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NEW FRONTIER OF EXPANSION AND PROTECTED AREAS IN THE STATE OF AMAZONAS

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Abstract

We analyze the transformations of the Trans-amazonian highway, located in the south of the state of Amazonas, as a new axis of expansion of the frontier. As methodology, we adopted the literature review, analysis of documents and reports from public institutions, field work and thematic cartography. To understand this process, the analysis is structured from the road axes, as links that articulate spatially with economic flows in the region; in the environmental policies concretized in protected areas (conservation units and indigenous lands) along the Trans-amazonian highway; and the reinvigoration of the Trans-amazonian border, based on the expansion of livestock, deforestation, mining and hydroelectric power. It is concluded that this process is updated with the revival of the BR-230 highway as a new front of frontier expansion, in conflict with ordained territories, public areas intended for environmental protection and the recognition of traditional territories.

Keywords: Western Amazonia, Territorial Policies, Roads, Traditional Territories.

Resumo / Resumen

NOVA FRONTEIRA DE EXPANSÃO E ÁREAS PROTEGIDAS NO ESTADO DO AMAZONAS

Analisa-se as transformações da rodovia Transamazônica, localizada no sul do estado do Amazonas, como um novo eixo de expansão de fronteira. Como metodologia, adotou-se a revisão bibliográfica, análise de documentos e relatórios de instituições públicas, trabalho de campo e cartografia temática. Para o entendimento desse processo, estrutura-se a análise a partir i) dos eixos rodoviários como elos que articulam espacialmente fluxos econômicos na região; ii) das políticas ambientais concretizadas em áreas protegidas (Unidades de Conservação e Terras Indígenas) ao longo da rodovia Transamazônica; e iii) do revigoramento da fronteira na Transamazônica, com base na expansão da pecuária, desmatamento, mineração e hidrelétrica. Conclui-se que esse processo se atualiza com o reavivamento da rodovia BR-230 como nova frente de expansão da fronteira, no conflito com os territórios ordenados, áreas públicas destinadas à proteção ambiental e ao reconhecimento de territórios tradicionais.

Palavras-chave: Amazônia Ocidental, Políticas Territoriais, Estradas, Territórios Tradicionais.

NUEVA FRONTERA DE EXPANSIÓN Y LAS AREAS PROTEGIDAS EN EL ESTADO DE AMAZONAS

Analizar las transformaciones de la Carretera Transamazónica, ubicada en el sur del estado de Amazonas, como un nuevo eje de expansión fronteriza. Como metodología se adoptó una revisión bibliográfica, análisis de documentos e informes de instituciones públicas, trabajo de campo y cartografía temática. Para comprender este proceso, el análisis se estructura desde los ejes viales, como vínculos que articulan espacialmente los flujos económicos de la región; políticas ambientales implementadas en áreas protegidas (Unidades de Conservación y Tierras Indígenas) a lo largo de la Carretera Transamazónica; y la revitalización de la frontera transamazónica, basada en la expansión de la ganadería, la deforestación, la minería y la energía hidroeléctrica. Se concluye que este proceso se actualiza con la reactivación de la carretera BR-230 como un nuevo frente de expansión fronteriza, en conflicto con territorios ordenados, áreas públicas destinadas a la protección ambiental y reconocimiento de territorios tradicionales.

Palabras-clave: Amazonia Occidental. Políticas Territoriales. Carreteras. Territorios Tradicionales.

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INTRODUCTION

Since the military dictatorship (1964-1985), the Amazon region has played a prominent role in the context of Brazil's internal geopolitics, above all, considering the numerous state challenges to managing the territory. For the Brazilian State, even today, the purpose is to guarantee the sovereignty of this region. Thus, the military government implemented a series of territorial policies and programs that enabled a new human occupation, circulation, and economic integration of the Northern region into the rest of the country.

The settlement policy in this period, based on circulation axes, such as the BR-230 or Trans-Amazonian highway, established a framework of socio-geographic transformations based on the economic processes of incorporating nature as capital. At the other pole, the original peoples, traditional communities, and their territories suffered an intense invasion and conflicts process that resulted in massacres, deforestation, and deterritorialization of the population that lived for centuries in the Amazon, a situation that continues so far.

The indisputable evidence of environmental impacts in the region, including deforestation, highlights the spatiality of the expansion of society (migration) and capital (accumulation) in the Amazon forest. Strengthened by the debate on nature protection in the early 1990s, territorial policies began to incorporate the environmental theme. Thus, protected spaces were created and expanded, such as Conservation Units, Indigenous Lands, and other traditional territories of rural communities. Currently, land management has incorporated social and environmental issues to guarantee access to natural resources for the traditional population and significant mineral, energy, and biotechnological extraction projects. These contradictions within the scope of public policies generate numerous territorial conflicts and uncertainties for Amazonian peoples (indigenous peoples, rubber tappers, extractivist workers, quilombolas, community fishers, rural communities living in the forest, among others).

In the current context, we are witnessing what has already been identified in other areas of the Amazon, the implementation of two contradictory territorial policies: environmental policies and economic development policies. On the Trans-Amazonian highway, particularly in the state of Amazonas, disputes over territory are asserted, a veritable myriad of territorial conflicts, accelerated in recent years due to the growth of agribusiness and expansion of the frontier, a concept understood in the sense of a space not yet fully structured (BECKER, 2004). There are possibilities of reconfiguring economic-territorial projects, which unfolds lato sensu in transforming nature into an extractive economy space (livestock, wood, ore, land market, hydroelectric).

