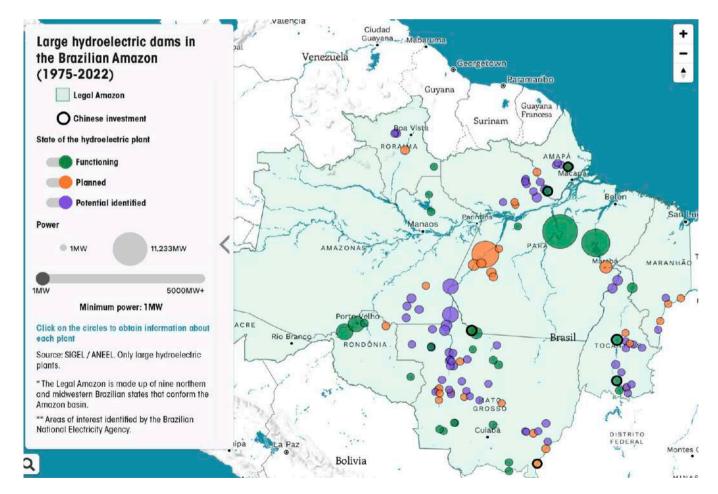
Regarding the Brazilian energy matrix, only 13% of energy comes from renewable sources and with little environmental





impact (Wenzel, Hofmeister, Papini and Gehm, 18 March 2022). Since the Lula administration, the federal government has promoted the construction of hydroelectric plants in different states of the Brazilian Amazon. Map 7 shows the operational, planned and potential plants. According to the National Electric Energy Agency (Aneel), 32 hydroelectric plants are currently operating in the Amazon and an additional 31 are at some stage of the planning process (Wenzel *et al.*, 18 March 2022). In addition to the clear environmental impacts brought about by the adaptation and construction of hydroelectric dams, in terms of the diversion of rivers, the flooding of territories and impacts on the ways of life of communities, Wenzel *et al.* affirm that "among the main environmental impacts of hydroelectric plants is the emission of methane gas, the result of the decomposition of the remains of trunks and plants found at the bottom of the reservoirs" (18 March 2022, par. 20).





Source: Wenzel et al. (18 March 2022).

Overall, the impacts of public policy decisions in the Amazon remain unclear. Under the Bolsonaro administration, the degree of degradation and expansion of the agricultural and livestock frontier is evident. Additionally, regulatory and institutional change has limited institutional capacity at the federal level. These decisions are based on a vision of development that assumes the Brazilian Amazon to be a strategic asset for the country rather than a common use asset or heritage of humanity. Undoubtedly, the concerns of the Bolsonaro administration regarding the sovereignty of the Amazon have resulted in attempts to limit the potential interventions of other governments and international organisations in the territory. Thus, the understanding of border areas in terms of cooperation may be limited.

The Bolsonaro administration assumes the need to protect the Amazon as a strategic asset of the state. This explains the attempt to reactivate the Calha Norte plan and similar projects that allow the exercise of full sovereignty over the territory, particularly in the north of the country, on the borders with countries like Colombia, Suriname, Guyana and Venezuela. However, Suriname and Guyana may represent a strategic value for Brazil, given their proven reserves of minerals, oil and gas (Bourscheit, 19 May 2022). Taken together, this can limit collective actions for the protection, conservation

and maintenance of environmental security among the countries that share the Amazon. Although Colombia led the Presidential Summit for the Amazon during the presidency of Iván Duque, its results or advances have been very limited. Thus, the governance proposal, in the terms of Morata (2004), faces important obstacles.

The Bolsonaro administration's uncooperative vision of development and its focus on national interests has disintegrated channels of cooperation with other actors in the international system. Even addressing the solution of public problems that cross borders seems complex, as the proposal of high levels of intervention in Amazonian ecosystems appears opposed to the vision of conservation and sustainable development proposed by other states, as well as to other instruments for planning and executing climate-related actions, such as the Paris Agreement or the Sustainable Development Goals (SDGs). Similarly, political changes in the region can become another obstacle to the collective construction of cooperation, particularly with Colombia. The proposals for conservation and the development of clean energy by the Colombian government of Gustavo Petro are antagonistic to the vision of high levels of intervention in the Amazonian ecosystems adopted by the Bolsonaro and Duque administrations. However, with the return of Lula Da Silva to the Brazilian presidency, environmental cooperation agendas will change significantly. For this





reason, the current institutional arrangements for the protection and conservation of the Amazon could acquire, once again, greater relevant in public decision-making and border relations.