In terms of methodology, a bibliographic review, analysis of documents and reports from public institutions, field work, and thematic cartography were used to understand the regional space. Field work was carried out in the municipalities of Humaitá and Apuí, and field observation along the Trans-Amazonian highway, both occurring alternately in 2019 and 2020. Intersubjective dialogues were carried out with residents, merchants, and settlers to understand the processes that configure the frontier expansion, mainly in the district of Santo Antônio do Matupi (Manicoré) and Vila de Realidade (Humaitá).

In cartographic production, the methodology used added data from field work, i.e., queries from the National Spatial Data Infrastructure - INDE database, whose platform offers a range of data related to the Amazon. Among these queries, data related to INCRA, Ministry of Transport, ANA, IBGE, ICMBio, and SEMA(AM) were examined and obtained. The software GIS (Geographic Information System) ArcGIS 10.5 was used for the elaboration of the maps. This software has applications that allow editing vector data and selecting files by attributes in shp format (shapefile), whose purposes allowed us to indicate the settlements, villages, communities, and cities, Conservation Units, Indigenous Lands, highways.

The article is organized based on the analysis of the action of the State, highlighting the role of highway axes as links that spatially articulate the region with other economic flows in Brazil. It is about thinking about the configuration of the Legal Amazon starting from the roads, a process that structurally transformed the regional space and that still constitutes economic expansion fronts in the different Amazon sub-regions. Subsequently, the analysis focuses on environmental policies (Conservation Units and Indigenous Lands) along the Trans-Amazonian highway, prioritizing the municipality of Apuí.

Then, the reinvigoration of the Trans-Amazonian frontier is discussed based on livestock expansion, deforestation, mineral and hydroelectric projects.

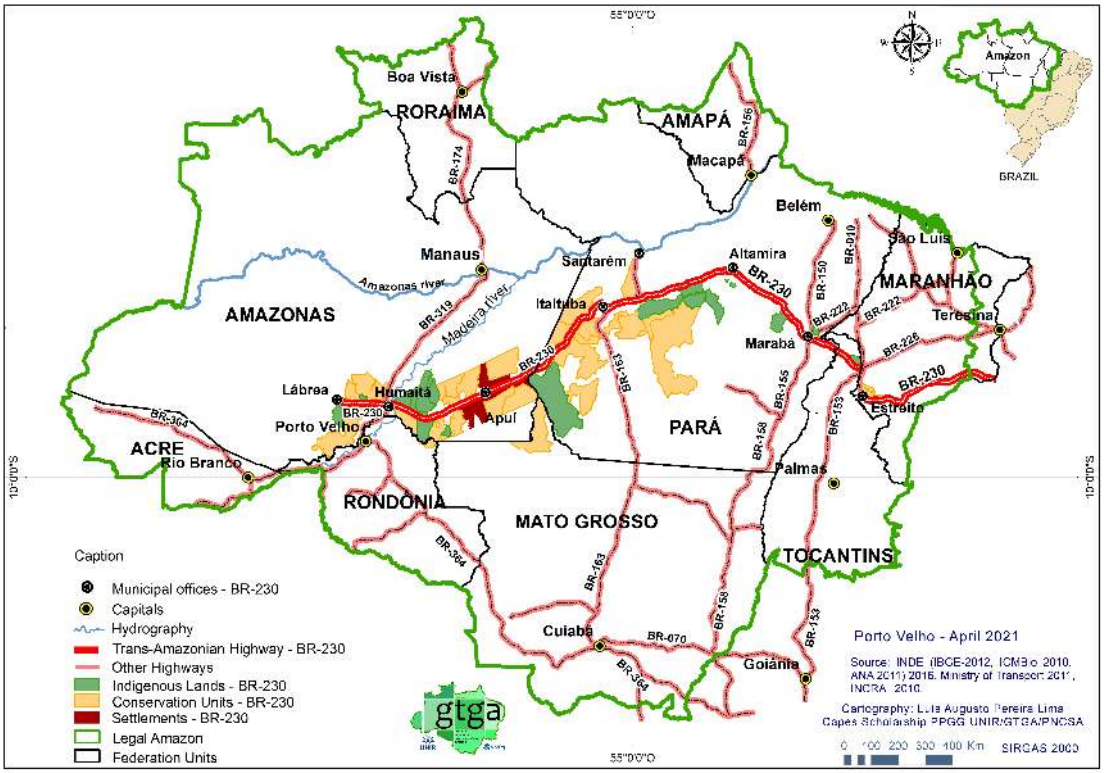
TRANS-AMAZONIAN HIGHWAY AND THE TERRITORIAL CONFIGURATION OF SOUTH AMAZON

Before analyzing the situation of the Trans-Amazonian highway, it is important to list some arguments used by scholars. One of the recurrent views external to the Amazon is always being a source of abundant natural resources. This process for decades has qualified it as an economic frontier (BECKER, 1983). Its spatial expansion is related to different territorial public policies that redirected economic and demographic flows to the Amazon. In this perspective, the reference to the exploration of nature was a symbolic constant that "attracted" capital to the region for agriculture, mining, logging, land market, and electricity. Currently, this process continues and is directed mainly towards some sub-regions that, until then, were located outside the axis of the predominant dynamics, such as the situation in the Trans-Amazonian highway region, south of Amazonas state.

As a territorial agent, the Brazilian state implemented a strategic agenda with territorial policies that reconfigured the Brazilian Amazon. This factor attracts capital flows in the extractive economy, added to population migration to the various public and private colonization projects in Pará, Mato Grosso, and Rondônia (BECKER, 2004; MELLO, 2011; COSTA SILVA, 2017). Territorial policies' role is to model the space, producing and organizing it as an object of public intervention, designating it as a condition for other spatializations, resulting in logics of restructuring and adequacy of the territory and affected places (MELLO-THÉRY, 2006). In general, territorial dynamics in the Amazon reflect the different territorial policies implemented by governments that prioritized, in different periods, the integration, development, and conservation of its natural resources, albeit for a short time (LOUREIRO, 2009).

Indeed, the expressive state support, both in planning and constructing roads, opened up a set of socioeconomic possibilities that qualified the Amazon frontier as a new space for capital accumulation. The complexity of the historical contexts resulted from different motivations, in a way that the actors stimulated different processes in this frontier, which implied in territorial planning challenges. Carrying out territorial management (BECKER; EGLER, 1997, MELLO-THERY, 2006; GELPI; KALIL, 2015) in the countryside or the city is a highly complex process, especially when both dynamics and territorial policies are contradictory and disjointed. Currently, there are legal instruments created to carry it out, such as management plans and management councils. During the military period, national and regional development plans predominated (I and II PND, National Development Plan) and, in a way, some articulation regarding the development model adopted. This process created more dynamic areas where specific programs and projects arising from the plans were installed instead of areas without incentives from the stagnant governments. After 1988, with the country's re-democratization process and the federative pact, there was, simultaneously, a devaluation of national policies and plans, transforming the multiyear plans (PPAs) into simple budget programming, without broader guidelines and strategies. Thus, management ends up acting more locally than regionally.

Concerning spatial articulation, roads/highways stand out as links in the territorial system of political and strategic management of the State in the Amazon. Territorial integration (Map 1) was configured with the construction of BR-230 (Trans-Amazonian), BR-174 (Manaus – Boa Vista), BR-210 (Perimetral Norte), BR-163 (Cuiabá-Santarém), and BR-010 Belém-Brasília highway. These highways materialize an accelerated time-space in the hylean Amazon, the time of the action of the State and capital in the reconfiguration of the forest into the space of agriculture, towns and cities, the mineral and logging hubs, which assimilate modernity in opposition to nature. Therefore, highways serve as paths for the march of modernization of capital in the forest universe.



Map 1 – Main highways in the Legal Amazon (2019). Elaboration: GTGA/UNIR

With the colonization strategy as justification, the construction of highways in the north-south direction predominated, except the Trans-Amazonian, in the transversal direction (East-West), from the municipality of Cabelo (Paraíba) to Lábrea (Amazonas), representing one of the essential elements of the I PND (1972-1974). The dissemination of problems related to drought in the Northeast supported this choice, with government investments and loans from the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD) (OLIVEIRA NETO, 2015).

The objective was to favor access to areas with the possibility of productive exploration and more favorable soils for the implementation of agriculture and livestock, in addition to favoring the Amazon's relations with other Brazilian regions, especially with the demographic flow of northeastern Pará, and the south and southeast Mato Grosso and Rondônia, thus enhancing the strengthening of inter-regional trade (BECKER, 2004; COSTA SILVA, 2005; HUERTAS, 2009; MESQUITA, 2011).

Associated with the implementation of circulation axes, through Decree-Law n. 1,164, of April 1, 1971, 100 km of land were allocated on the banks of the implemented highways so that the military government could carry out the process of occupation and colonization of the region, in addition to agro-industrial projects (BECKER, 1983; LOUREIRO, 2009, MELLO-THÉRY, 2011). Especially on the Trans-Amazonian highway, the National Institute of Colonization and Agrarian Reform - INCRA created the Rio Juma Settlement Project (PA) in 1982, giving rise, in 1987, to the municipality of Apuí, southern Amazonas state (Map 1). Supported by the National Integration Project and under the slogan "a land without men for landless men," the government promoted the migration of settlers to occupy the region. Unlike the model based on the extractivism of traditional Amazonian populations and the current projects of extractive settlements and sustainable development, another model was consolidated, this one now based on forest clearing, deforestation, and logging for the implementation of agriculture and livestock.

The main circulation axes somehow reorganize the forms of collective life in the region, going from riverbanks, production, and daily riverside life to roadside, a new way of life for migrants (LOUREIRO, 2009). The agricultural colonization projects were part of a strategic territorial policy, including as a conservative alternative to the agrarian reform demanded by rural social movements, pari

passu to the expansion of agricultural areas, a process that configured the Amazon as a territorial reserve for the reproduction of capital (COSTA SILVA, 2017; MESQUITA, 2011).

The strategies of territorial policies in the development plans favored agricultural colonization, construction of roads, agricultural and mining projects, producing intense transformations in the Amazon region and, at the end of the 1980s, causing concerns about environmental protection.

In these contexts, highways became the axes of economic expansion that incorporated nature into the mercantile circuit, feeding frontier flows. This process is also carried out in the environmental crime context and pressures and invasions of public areas, including those already designated. This situation occurs in the south of Amazonas state, mainly in the Rio Juma PA, which has 689,000.00 ha, with 6,000 settled families, and despite 39 years of creation, it is still in the consolidation phase (INCRA, 2021).