Conclusions

- Border theory makes it possible to interpret and understand the complexities of events, conflicts and risks to which communities settled in border regions are subjected. Thus, cultural identity problems, the lack of institutional presence of the states that establish the border limits as legal figures, convergent crimes, and the multiplicity of actors with illicit interests in the Amazon constitute determining variables in the projections of environmental security in border areas. Likewise, border theory allows us to understand the complexity of the communities that reside in the ANMs on the binational border.
- There are various problems related to institutional weakness on the border studied due to various factors, including the precariousness of the ANMs and the great distances to the centres of power that keep these territories isolated. On both sides of the border, the quality of life of its inhabitants is among the lowest in each country. This means that, in the territory, there are armed actors dedicated to the illegal

exploitation of natural resources and other crimes. These groups are productive chains that involve the most vulnerable people who work in mining in precarious conditions, and extortion is common, but it is local, regional and international powers that profit from these activities. Crimes against the environment are linked to drug trafficking and the illegal exploitation of resources, and the criminal groups that conduct these activities control a large part of the territories studied. The fight against transnational crime is only effective if a state acts in a resolute and coordinated manner.

- There are national entities whose missions, competencies and functions are determined to serve, investigate or act as an authority in the Amazonian territories, but at the same time one can observe the absence of the state.
- The proposals to intervene in the BrazilianAmazonstatesarebasedonaduality between protection-conservation and exploitation. The development vision of the Bolsonaro administration has deteriorated environmental protection systems, as well as dialogue with communities and environmental organisations. In other words, the internal governance mechanisms have been fragmented.
- The possibility of building a joint approach to the problems of the Amazon

has changed radically in the last two decades. The environmental diplomacy advanced by Lula Da Silva allowed Brazil to position itself as a leader in environmental issues, particularly in the reduction of GHG emissions. However, subsequent presidential administrations have fragmented the institutional structures that made it possible to reduce or limit the capacity of action of actors linked to deforestation or illegal mining. Currently, Brazil is experiencing levels of deforestation close to or higher than those registered at the beginning of the 21st century.

Recommendations

To the Executive branches of Colombia and Brazil, it is necessary to promote common spaces where the meanings and ways of understanding the social, economic, cultural and security problems that affect communities are discussed. Additionally, to project administrative cooperation exercises in order to coordinate policies and defence mechanisms for the protection and conservation of the Amazon. Similarly, for local and regional leaders, it is recommended to create spaces for interaction in terms of police cooperation, making it possible to confront security threats that are camouflaged by the legal political ambiguities of binational borders.

- To the Colombian government of Gustavo Petro and its Ministry of the Environment and Sustainable Development, in response to the interests expressed during its electoral campaign, it must project a consistent strategy of direct environmental diplomacy with Brazil in which the protection and conservation of the Amazon are referent objects.
- To the Brazilian environmental authorities like IBAMA and CONAMA, it must be a priority to establish a cooperation agenda with local authorities, communities, indigenous organisations and environmental groups, in order to recover collaboration mechanisms for the protection of Amazonian ecosystems, as well as to act as a scenario for the collective construction of actions that reduce deforestation, illegal mining and other actions against the environment. This collaboration, in terms of environmental governance, would allow the promotion of new intra- and inter-state dynamics.





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Explanation of the network:

The Latin American Network of Environmental Security aims to produce knowledge in the academic field and opinion work on the threats, risks and challenges facing environmental security in Latin America and the Caribbean through various case studies. To achieve this, it has generated spaces for dialogue with civil society organizations, academia, economic actors, and decision-makers from the public sector, to dialogue, raise awareness and seek consensus on the need to give relevance and priority to the threats presented by the region in environmental matters. Thus, through the preparation of papers (policy and working) and books, it is proposed to collect the study work of the network on specific cases to make visible the main problems and propose recommendations to provide inputs to decision makers in both the public and private sectors to respond and mitigate the threats that endanger environmental security in its different dimensions in Latin America and the Caribbean.

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