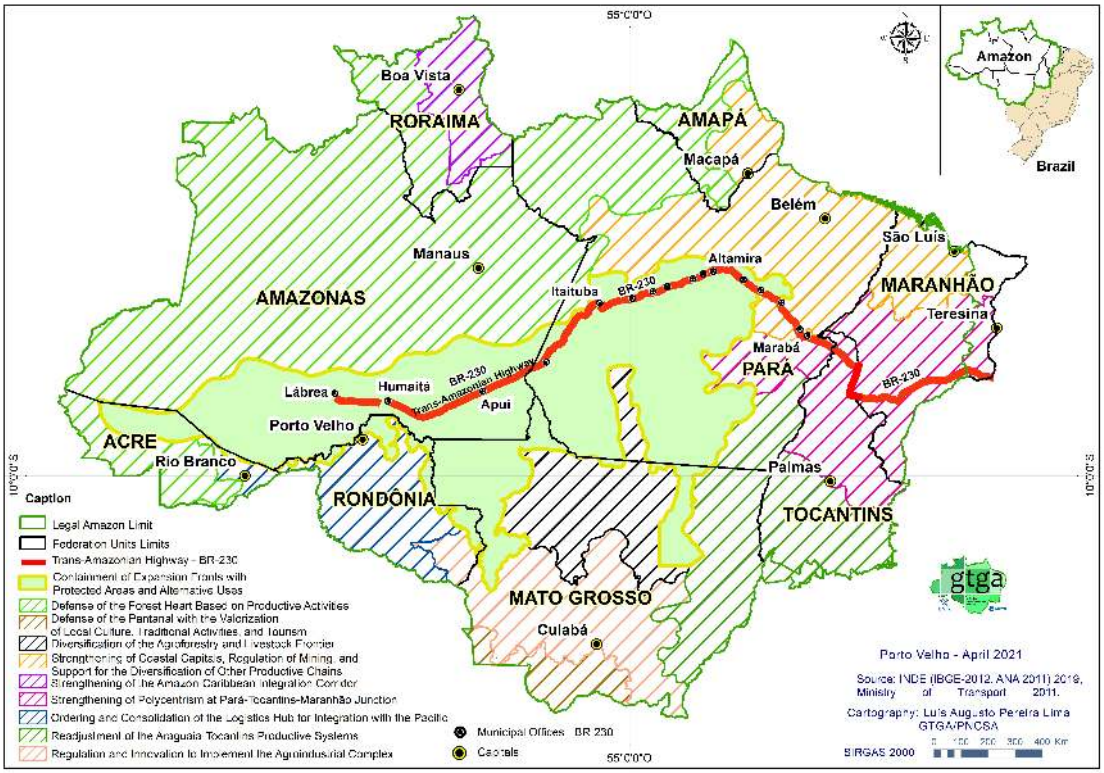
The settlement still presents incomplete land tenure regularization problems since only 17.6% of its area is titled. Added to this is a high process of land evasion and concentration, with "owners" and properties up to 15 lots in the Rio Juma PA. More than 50% of the Juma PA area is illegally occupied by farmers who are seeking, through current territorial policies, such as the Terra Legal Program, land regularization (MENEZES, 2015), facilitated by normative instructions 98 and 99/2019 of INCRA, related to the simplified procedures for the titling of rural properties. In this context, the dynamics of land use and occupation in Apuí have gone from colonization with rural settlements to the expansion of agribusiness, driven mainly by the de-characterization of the Juma PA, with the expansion of deforestation and land market (GALUCH; MENEZES, 2019).

In addition to livestock and deforestation, particularly on the BR-230 - Trans-Amazonian highway, there is a whole spatial movement of capital from agricultural, mineral, logging, and energy projects that directly and indirectly affect Protected Areas institutionalized by the State. It produces conflicts in expansion from the frontier that enters the south of Amazonas state (COSTA SILVA; SILVA; LIMA, 2019).

PROTECTED AREAS ON THE TRANS-AMAZONIAN HIGHWAY

From the 1990s, with the emergence of environmental issues and discourses, territorial policies were qualified by programs to conserve tropical forests, such as the Nossa Natureza Program (1988) and the International Pilot Program to Conserve the Brazilian Rain Forests (PPG-7). In the Nossa Natureza Program sphere, the debate on territorial planning and the instrument of Environmental Zoning has expanded and become the basis of the modern mechanism for environmental protection and land management, although much questioned by the Amazon states.

The National Environmental Policy (PNMA, Law No. 6,938 of 08/31/1981) defined the Environmental Zoning among the various instruments for the conservation of nature. The current nomenclature became Ecological-Economic Zoning (ZEE) and was established by Decree No. 7378 of December 1, 2010. Even with the implementation of environmental policies and the instrumentalization of the ZEE, the macro policies of the Brazilian government continued to prioritize Amazon as a strategy to integrate areas of Brazil and Latin America. The Brasil em Ação Program (1996-1999) and then the Avança Brasil Program (2000-2003) presented the National Integration and Development Axes (ENIDs) as reference for regional ordering in Brazil based on the logistical integration of productive regions. Subsequently, the Amazônia Sustentável Plan (PAS), re-elaborated in 2008 under the Lula government, while maintaining the previous territorial policies, converged to the sustainable development model in combating environmental degradation processes, establishing guidelines for territorial planning and environmental management, in addition to integrating territorial planning policies with sustainable development actions (MELLO; PASQUIS; THÉRY, 2004; BRASIL, 2008).



Map 2 – Trans-Amazonian and the Ecological-Economic Macro-zoning of the Legal Amazon (2020).
Source: GTGA/UNIR, based on information from IBGE; ANA; Ministry of Transport.

With Decree No. 7,378, of December 1, 2010, the Ecological-Economic Macro-zoning of the Legal Amazon – MacroZEE[1] (Map 2), whose objective is to ensure the sustainability of regional development, indicating productive and environmental, and territorial management strategies in line with the Amazon's ecological, economic, cultural, and social diversity. It is also articulated with the ZEEs of the Legal Amazon states, which, in a way, constituted a territory management policy with all the federative entities involved. It aimed at a more articulated process in elaborating national policies, considering the recommendations for use for each macrozone.

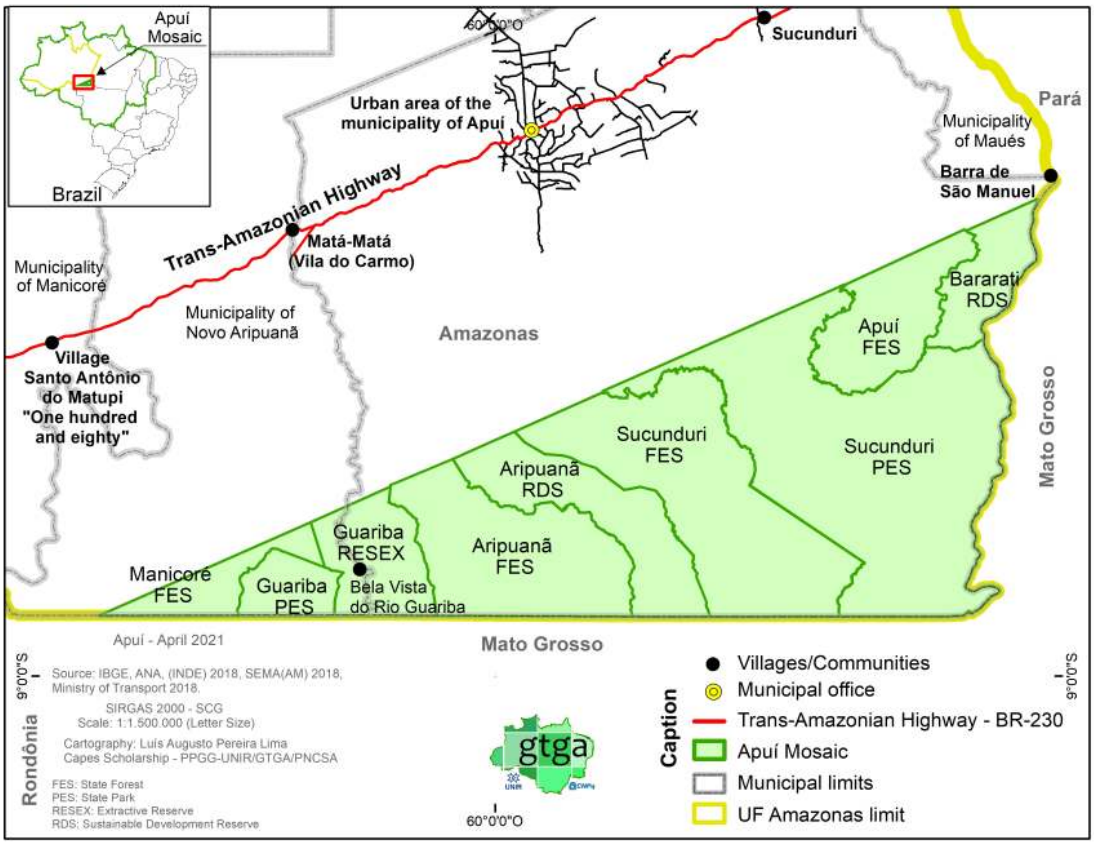
The MacroZEE instituted three territorial units as a mechanism for territorial planning: territories-networks, territories-borders, and territories-zones[2]. On a macro scale, the municipality of Apuí and municipalities in southern Amazonas are located in the territory-border. In this territory, the MacroZee identifies two gradations of the border: the diversification of the agroforestry and livestock frontier and the containment of fronts with protected areas and alternative uses (BRASIL, 2010). This is the gradation of the border identified in the municipality of Apuí, along the BR-230, which is materialized by deforestation, illegal trade in public lands (grabbing), heated up by livestock, especially in the Rio Juma settlement. On the other hand, within the scope of Environmental Policies, the set of Conservation Units, the Apuí Mosaic, the Jatuarana National Forest, and part of the Juruena National Park comprise 63.31% of the municipality of Apuí. They form a territorial set to contain deforestation and enable biotechnological and sustainable uses by traditional communities.

However, given the reinvigoration of the frontier expanding in the Amazon and the insertion of Brazil in the process of globalization (production of commodities), the municipality of Apuí observes the expansion of capital materializing in the increase in cattle numbers, energy expansion, and mineral associated with the classic grabbing of public lands. Thus, as Madeira (2014) states, in MacroZee, the territory-border represents practically continuities of large projects started in the 1980s and which are currently linked to the Madeira-Amazonas Integration Axis, a component of the ENIDs, and to the expansion of commodities in the region (COSTA SILVA; CONCEIÇÃO, 2017; MESQUITA, 2009).

In the state of Amazonas, with the decentralization of environmental policies, this process began

in the government of Amazonino Mendes (1999-2003) as a way of modernizing management and gained relevance in the government of Eduardo Braga (2003-2007). Through a socio-environmental agenda, the state government approached groups on the margins of the political process, such as the traditional Amazonian communities territorialized in the different Amazonian sub-regions (VILLARROEL; TONI, 2012). With the implementation of the Zona Franca Verde Program, during the first term of Eduardo Braga (2003-2007), the state government started to adopt a policy of sustainable use of natural resources, state commitment to the quality of life of the population of the interior, and the protection of the natural heritage of Amazonas. It highlighted that this program created Conservation Units as one of its principal axes (SANTOS, 2013).

Following the context of insertion of resource conservation in territorial management and determination of ZEE implementation by the states of the Legal Amazon, Law No. 3,417, of July 31, 2009, established the Macro-zoning of the state of Amazonas. Following the MacroZee, the municipalities on the southern border of Amazonas are configured as areas with a defined productive structure, Conservation Units and Indigenous Lands, instituted and potential areas for creating Conservation Units.



Map 3 – Location of the Apuí Mosaic with the indication of rural communities (2019). Source: GTGA/UNIR, based on IBGE, ANA, SEMA, and Ministry of Transport information.

In the southern region of Amazonas, the Conservation Units comprise 32 units, 08 for full use and 24 for sustainable use (Map 3), under the management of the federal and state government. This spatial set is in a situation of conflicts and territorial pressure from agricultural, energy, and mineral capital that fuels the expansion of the frontier, even though it highlights the relevance and strategy of environmental protection and defense of the traditional territories of the Amazonian peoples. In the Amazon context, Protected Areas and traditional territories are also the results of the struggle movements of riverside dwellers, fishers, rubber tappers, quilombolas, indigenous people. It has ensured the production of space and territorialization of these communities, constituting what Costa Silva and Conceição (2017) called peasant/community territories facing the agribusiness territory.

Following this policy, the state government instituted, in 2005, the Mosaic of Apuí Units (Map 3), under the management of the Department of Climate Change and Management of Conservation Units of the Amazonas State Secretariat for the Environment. The Apuí Mosaic comprises 09 conservation units, 02 of complete protection, and 07 of sustainable use, in the municipalities of Apuí and Novo Aripuanã, intending to curb deforestation that is advancing from the state of Mato Grosso to the agricultural frontier in Amazonas.

The creation of the Apuí Mosaic is the result of two public policies to protect the Amazon. One of these policies was implementing the Zona Franca Verde Program of the Amazonas state government, which focused on creating Conservation Units. In turn, the Federal Government created, through Decree No. 4,326, of August 8, 2002, the Áreas Protegidas da Amazônia Program (ARPA), whose objective consisted in the creation and implementation of 60 million hectares of Protected Areas in the Legal Amazon. According to the Unit Management Plan (2010), no traditional communities reside in sustainable use units. However, 07 surrounding communities carry out extractive activities for copaiba oil, natural rubber, and nut collection in the Guariba Extractive Reserve (RESEX), Aripuanã Sustainable Development Reserve (RDS (RDS), Bararati RDS, and Apuí State Forest (FOREST). In the state of Amazonas are located the communities of Barra de São Manuel, Sucunduri District, Bela Vista do Rio Gauriba, Matá-Matá (or Vila do Carmo) and Vila Batista, and in Mato Grosso, the communities of Vila Guariba and Vila Colares.

The Apuí Mosaic has fulfilled one of its objectives: to curb deforestation that moves from the state of Mato Grosso. Although there is funding for inspection activities and sustainable development projects for traditional communities through the ARPA Program, the challenge is to monitor the Conservation Units that make up the mosaic. As a result, the mosaic continually faces pressures such as land grabbing, occasional invasions, land tenure regularization, and prospecting.

REINVIGORATION OF THE BORDER AT TRANS-AMAZONIAN

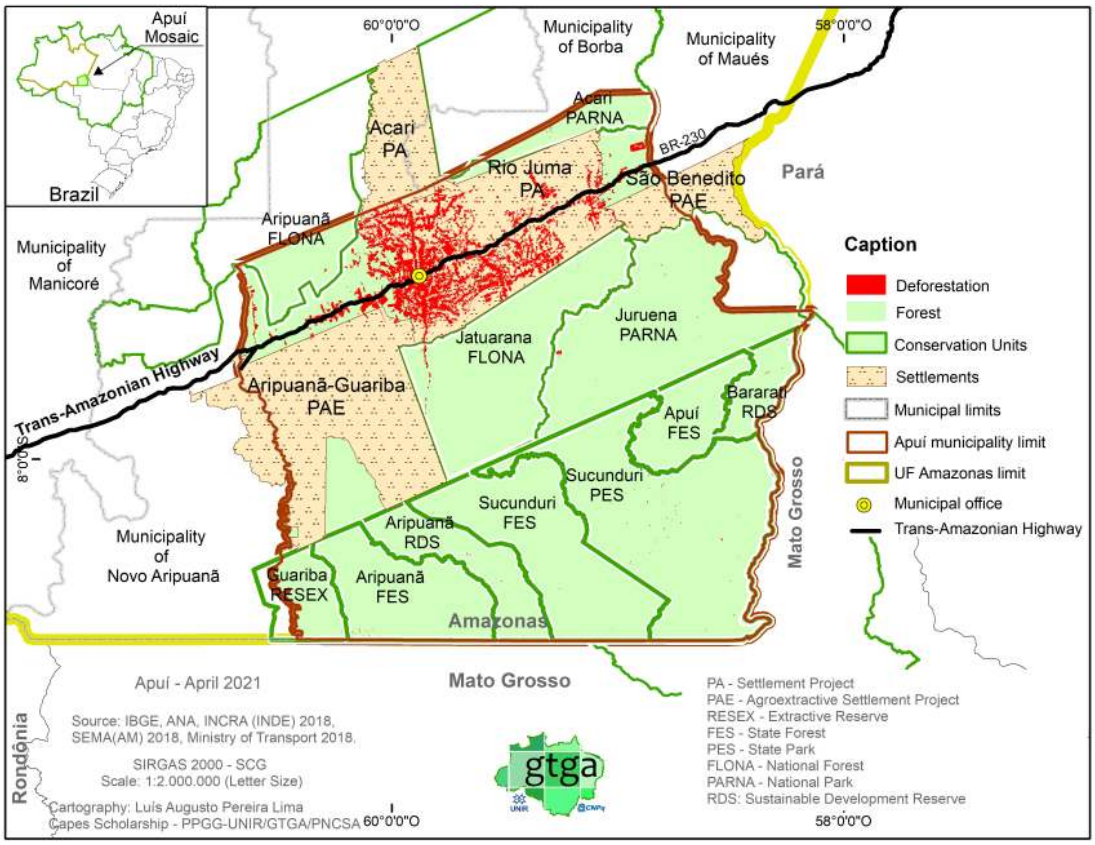
The economic projects that are in dispute in the Western Amazon, especially along the Trans-Amazonian highway, are the same ones that characterized the economic frontier classified by the specialized literature in the region: mining, hydroelectric power, land markets, grabbing of public lands, illegal logging, livestock and, recently, soy agribusiness (SILVA; COSTA SILVA; LIMA, 2019).

Figure 1 – Section of the Trans-Amazonian Highway – BR230, southern Amazonas. Source: ARAÚJO, 2017.

The Trans-Amazonian (Figure 1), which enabled the arrival of migrants for the colonization of the

Rio Juma Settlement Project, is still today the axis that drives the socioeconomic dynamics in the south of the state of Amazonas. The "availability" of public areas and the low price of land enable the growth of extensive livestock, which tends to replace agriculture since cattle profitability is associated with logging, prospecting, trade, and, above all, with public land grabbing (CASTRO, 2005). This process has been encouraged by the current federal government, supported mainly by normative instruction No. 100/2019 of the Ministry of Agriculture, Livestock, and Food Supply (MAPA). It deals with land regularization of up to 2500 ha, facilitated by the declaratory use of the Environmental Rural Registry as proof of ownership, which tends to aggravate and boost irregular occupations in the region.

Logging is usually the first activity on the border. It is organized under a complex system, from traditional processes, with the use of chainsaws, to industrial processes (charcoal plants, mining) of legal or illegal processing (CASTRO, 2005). This activity is associated with increased deforestation and pressure on Protected Areas since wood stocks with market value are located in Conservation Units and Indigenous Lands. This means that such an economy is developed within the scope of environmental crime and in the processes of grabbing public lands, where the plunder of nature has been a recurrent instrument of capital accumulation (APUBLICA, 2019).



Map 4 – Territorial configuration of the municipality of Apuí (2019). Source: INPE, 2019. Elaboration: GTGA/UNIR

The municipality of Apuí has occupied a prominent position in the number of cattle herds and deforestation along the frontier. Added to this context is the current federal government's discourse, in line with a perspective of (de)amazonization. It is verified in the programmed erosion of environmental policies, monitoring, and inspection, which resulted for Apuí, only in the period from January to July 2019, the first position among the ten municipalities with the highest number of hotspots (1,754 records) and deforested area (151.0 km²) in the Amazon. There was accumulated deforestation of 287.58 km² in 2019 (IPAM, 2019; INPE, 2019), especially in Rio Juma PA and BR-230 (Map 4).

Another element that has been gaining expression on the southern border of Amazonas state is the dispute for the subsoil through the exploration and prospecting of various minerals. In the municipality

of Apuí, according to data from the Geographic Information System of Mining – SIGMINE of the National Department of Mineral Production - DNPM , here are requests for 209 areas for research and exploration, with 49 areas in different stages of the process (Table 1), located in the Sucunduri, Apuí, Aripuanã, Manicoré State Forests, and in the Aripuanã Sustainable Development Reserve, both Conservation Units with sustainable uses that make up the Apuí.

Process Phases				
Ore	**Research Application**	**Research Authorization**	**Mining Request**	**Use**
Cassiterite			4	Industrial
Diamond	3		3	Gemstone/Industrial
Copper Ore	13			Industrial
Tin Ore	1			Industrial
Gold Ore		5	21	Industrial
Tantalum Ore	3			Metallurgical/Industrial
Rare Earths		2		Industrial
Wolframite			1	Industrial

Table 1 – Requests for mineral exploration in the Apuí Mosaic (2019). Source: adapted from DNPM, (2019).

Mineral exploration in Conservation Units of sustainable use is only prohibited in the RESEX, according to paragraph 6, of article 18 of the National System of Conservation Units (SNUC). Concerning State Forests, according to the State System of Conservation Units of Amazonas (Complementary Law No. 53 of June 5, 2007), mineral exploration depends on authorization or concession from the Union and the rules established by the Amazonas State Council for the Environment. However, to obtain the right to mineral exploration, Environmental Impact Studies and Environmental Impact Report (EIA-RIMA) must be carried out with the activity's sustainable development. In any case, there is a straightforward "race" for the subsoil. This is a dispute for the commodification of nature, converting it into a space of capital, even though they are protected areas.

Another field of dispute is the projects for energy production, also evidenced on the southern border of the state of Amazonas. Lima and Costa Silva (2018) called these projects hydrostrategies, i.e., State actions associated with industrial capital that project the Amazon as a space for accumulation and intense commodification of water resources. Small hydroelectric plants and power plants on the Roosevelt and Aripuanã rivers are planned and under execution, inside or within the limits of Conservation Units. They generate tensions and political-territorial pressures to make more flexible or convert natural areas into territories of the capital and disputes for territories by the different agents, i.e., State, capital, social movements, and traditional communities. Both sectors have benefited from the flexibility of the licensing process, which will undoubtedly contribute to the increase in the race identified locally.

These processes qualify the limits of frontier expansion based on changes in environmental and territorial management policies. For example, changes to the Forest Code (2012), changes to the Mining Code (2018), changes to the Terra Legal Project (Law 11,952/09 and Law 13. 465/2017), which became known as the “MP da Grilagem,” providing for urban and rural land tenure regularization within the Legal Amazon.

Thus, the territorialization of these economic projects is accompanied by the expropriation of social groups with ways of life related to the forest and rivers, causing a social relationship of conflict and estrangement from different cultural worlds.

Therefore, the established political practice ignores the Federal Constitution, the legal frameworks that enshrine the environmental policy, and the recognition of the traditional territories of the Amazonian peoples. Erosion can be seen in the environmental policies, especially in the current government, proposed by the forces of agribusiness, which tends to weaken the territorial management instruments and encourage invasions of protected areas in the Amazon region, as registered in 2018 and 2019 along the Trans-Amazonian highway (SILVA; COSTA SILVA; LIMA, 2019, MELLO-THÉRY,

2019).

CONCLUSION

Since the beginning of the military dictatorship, the territorial policies implemented in the Amazon prioritized the region's perspective as a producer of fundamental raw materials for the country's economic growth. These policies supported agricultural colonization, migration, agricultural projects, mining and electricity, the construction of a road network that became fronts for the expansion of deforestation, and that, currently, are directed towards the most protected Amazon sub-regions. In the 1990s, based on the principles of sustainable development, the federal government and the states of the Legal Amazon instituted a set of environmental and territorial public policies for the expansion of protected areas, territorial management, and incentives for sustainable economies.

Even so, the macroeconomic projects planned for the region remain the same: mining, hydroelectric power, land markets, public land grabbing, illegal logging, livestock, and soy agribusiness. As shown, such evidence is found along the BR-230 – Trans-Amazonian highway. In the territorial dynamics of the border, Protected Areas' institutionality was considered the real possibility of curbing deforestation in the region. However, in the current political situation in Brazil, Protected Areas and traditional territories are indicated as an obstacle to the march of economic development. This model has already shown its limits.

In conclusion, territorial policies structure the Amazon region to provide a supposed integration with the national economic circuits, with the highways as axes of expansion and connection. This process is updated with the revival of the BR-230 highway as a new frontier expansion front, which takes place in organized territories, with public areas destined for environmental protection and recognition of traditional territories. The economic pressure sets up new disputes for public areas already allocated in the legal mechanisms of territorial ordering, which indicates that the border and its economic agents go beyond the concept of untitled land to dispute territories defined by the Brazilian State.

NOTES

1- The discussion on Amazon Zoning and MacroZEE dates back to 1990 when the IBGE was hired to carry it out. Many controversies and conflicts about methodologies, resources, attributions of the Union or the federated States arose over the next two decades until, finally, in 2010, they managed to approve it.

2- The MacroZEE instituted ten territorial units distributed among the categories of territory-network, territory-border, and territory-zone. The territory-network corresponds to areas of consolidated settlement, characterized by the dominance of networks, and encompasses the following territorial units: the Amazon-Caribbean integration corridor, coastal capitals, mining, and other production chains, the Pará-Tocantins-Maranhão junction, the Araguaia-Tocantins axis, the agro-industrial complex, and the logistics hub. The territories-zones correspond to the areas of dense rainforest and other continuous plant formations with a low degree of anthropism and cover the territorial units defending the forest heart based on productive activities and defending the Pantanal with the valorization of local culture, traditional activities, and tourism. Finally, the territories-borders present different stages of land appropriation, settlement, and organization and constitute the penetration fringes and comprise the territorial units of agroforestry and livestock border diversification and the containment of fronts with Protected Areas and alternative uses (BRASIL, 2010).

3- Data accessed in the Geographic Information System of Mining – SIGMINE (http://sigmine.dnpm.gov.br/webmap/).

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